



WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
**PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE
ELIMINATION SYSTEM**

Green Bay Metropolitan Sewerage District

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from two facilities
located in Brown County at

2231 North Quincy Street, Green Bay, Wisconsin (Green Bay Facility [GBF]), and
315 Leonard Street, De Pere, Wisconsin (De Pere Facility [DPF])

to

**the Fox River (Water Body Identification Code Number 117900) in the East River Watershed (LF01) of the
Lower Fox River Drainage Basin of the Lake Michigan Basin**

GBF Outfall 001 – Lat: 44° 32' 18" N / Lon: 88° 00' 13" W

DPF Outfall 051 – Lat: 44° 29' 13" N / Lon: 88° 02' 11" W

in accordance with the effluent limitations, monitoring requirements and other conditions set
forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after
this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis.
Adm. Code, at least 180 days prior to the expiration date given below.

State of Wisconsin Department of Natural Resources
For the Secretary

By

Heidi Schmitt Marquez
Wastewater Field Supervisor

April 28, 2022

Date Permit Signed/Issued for Modification

PERMIT TERM: EFFECTIVE DATE – April 01, 2022
EFFECTIVE DATE OF MODIFICATION: May 01, 2022

EXPIRATION DATE - March 31, 2027

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1 Influent Requirements

1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
701	GBF Influent - Representative influent loading to the facility shall be calculated by combining the monitoring results from the separate influent streams to the facility. Results of chemical analyses shall be determined on a flow-weighted basis.
751	DPF Influent - Representative samples shall be taken at the raw sewage pump station prior to the addition of any sidestreams.

1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

1.2.1 Sampling Point 701 - GBF Influent

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
CBOD ₅		mg/L	Daily	Calculated	
BOD ₅ , Total		mg/L	Daily	Calculated	
Suspended Solids, Total		mg/L	Daily	Calculated	
Cadmium, Total Recoverable		µg/L	Monthly	Calculated	See Sections 1.2.1.1 and 1.2.1.2.
Chromium, Total Recoverable		µg/L	Monthly	Calculated	See Sections 1.2.1.1 and 1.2.1.2.
Copper, Total Recoverable		µg/L	Monthly	Calculated	See Sections 1.2.1.1 and 1.2.1.2.
Lead, Total Recoverable		µg/L	Monthly	Calculated	See Sections 1.2.1.1 and 1.2.1.2.
Nickel, Total Recoverable		µg/L	Monthly	Calculated	See Sections 1.2.1.1 and 1.2.1.2.
Zinc, Total Recoverable		µg/L	Monthly	Calculated	See Sections 1.2.1.1 and 1.2.1.2.
Mercury, Total Recoverable		ng/L	Monthly	Calculated	See subsection 1.2.1.3 for Mercury Monitoring Requirements.

1.2.1.1 Total Metals Analyses

Measurements of total metals and total recoverable metals shall be considered as equivalent.

1.2.1.2 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified at a level of quantitation below the calculated/potential effluent limit, unless not possible using the most sensitive approved method.

1.2.1.3 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

1.2.2 Sampling Point 751 - DPF Influent

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
CBOD ₅		mg/L	5/Week	24-Hr Flow Prop Comp	
BOD ₅ , Total		mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	5/Week	24-Hr Flow Prop Comp	
Cadmium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See Sections 1.2.2.1 and 1.2.2.2.
Chromium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See Sections 1.2.2.1 and 1.2.2.2.
Copper, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See Sections 1.2.2.1 and 1.2.2.2.
Lead, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See Sections 1.2.2.1 and 1.2.2.2.
Nickel, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See Sections 1.2.2.1 and 1.2.2.2.
Zinc, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	See Sections 1.2.2.1 and 1.2.2.2.
Mercury, Total Recoverable		ng/L	Monthly	24-Hr Flow Prop Comp	See subsection 1.2.2.3 for Mercury Monitoring Requirements.

1.2.2.1 Total Metals Analyses

Measurements of total metals and total recoverable metals shall be considered as equivalent.

1.2.2.2 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified at a level of quantitation below the calculated/potential effluent limit, unless not possible using the most sensitive approved method.

1.2.2.3 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

2 In-Plant Requirements

2.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
101	GBF Field Blank - Sample point for reporting results of Mercury field blanks collected using standard sample handling procedures.
151	DPF Field Blank - Sample point for reporting results of Mercury field blanks collected using standard sample handling procedures.
021	Effluent to Green Bay Packaging for Reuse - Sample point to track flow of fully treated effluent to Green Bay Packaging. Flow from the chlorine contact basin at the Green Bay Facility enters reuse pump station and is transferred via force main to the valve vault located on the Green Bay Packaging property.

2.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

2.2.1 Sampling Point 101 - GBF Field Blank and 151- DPF Field Blank

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury, Total Recoverable		ng/L	Monthly	Blank	See subsection 2.2.1.1 for Mercury Monitoring requirements.

2.2.1.1 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

2.2.2 Sampling Point 021 - Effluent to GBP

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	

3 Surface Water Requirements

3.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
001	GBF Effluent - Representative samples shall be collected downstream of the Parshall flumes for the North and South Complexes. Results of chemical analyses shall be reported on a flow-weighted average between the North Plant and the South Plant. Escherichia coli (E. coli) samples shall be collected 20 feet upstream of the Parshall flume. Grab samples for mercury and continuous measurements for pH shall be collected after dechlorination.
601	River Monitoring for GBF WLA - Lower Fox River data as reported by the Lower Fox River Dischargers Association used in the determination of the daily CBOD ₅ wasteload allocation.
007	GBF WLA Compliance Reporting - Sample point for determining compliance with CBOD ₅ wasteload allocation for the discharge from sample point/outfall 001. These requirements are applicable from May through October, each year.
051	DPF Effluent - Representative composite samples and continuous measurements shall be taken from the final effluent channel, and grab samples shall be taken from the disinfection basin discharge.
076	Calculated Combined Effluent - Sample point for Total Suspended Solids and Total Phosphorus calculated as a combined discharge from the GBF and DPF. Loadings are calculated as the sum of the mass discharged at sample points 001 and 051.
602	In-stream Sampling Point 602: Representative surface water samples shall be collected from the Fox River. Sample point 602 is located near the GBF outfall and the mouth of the Fox River at SWIMS Station ID 10046799 (Lat: 44° 32' 8.98" N, Long: 88° 0' 24.12" W).
603	In-stream Sampling Point 603: Representative water samples shall be collected from Ashwaubenon Creek. Sample point 603 is located at Ashwaubenon Creek at Grant Street at SWIMS Station ID 10016502 (Lat: 44° 26' 41.81" N, Lon: 88° 5' 55.77" W). Sample point 603 correlates with sample site A2 described in the approved AM Plan No. WQT-2020-0016 (October 2020).
604	In-stream Sampling Point 604: Representative water samples shall be collected from Dutchman Creek. Sample point 604 is located at Dutchman Creek at Hansen Road at SWIMS Station ID 10054013 (Lat: 44° 28' 58.49" N, Lon: 88° 5' 13.17" W). Sample point 604 correlates with sample site D1a described in the approved AM Plan No. WQT-2020-0016 (October 2020).

3.2 Monitoring Requirements and Effluent Limitations

The permittee shall comply with the following monitoring requirements and limitations.

3.2.1 Sampling Point (Outfall) 001 - GBF Effluent

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
CBOD ₅	Weekly Avg	40 mg/L	Daily	24-Hr Flow Prop Comp	See Section 3.2.3 for reporting Waste Load Allocation mass limits, which apply from May through October.

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Green Bay Metropolitan Sewerage District

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
CBOD ₅	Monthly Avg	25 mg/L	Daily	24-Hr Flow Prop Comp	See Section 3.2.3 for reporting Waste Load Allocation mass limits, which apply from May through October.
Suspended Solids, Total	Weekly Avg	27 mg/L	Daily	24-Hr Flow Prop Comp	This is an Adaptive Management interim limit that applies on the permit effective date.
Suspended Solids, Total	Monthly Avg	18 mg/L	Daily	24-Hr Flow Prop Comp	This is an Adaptive Management interim limit that applies on the permit effective date.
Suspended Solids, Total		lbs/day	Daily	Calculated	Monitoring Only - See Section 3.2.5.1 for calculating combined effluent results for the GBF and DPF.
pH (Minimum)	Daily Min	6.0 su	Daily	Continuous	
pH (Maximum)	Daily Max	9.0 su	Daily	Continuous	
Chlorine, Total Residual	Daily Max	38 µg/L	Daily	Grab	Monitoring and limits apply May 1 through September 30 annually.
Chlorine, Total Residual	Weekly Avg	38 µg/L	Daily	Grab	Monitoring and limits apply May 1 through September 30 annually.
Chlorine, Total Residual	Monthly Avg	38 µg/L	Daily	Grab	Monitoring and limits apply May 1 through September 30 annually.
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Monitoring and limits apply May 1 through September 30 annually.
E. coli	% Exceedance	10 Percent	Monthly	Calculated	Monitoring and limits apply May 1 through September 30 annually. See Section 3.2.1.4 for formula to calculate E. coli Percent Limit. Enter the result in the DMR on the last day of the month.
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	59 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect January 1 through April 30 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	13 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect May 1 through September 30 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	38 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect the month of October annually.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	104 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect November 1 through December 31 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	15 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect January 1 through April 30 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	4.7 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect May 1 through September 30 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	14 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect the month of October annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	26 mg/L	Daily	24-Hr Flow Prop Comp	Limit in effect November 1 through December 31 annually.
Phosphorus, Total	Monthly Avg	1.0 mg/L	Daily	24-Hr Flow Prop Comp	
Phosphorus, Total	6-Month Avg	0.6 mg/L	Daily	24-Hr Flow Prop Comp	This is an Adaptive Management interim limit effective beginning May 1, 2022. See Section 3.2.1.7 for averaging periods and compliance determination. Future interim limit of 0.5 mg/L may be effective upon reissuance per Schedule 5.1.
Phosphorus, Total		lbs/day	Daily	Calculated	Monitoring Only - See Section 3.2.5.1 for calculating combined effluent results for the GBF and DPF.
Cadmium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.1.2 and 3.2.1.3.
Chromium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.1.2 and 3.2.1.3.
Copper, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.1.2 and 3.2.1.3.
Lead, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.1.2 and 3.2.1.3.
Nickel, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.1.2 and 3.2.1.3.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Zinc, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.1.2 and 3.2.1.3.
Mercury, Total Recoverable	Daily Max	5.5 ng/L	Monthly	Grab	This is an Alternative Mercury Effluent Limit. See Sections 3.2.1.10 for mercury monitoring requirements, 3.2.1.11 for mercury variance information and 5.3 for the Mercury Schedule.
Acute WET		TU _a	See Listed Qtr(s)	24-Hr Flow Prop Comp	See Section 3.2.1.15 for Whole Effluent Toxicity (WET) testing dates and WET requirements.
Chronic WET	Monthly Avg	11 TUC	See Listed Qtr(s)	24-Hr Flow Prop Comp	See Section 3.2.1.15 for Whole Effluent Toxicity (WET) testing dates and WET requirements.
Temperature Maximum	Weekly Avg	67 deg F	3/Week	Continuous	Monitor year-round beginning on the permit effective date. Limit in effect for the month of October annually beginning October 1, 2025. See the Temperature and Dissipative Cooling Sections below and section 5.2 for the temperature schedule.
Temperature Maximum	Weekly Avg	58 deg F	3/Week	Continuous	Monitor year-round beginning on the permit effective date. Limit in effect for the month of
					December annually beginning December 1, 2025. See the Temperature and Dissipative Cooling Sections below and section 5.2 for the temperature schedule.
Nitrogen, Total Kjeldahl		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only.
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		mg/L	Quarterly	Calculated	Monitoring Only. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.

3.2.1.1 Annual Average Design Flow

The annual average design flow of the Green Bay Facility is 49.2 MGD.

3.2.1.2 Total Metals Analyses

Measurements of total metals and total recoverable metals shall be considered as equivalent.

3.2.1.3 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified at a level of quantitation below the calculated/potential effluent limit, unless not possible using the most sensitive approved method.

3.2.1.4 *E. coli* Percent Limit

No more than 10 percent of *E. coli* bacteria samples collected in any calendar month may exceed 410 #/100 ml. Bacteria samples may be collected more frequently than required. All samples shall be reported on the monthly discharge monitoring reports (DMRs). The following calculation should be used to calculate percent exceedances.

$$\frac{\text{\# of Samples greater than 410 \#/100}}{\text{Total \# of samples}} \times 100 = \% \text{ Exceedance}$$

3.2.1.5 Lower Fox River Basin Total Maximum Daily Load for Total Phosphorus and Total Suspended Solids

Green Bay Metropolitan Sewerage District Combined (GBMSD) operates two separate regional wastewater treatment facilities—the Green Bay Facility (GBF) and the De Pere Facility (DPF)—that both discharge to the Lower Fox River Main Stem Sub-Basin of the Lower Fox River Basin Total Maximum Daily Load (TMDL). Due to the merger of the two facilities (GBF and DPF) under the same permit and the fact that both outfalls discharge to the Lower Fox River, GBMSD's current WPDES permit (Permit No. WI-0065251-01-1) contains the combined TMDL wasteload allocation (WLA) for phosphorus and TSS for both GBF and DPF. Additionally, GBMSD has entered into a contractual agreement with Green Bay Packaging (GBP) under which GBP has agreed to transfer to GBMSD GBP's Lower Fox River TMDL total phosphorus (WLA) under GBP's WPDES permit (Permit No. WI-0000973-09-0). GBP's permitted discharge is to the same reach of the Lower Fox River TMDL as GBMSD's two treatment facilities. TMDL compliance shall be determined based on the combined allocations for the three facilities. This WLA allocation transfer does not include GBP's TSS WLA and therefore does not change GBMSD's TSS WLA.

The combined total phosphorus WLA for GBMSD after the WLA transfer from GBP is 22,921 lbs/year, consisting of 17,349 lbs/year allocated to GBF, 4,943 lbs/year allocated to DPF and 629 lbs/year allocated to GBP.

3.2.1.6 Total Phosphorus and TSS Limitation(s) and Adaptive Management Requirements

Green Bay Metropolitan Sewerage District Combined (GBMSD), branded as NEW Water, has requested and the Department has approved a plan to implement a watershed adaptive management approach under s. NR 217.18, Wis. Adm. Code and s. 283.13(7) Wis. Stats., as a means for GBMSD to achieve compliance with the phosphorus water quality standard in s. NR 102.06, Wis. Adm. Code, and the Lower Fox River Basin TMDL for TSS. The total phosphorus and TSS limitations and conditions in this permit reflect the approved adaptive management plan WQT-2020-0016 (October 2020). Failure to implement the terms and conditions of this section is a violation of this permit. The permittee shall design and implement the actions identified in Section 3.2 of AM Plan No. WQT-2020-0016 (October 2020) in accordance with the goals and measures identified in the approved plan. The scope of the watershed adaptive management approach for GBMSD to achieve compliance with phosphorus water quality standards and the TMDL for TSS accounts for GBMSD's combined discharges from GBF and DPF.

If total phosphorus loadings within the Dutchman and Ashwaubenon Creeks action area, as identified in AM Plan No. WQT-2020-0016 (October 2020), are not reduced by at least 4,727 pounds per year by December 31, 2026 the watershed adaptive management option may not be available to the permittee upon permit reissuance. If TSS loadings within the Dutchman and Ashwaubenon Creeks action areas, as identified in AM Plan No. WQT-2020-0016 (October 2020), are not reduced by at least 985,935 pounds per year by December 31, 2026 the watershed adaptive management option may not be available to the permittee upon permit reissuance.

Pursuant to s. NR 217.18(3)(e)2, Wis. Adm. Code, the total phosphorus adaptive management interim limitation is 0.6 mg/L, expressed as a six-month average. Additionally, a 1.0 mg/L phosphorus limitation expressed as a monthly average is required. These phosphorus effluent limitations apply to the GBF and DPF discharges independently (each facility must meet these phosphorus limits). The adaptive management TSS interim limits are 27 mg/L as a weekly average and 18 mg/L as a monthly average for GBF and 12 mg/L as a weekly average and 8 mg/L as a monthly average for DPF.

The final TMDL water quality based effluent limitations for GBMSD for total phosphorus on a combined basis (GBF + DPF + GBP) are 70 lbs/day as a six-month average and 209 lbs/day as a monthly average. The final TMDL water quality based effluent limitations for GBMSD for TSS on a combined basis (GBF + DPF) are 4,305 lbs/day as a weekly average and 2,404 lbs/day as a monthly average. These final limitations may be recalculated based on changes in the in-stream data or approved revisions to the Lower Fox River TMDL wasteload allocations at the time of permit reissuance. These limits will become effective at the end of four permit terms (December 31, 2041) unless the adaptive management project is terminated per s. NR 217.18(3)(g), Wis. Adm. Code, in which case the limits may be imposed at an earlier date, or the applicable phosphorus water quality standard in s. NR 102.06, Wis. Adm. Code and Lower Fox River Basin TMDL for TSS have been achieved within the permittee's receiving water.

3.2.1.7 Total Phosphorus and TSS Interim Limits, Averaging Periods and Compliance Determination

The adaptive management total phosphorus interim limit of 0.6 mg/L as a 6-month average goes into effect May 1, 2022 beginning with the averaging period from May 1, 2022 through October 31, 2022. The averaging periods are May through October and November through April. Compliance with the 6-month average limit is evaluated at the end of each 6-month period on April 30th and October 31st annually. Interim limits for TSS are effective immediately upon permit reissuance.

3.2.1.8 Adaptive Management Reopener Clause

Per s. NR 217.18(3)(g), Wis. Adm. Code, the Department may terminate the adaptive management option for a permittee through permit modification or at permit reissuance and require compliance with a phosphorus effluent limitation calculated under s. NR 217.13, Wis. Adm. Code, or a TSS mass limitation from a federally approved TMDL based on any of the following reasons:

1. Failure to implement the adaptive management actions in accordance with the approved adaptive management plan and compliance schedule established in the permit.
2. New information becomes available that changes the Department's determinations made under s. NR 217.18(2), Wis. Adm. Code, or pursuant to s. 283.13(7), Wis. Stats.
3. Circumstances beyond the permittee's control have made compliance with the applicable phosphorus criterion in s. NR 102.06, Wis. Adm. Code, or TSS load allocation based on the federally approved TMDL pursuant to the plan's goals and measures infeasible.
4. A determination by the Department that sufficient reductions have not been achieved to timely reduce the amount of total phosphorus or TSS to meet the criteria in s. NR 102.06, Wis. Adm. Code or the federally approved TMDL.

3.2.1.9 Adaptive Management Requirements - Optimization

The permittee shall continue to optimize performance to control phosphorus discharges in accordance with s. NR 217.18(3)(c), Wis. Adm. Code.

3.2.1.10 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

3.2.1.11 Mercury Variance – Implement Pollutant Minimization Plan

This permit contains a variance to the water quality-based effluent limit (WQBEL) for mercury granted in accordance with s. 283.15, Stats. As conditions of this variance the permittee shall (a) maintain effluent quality at or below the interim effluent limitation specified in the table above, (b) follow the “Green Bay Metropolitan Sewerage District Mercury Pollutant Minimization Program” dated August 14, 2020 and (c) perform the actions listed in the schedule. (See the Schedules section herein.):

3.2.1.12 Effluent Temperature Monitoring

For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13), Wis. Adm. Code. This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. Report the maximum temperature measured during the day on the DMR.

3.2.1.13 Effluent Temperature Limitations

Limits for Temperature, Maximum: The effluent limitations for “Temperature, Maximum” become effective on **October 1, 2025** as specified in the Schedules section. Monitoring is required 3X/week upon permit reissuance. Daily maximum temperatures shall be reported so that applicable daily maximum limits can be compared to the reported daily maximum temperatures and applicable weekly average limits can be compared to the weekly averages of the reported daily maximum temperatures.

3.2.1.14 Dissipative Cooling Demonstration – POTW Weekly Average Limits

If weekly average effluent temperature limitations are needed, the permittee may submit all additional necessary information with a request that the Department account for dissipative cooling of the effluent pursuant to s. NR 106.59, Wis. Adm. Code. If the Department determines that weekly average effluent limitations for temperature are not necessary based on dissipative cooling the Department shall modify the permit to remove the weekly average effluent limitations pursuant to s. NR 106.59(4)(e). Monitoring frequency shall be 3X/Week and the remainder of the permit schedule for weekly average temperature limits shall be discontinued at that time. If after reviewing the data the Department determines that weekly average effluent limitations for temperature are still necessary because the thermal load from the effluent is not adequately dissipated, the requirement to meet the effluent limitations according to the permit schedule will not be removed and the monitoring frequency specified in the permit shall continue to apply. A re-evaluation of the limits may then be requested pursuant to NR 106 – ‘Subchapters V & VI Effluent Limitations for Temperature’ or NR 102.26 – Site Specific Ambient Temperature.

3.2.1.15 Whole Effluent Toxicity (WET) Testing

Primary Control Water: The primary control water shall be a standard laboratory water having approximately the same hardness as the Fox River, as specified in section 4.4.7 of the “State of Wisconsin Aquatic Life Toxicity Testing Methods Manual” (s. NR 219.04, Wis. Adm. Code).

Instream Waste Concentration (IWC): 9%

Acute Mixing Zone Concentration: N/A

Dilution series: At least five effluent concentrations and dual controls must be included in each test.

- **Acute:** 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- **Chronic:** 100, 30, 10, 3, 1% and any additional selected by the permittee.

WET Testing Frequency:

Acute tests shall be conducted once each year in rotating quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

Acute:

- 3rd Quarter (July 1 – September 30) 2022
- 4th Quarter (October 1 – December 31) 2023
- 3rd Quarter (July 1 – September 30) 2024
- 1st Quarter (January 1 – March 31) 2025
- 2nd Quarter (April 1 – June 30) 2026

Acute WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in 2nd Quarter (April 1 – June 30) 2027.

Chronic tests shall be conducted once each year in rotating quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

Chronic:

- 3rd Quarter (July 1 – September 30) 2022
- 4th Quarter (October 1 – December 31) 2023

- 3rd Quarter (July 1 – September 30) 2024
- 1st Quarter (January 1 – March 31) 2025
- 2nd Quarter (April 1 – June 30) 2026

Chronic WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in 2nd Quarter (April 1 – June 30) 2027.

Testing: WET testing shall be performed during normal operating conditions. Permittees are not allowed to turn off or otherwise modify treatment systems, production processes, or change other operating or treatment conditions during WET tests.

Reporting: The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition*"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically by the required deadline.

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than 1.0 for either species. The TU_a shall be calculated as follows: $TU_a = 100 \div LC_{50}$. A chronic toxicity test shall be considered positive if the Toxic Unit - Chronic (TU_c) is greater than 11 for either species. The TU_c shall be calculated as follows: $TU_c = 100 \div IC_{25}$.

Additional Testing Requirements: Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The 90 day reporting period shall begin the day after the test which showed a positive result. The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

3.2.2 Sampling Point 601 - River Monitoring for GBF WLA

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
WLA Previous Day River Flow		cfs	Daily	Gauge Station	Monitoring Only - May 1 through October 31.
WLA Previous Day River Temp		deg F	Daily	Measure	Monitoring Only - May 1 through October 31.
WLA Previous 4 Day Avg River Flow		cfs	Daily	Calculated	Monitoring Only - May 1 through October 31.

3.2.2.1 Reporting Requirements

See Section 3.2.3.1 for Definitions, Monitoring Requirements and Reporting Requirements applicable to River Monitoring performed for Sampling Point 601.

3.2.3 Sampling Point (Outfall) 007 - GBF WLA Compliance Reporting

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
WLA CBOD ₅ Value		lbs/day	Daily	See Table	May 1 through October 31. Based on River Monitoring at Sample Point 601, use the "WLA Previous Day River Temp" and "WLA Previous 4-day Avg River Flow" to look up the "WLA CBOD ₅ Value" from Tables 1 - 4 at Section 3.2.3.1.5.
WLA Adjusted Value		lbs/day	Daily	Calculated	May 1 through October 31. Multiply the "WLA CBOD ₅ Value" times 1.34 and report the applicable limit in this DMR column.
WLA CBOD ₅ Discharged	Daily Max - Variable	lbs/day	Daily	Calculated	May 1 through October 31. Enter the daily mass of CBOD ₅ discharged from Outfall 001. Compare to "WLA Adjusted Value" to determine compliance.
WLA 7 Day Sum of WLA Values		lbs/day	Daily	Calculated	May 1 through October 31. Enter the sum of the "WLA CBOD ₅ Value" (allocation) for each 7-consecutive-day period (present day value plus 6 previous day's values) and report applicable limit in this DMR column.
WLA 7 Day Sum of CBOD ₅ Discharged	Daily Max - Variable	lbs/day	Daily	Calculated	May 1 through October 31. Enter the daily mass of CBOD ₅ discharged from Outfall 001. Compare to "WLA Adjusted Value" to determine compliance.

3.2.3.1 Waste Load Allocation Requirements

Each year during the months of May through October, the discharge of CBOD₅ from sample point/outfall 001 is limited to the following wasteload allocated water quality related effluent limitations in addition to the effluent limitations contained in section 3.2.1.

3.2.3.1.1 Definitions

- *CBOD₅ Allocation*: Green Bay Metropolitan Sewerage District's GBF allocation of CBOD₅ (pounds per day CBOD₅), as listed in Tables 1 through 4 of Section 3.2.3.1.5, represent water quality related effluent limitations. The flow and temperature conditions used to determine the CBOD₅ allocation for a given day are defined below.
- *Flow*: A representative measurement of flow is the previous four days average flow value derived daily from continuous river flow monitoring data for the Fox River as reported by the Lower Fox River Dischargers Association.
- *Temperature*: A representative measurement of temperature is the daily average temperature value of the previous day derived from continuous river temperature monitoring data for the Fox River as reported by the Lower Fox River Dischargers Association.

3.2.3.1.2 Determination of Effluent Limitation

For purposes of determining compliance with the wasteload allocated water quality related CBOD₅ effluent limitations, the following conditions shall be met:

- The sum of the actual daily discharges of CBOD₅ for any 7-consecutive-day period shall not exceed the sum of the daily CBOD₅ allocation values from Tables 1 through 4 for the same 7-consecutive-day period.
- For any one-day period, the actual discharge of CBOD₅ shall not exceed 1.34 times the CBOD₅ allocation value from Tables 1 through 4 for that day.

3.2.3.1.3 Monitoring Requirements

The same 24-hour period shall be used for the collection of composite and continuous samples for river flow and temperature and all effluent characteristics listed in Table 3.2.1, including effluent flow and CBOD₅.

3.2.3.1.4 Reporting Requirements

During the months of May through October inclusive the permittee shall report the following information:

- The daily average river flow value in cfs ("WLA Previous Day River Flow");
- The daily average river temperature value in °F ("WLA Previous Day River Temp");
- The average of the previous 4 days river flow values in cfs ("WLA Previous 4 Day Avg River Flow");
- The daily CBOD₅ allocation value in lbs CBOD₅ per day from Tables 1 through 4 ("WLA CBOD₅ Value");
- The daily adjusted CBOD₅ allocation value – 1.34 x daily WLA CBOD₅ Value ("WLA Adjusted Value");
- The actual discharge value of CBOD₅ in lbs CBOD₅ per day ("WLA CBOD₅ Discharged");
- The sum of the daily CBOD₅ allocation values in lbs CBOD₅ for each 7-consecutive-day period (present day allocation plus the 6 previous day's allocation) ("WLA 7 Day Sum of WLA Values"); and
- The sum of the actual daily discharge values of CBOD₅ in lbs CBOD₅ for each 7-consecutive-day period (present day discharge plus the 6 previous days discharge) ("WLA 7 Day Sum of CBOD₅ Discharged").

3.2.3.1.5 Tables 1 through 4 (Wasteload Allocation, May through October)

TABLE 1 - WASTELOAD ALLOCATED VALUES IN LBS PER DAY OF CBOD₅
(River mile 7.3 to 0.0)

MAY

Temperature (previous day average in °F)	Flow reported by the Lower Fox River Dischargers Association (previous four-day average in cfs)														
	750 OR LESS	751 TO 1000	1001 TO 1250	1251 TO 1500	1501 TO 1750	1751 TO 2000	2001 TO 2250	2251 TO 2500	2501 TO 2750	2751 TO 3000	3001 TO 3500	3501 TO 4000	4001 TO 5000	5001 TO 8000	8001 OR MORE
≥86	7439	7439	7439	7439	7439	7439	7439	7439	9882	12967	18576	27844	35420	35420	35420
82 TO 85	7439	7439	7439	7439	7439	7439	7439	8441	10925	13901	19274	28104	35420	35420	35420
78 TO 81	7439	7439	7439	7439	7439	7439	8290	10323	12795	15701	20859	29201	35420	35420	35420
74 TO 77	7439	7439	7439	7439	7439	8479	10304	12514	15106	18071	23212	31330	35420	35420	35420
70 TO 73	7439	7439	7439	7439	8670	10528	12719	15241	18083	21243	26566	34724	35420	35420	35420
66 TO 69	7439	7439	7439	8524	10658	13073	15764	18726	21953	25439	31142	35420	35420	35420	35420
62 TO 65	7439	7439	7700	10354	13236	16342	19663	23198	26941	30885	35420	35420	35420	35420	35420
58 TO 61	7439	7439	9276	12868	16630	20557	24642	28885	33274	35420	35420	35420	35420	35420	35420
54 TO 57	7439	7439	11630	16290	21064	25946	30927	35420	35420	35420	35420	35420	35420	35420	35420
50 TO 53	7439	9186	14988	20849	26767	32731	35420	35420	35420	35420	35420	35420	35420	35420	35420
46 TO 49	7439	12380	19573	26769	33960	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420
42 TO 45	10762	16894	25613	34274	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420
≤41	15632	22958	33333	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420

TABLE 2 - WASTELOAD ALLOCATED EFFLUENT VALUES IN POUNDS PER DAY OF CBOD₅
(River mile 7.3 to 0.0)

JUNE

Temperature (previous day average in °F)	Flow reported by the Lower Fox River Dischargers Association (previous four-day average in cfs)														
	750 OR LESS	751 TO 1000	1001 TO 1250	1251 TO 1500	1501 TO 1750	1751 TO 2000	2001 TO 2250	2251 TO 2500	2501 TO 2750	2751 TO 3000	3001 TO 3500	3501 TO 4000	4001 TO 5000	5001 TO 8000	8001 OR MORE
≥86	13818	12792	11646	10866	10434	10335	10557	11085	11901	12967	18576	27844	35420	35420	35420
82 TO 85	13068	12203	11285	10726	10512	10627	11057	11788	12804	13901	19274	28104	35420	35420	35420
78 TO 81	12057	11465	10929	10748	10901	11375	12158	13234	14585	15701	20859	29201	35420	35420	35420
74 TO 77	11281	10979	10851	11066	11613	12472	13630	15073	16785	18071	23212	31330	35420	35420	35420
70 TO 73	10738	10743	11047	11686	12646	13913	15472	17307	19403	21243	26566	34724	35420	35420	35420
66 TO 69	7439	7439	7439	8524	10658	13073	15764	18726	21953	25439	31142	35420	35420	35420	35420
62 TO 65	7439	7439	7700	10354	13236	16342	19663	23198	26941	30885	35420	35420	35420	35420	35420
58 TO 61	7439	7439	9276	12868	16630	20557	24642	28885	33274	35420	35420	35420	35420	35420	35420
54 TO 57	7439	7439	11630	16290	21064	25946	30927	35420	35420	35420	35420	35420	35420	35420	35420
50 TO 53	7439	9186	14988	20849	26767	32731	35420	35420	35420	35420	35420	35420	35420	35420	35420
46 TO 49	7439	12380	19573	26769	33960	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420
42 TO 45	10762	16894	25613	34274	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420
≤41	15632	22958	33333	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420

TABLE 3 - WASTELOAD ALLOCATED EFFLUENT VALUES IN POUNDS PER DAY OF CBOD₅
(River mile 7.3 to 0.0)
JULY - AUGUST

Temperature (previous day average in °F)	Flow reported by the Lower Fox River Dischargers Association (previous four-day average in cfs))														
	750 OR LESS	751 TO 1000	1001 TO 1250	1251 TO 1500	1501 TO 1750	1751 TO 2000	2001 TO 2250	2251 TO 2500	2501 TO 2750	2751 TO 3000	3001 TO 3500	3501 TO 4000	4001 TO 5000	5001 TO 8000	8001 OR MORE
≥86	13818	12792	11646	10866	10434	10335	10557	11085	11901	12995	15116	18769	25774	35420	35420
82 TO 85	13068	12203	11285	10726	10512	10627	11057	11788	12804	14090	16493	20502	28007	35420	35420
78 TO 81	12057	11465	10929	10748	10901	11375	12158	13234	14585	16201	19083	23703	32066	35420	35420
74 TO 77	11281	10979	10851	11066	11613	12472	13630	15073	16785	18752	22149	27429	35420	35420	35420
70 TO 73	10738	10743	11047	11686	12646	13913	15472	17307	19403	21748	25693	31679	35420	35420	35420
66 TO 69	10432	10759	11517	12604	14005	15703	17684	19934	22439	25184	29715	35420	35420	35420	35420
62 TO 65	10361	11028	12264	13821	15684	17837	20267	22958	25894	29061	34215	35420	35420	35420	35420
≤61	10524	11547	13285	15337	17686	20318	23219	26373	29764	33380	35420	35420	35420	35420	35420

TABLE 4 - WASTELOAD ALLOCATED EFFLUENT VALUES IN POUNDS PER DAY OF CBOD₅
(River mile 7.3 to 0.0)
SEPTEMBER - OCTOBER

Temperature (previous day average in °F)	Flow reported by the Lower Fox River Dischargers Association (previous four-day average in cfs))														
	0 TO 750	751 TO 1000	1001 TO 1250	1251 TO 1500	1501 TO 1750	1751 TO 2000	2001 TO 2250	2251 TO 2500	2501 TO 2750	2751 TO 3000	3001 TO 3500	3501 TO 4000	4001 TO 5000	5001 TO 8000	8001 OR MORE
≥86	7439	7439	7439	7439	8811	11224	13833	16613	19550	22620	27439	34151	35420	35420	35420
82 TO 85	7439	7439	7439	7561	9417	11486	13750	16186	18776	21502	25800	31819	35420	35420	35420
78 TO 81	7439	7439	7439	8667	10149	11844	13731	15793	18007	20356	24085	29342	35420	35420	35420
74 TO 77	7439	7547	8392	9486	10811	12347	14078	15979	18031	20219	23705	28635	35420	35420	35420
70 TO 73	7734	8208	9111	10267	11651	13245	15033	16991	19101	21342	24910	29946	35420	35420	35420
66 TO 69	7981	8649	9830	11259	12920	14790	16851	19083	21462	23977	27951	33524	35420	35420	35420
62 TO 65	8104	9118	10792	12717	14868	17229	19781	22500	25370	28373	33076	35420	35420	35420	35420
58 TO 61	8359	9870	12255	14887	17748	20816	24073	27500	31076	34781	35420	35420	35420	35420	35420
54 TO 57	8991	11151	14462	18019	21804	25797	29979	34326	35420	35420	35420	35420	35420	35420	35420
50 TO 53	10255	13215	17668	22368	27295	32427	35420	35420	35420	35420	35420	35420	35420	35420	35420
46 TO 49	12399	16309	22123	28179	34465	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420
42 TO 45	15672	20686	28076	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420
≤41	20328	26597	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420	35420

3.2.4 Sampling Point (Outfall) 051 - DPF Effluent

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
CBOD ₅	Weekly Avg	18 mg/L	5/Week	24-Hr Flow Prop Comp	
CBOD ₅	Monthly Avg	9.0 mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Weekly Avg	12 mg/L	Daily	24-Hr Flow Prop Comp	This is an Adaptive Management interim limit that applies on the permit effective date.
Suspended Solids, Total	Monthly Avg	8.0 mg/L	Daily	24-Hr Flow Prop Comp	This is an Adaptive Management interim limit that applies on the permit effective date.
Suspended Solids, Total		lbs/day	Daily	Calculated	Monitoring Only - See subsection 3.2.5.1 for calculating combined effluent results for the GBF and DPF.
pH (Minimum)	Daily Min	6.0 su	Daily	Continuous	
pH (Maximum)	Daily Max	9.0 su	Daily	Continuous	
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Monitoring and limits apply May 1 through September 30 annually.
E. coli	% Exceedance	10 Percent	Monthly	Calculated	Monitoring and limits apply May 1 through September 30 annually. See section 3.2.4.4 for formula to calculate E. coli Percent Limit. Enter the result in the DMR on the last day of the month.
Phosphorus, Total	Monthly Avg	1.0 mg/L	Daily	24-Hr Flow Prop Comp	
Phosphorus, Total	6-Month Avg	0.6 mg/L	Daily	24-Hr Flow Prop Comp	This is an Adaptive Management interim limit effective starting May 1, 2022. See Section 3.2.4.6 for averaging periods and compliance determination. Future interim limit of 0.5 mg/L may be effective upon reissuance per Schedule 5.1.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Total		lbs/day	Daily	Calculated	Monitoring Only - See Section 3.2.5.1 for calculating combined effluent results for the GBF and DPF.
Nitrogen, Ammonia (NH ₃ -N) Total	Daily Max	26 mg/L	5/Week	24-Hr Flow Prop Comp	Limit in effect January 1 through April 30 and November 1 through December 31 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Weekly Avg	26 mg/L	5/Week	24-Hr Flow Prop Comp	Limit in effect January 1 through April 30 and November 1 through December 31 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	26 mg/L	5/Week	24-Hr Flow Prop Comp	Limit in effect January 1 through March 31 and November 1 through December 31 annually.
Nitrogen, Ammonia (NH ₃ -N) Total	Monthly Avg	24 mg/L	5/Week	24-Hr Flow Prop Comp	Limit in effect April 1 through April 30 annually.
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	5/Week	24-Hr Flow Prop Comp	Monitoring Only – May 1 through October 31 annually.
Cadmium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.4.2 and 3.2.4.3.
Chromium, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.4.2 and 3.2.4.3.
Copper, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.4.2 and 3.2.4.3.
Lead, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.4.2 and 3.2.4.3.
Nickel, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.4.2 and 3.2.4.3.
Zinc, Total Recoverable		µg/L	Monthly	24-Hr Flow Prop Comp	Monitoring Only - See Sections 3.2.4.2 and 3.2.4.3.
Mercury, Total Recoverable		ng/L	Monthly	Grab	Monitoring Only - See Section 3.2.4.9 for mercury monitoring requirements.
Acute WET		TU _a	See Listed Qtr(s)	24-Hr Flow Prop Comp	See Section 3.2.4.10 for Whole Effluent Toxicity (WET) testing dates and WET requirements.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Chronic WET		TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	See Section 3.2.4.10 for Whole Effluent Toxicity (WET) testing dates and WET requirements.
Nitrogen, Total Kjeldahl		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only.
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	24-Hr Flow Prop Comp	Monitoring Only.
Nitrogen, Total		mg/L	Quarterly	Calculated	Monitoring Only. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.

3.2.4.1 Annual Average Design Flow

The annual average design flow of the De Pere Facility is 10 MGD.

3.2.4.2 Total Metals Analyses

Measurements of total metals and total recoverable metals shall be considered as equivalent.

3.2.4.3 Sample Analysis

Samples shall be analyzed using a method which provides adequate sensitivity so that results can be quantified at a level of quantitation below the calculated/potential effluent limit, unless not possible using the most sensitive approved method.

3.2.4.4 *E. coli* Percent Limit

No more than 10 percent of *E. coli* bacteria samples collected in any calendar month may exceed 410 #/100 ml. Bacteria samples may be collected more frequently than required. All samples shall be reported on the monthly discharge monitoring reports (DMRs). The following calculation should be used to calculate percent exceedances.

$$\frac{\text{\# of Samples greater than 410 \#/100}}{\text{Total \# of samples}} \times 100 = \% \text{ Exceedance}$$

3.2.4.5 Adaptive Management for Total Phosphorus and Total Suspended Solids

The De Pere Wastewater Treatment Facility (“DPF”) is owned and operated by Green Bay Metropolitan Sewerage District Combined (“GBMSD”). GBMSD also owns and operates the Green Bay Wastewater Treatment Facility (“GBF”). The GBF and DPF are both permitted under same WPDES permit held by GBMSD. GBMSD has requested and the Department has approved a plan to implement a watershed adaptive management approach as a means for GBMSD to achieve compliance with the total phosphorus water quality standard in s. NR 102.06, Wis. Adm. Code, and the Lower Fox River Basin Total Maximum Daily Load for TSS. Compliance is determined on a combined basis (GBF plus DPF). The scope of the watershed adaptive management approach for GBMSD to achieve total phosphorus and total suspended solids compliance accounts for GBMSD’s combined discharges from the GBF (Outfall 001) and the DPF (Outfall 051).

The requirements in Sections 3.2.1.5 and 3.2.1.6 of this permit for GBF's Outfall 001 and GBMSD's approved adaptive management plan WQT-2020-0016 (October 2020) all apply to DPF's Outfall 051.

Pursuant to s. NR 217.18(3)(e)2, Wis. Adm. Code, the total phosphorus adaptive management interim limitation for DPF is 0.6 mg/L, expressed as a six-month average. Additionally, a 1.0 mg/L phosphorus limitation expressed as a monthly average is required. The adaptive management TSS interim limits are 12 mg/L as a weekly average and 8 mg/L as a monthly average for DPF.

3.2.4.6 Total Phosphorus and TSS Interim Limits, Averaging Periods and Compliance Determination

The adaptive management total phosphorus interim limit of 0.6 mg/L as a 6-month average goes into effect beginning the period from May 1, 2022 through October 31, 2022. The averaging periods are May through October and November through April. Compliance with the 6-month average limit is evaluated at the end of each 6-month period on April 30th and October 31st annually. Interim limits for TSS are effective immediately upon permit reissuance.

3.2.4.7 Adaptive Management Reopener Clause

Per s. NR 217.18(3)(g), Wis. Adm. Code, the Department may terminate the adaptive management option for a permittee through permit modification or at permit reissuance and require compliance with a phosphorus effluent limitation calculated under s. NR 217.13, Wis. Adm. Code, or a TSS mass limitation from a federally approved TMDL based on any of the following reasons:

1. Failure to implement the adaptive management actions in accordance with the approved adaptive management plan and compliance schedule established in the permit.
2. New information becomes available that changes the Department's determinations made under s. NR 217.18(2), Wis. Adm. Code, or pursuant to s. 283.13(7), Wis. Stats.
3. Circumstances beyond the permittee's control have made compliance with the applicable phosphorus criterion in s. NR 102.06, Wis. Adm. Code, or TSS load allocation based on the federally approved TMDL pursuant to the plan's goals and measures infeasible.
4. A determination by the Department that sufficient reductions have not been achieved to timely reduce the amount of total phosphorus or TSS to meet the criteria in s. NR 102.06, Wis. Adm. Code or the federally approved TMDL.

3.2.4.8 Adaptive Management Requirements - Optimization

The permittee shall continue to optimize performance to control phosphorus discharges in accordance with s. NR 217.18(3)(c), Wis. Adm. Code.

3.2.4.9 Mercury Monitoring

The permittee shall collect and analyze all mercury samples according to the data quality requirements of ss. NR 106.145(9) and (10), Wisconsin Administrative Code. The limit of quantitation (LOQ) used for the effluent and field blank shall be less than 1.3 ng/L, unless the samples are quantified at levels above 1.3 ng/L. The permittee shall collect at least one mercury field blank for each set of mercury samples (a set of samples may include combinations of intake, influent, effluent or other samples all collected on the same day). The permittee shall report results of samples and field blanks to the Department on Discharge Monitoring Reports.

3.2.4.10 Whole Effluent Toxicity (WET) Testing

Primary Control Water: The primary control water shall be a standard laboratory water having approximately the same hardness as the Fox River, as specified in section 4.4.7 of the "State of

Wisconsin Aquatic Life Toxicity Testing Methods Manual” (s. NR 219.04, Wis. Adm. Code).

Instream Waste Concentration (IWC): 9%

Acute Mixing Zone Concentration: N/A

Dilution series: At least five effluent concentrations and dual controls must be included in each test.

- **Acute:** 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- **Chronic:** 100, 30, 10, 3, 1% and any additional selected by the permittee.

WET Testing Frequency:

Acute tests shall be conducted once each year in rotating quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

Acute:

- 3rd Quarter (July 1 – September 30) 2022
- 4th Quarter (October 1 – December 31) 2023
- 3rd Quarter (July 1 – September 30) 2024
- 1st Quarter (January 1 – March 31) 2025
- 2nd Quarter (April 1 – June 30) 2026

Acute WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in 2nd Quarter (April 1 – June 30) 2027.

Chronic tests shall be conducted once each year, in rotating quarters in order to collect seasonal information about the discharge. Tests are required during the following quarters.

Chronic:

- 3rd Quarter (July 1 – September 30) 2022
- 4th Quarter (October 1 – December 31) 2023
- 3rd Quarter (July 1 – September 30) 2024
- 1st Quarter (January 1 – March 31) 2025
- 2nd Quarter (April 1 – June 30) 2026

Chronic WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in 2nd Quarter (April 1 – June 30) 2027.

Testing: WET testing shall be performed during normal operating conditions. Permittees are not allowed to turn off or otherwise modify treatment systems, production processes, or change other operating or treatment conditions during WET tests.

Reporting: The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition*"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically by the required deadline.

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than 1.0 for either species. The TU_a shall be calculated as follows: $TU_a = 100 \div LC_{50}$. A chronic toxicity test shall be considered positive if the Toxic Unit - Chronic (TU_c) is greater than 11 for either species. The TU_c shall be calculated as follows: $TU_c = 100 \div IC_{25}$.

Additional Testing Requirements: Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The 90 day reporting period shall begin the day after the test which showed a positive result. The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

3.2.5 Sampling Point (Outfall) 076 - Calculated Combined Effluent

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Suspended Solids, Total		lbs/day	Daily	Calculated	Monitoring Only.
Phosphorus, Total		lbs/day	Daily	Calculated	Monitoring Only.

3.2.5.1 Calculation of Combined Effluent Results

Results reported under this sample point, for the combined daily mass of total suspended solids and total phosphorus discharged from the GBF and the DPF, shall be calculated as the sum of those respective parameters reported at sample points 001 and 051.

3.2.6 Sampling Point 602 - Fox River; 603 - Ashwaubenon Creek; 604 - Dutchman Creek

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow River		cfs	2/Month	Measure	Provide an estimate of river flow for each day that in-stream phosphorus and total suspended solids monitoring is performed May 1 through October 31 annually.
Flow River		cfs	Per Occurrence	Measure	Voluntary river flow estimates for each day that in-stream phosphorus and total suspended solids monitoring is performed November 1 through April 30 annually.
Phosphorus, Total		mg/L	2/Month	Grab	Collect samples 2/Month May 1 through October 31 annually. See Sections 3.2.6.1 through 3.2.6.3 for sampling and reporting requirements.

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Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Total		mg/L	Per Occurrence	Grab	Voluntary monitoring November 1 through April 30 annually. See Sections 3.2.6.1 through 3.2.6.3 for sampling and reporting requirements.
Phosphorus, Total		lbs/month	Monthly	Calculated	Calculate and report total monthly phosphorus loads for the months of May through October annually. See Section 3.2.6.4 for calculation of total monthly loads.
Phosphorus, Total		lbs/month	Per Occurrence	Calculated	Calculated total monthly phosphorus loads may also be reported for the months of November through April, as data is available. See Section 3.2.6.4 for calculation of total monthly loads.
Suspended Solids, Total		mg/L	2/Month	Grab	Collect samples 2/Month May 1 through October 31 annually. See Sections 3.2.6.1 through 3.2.6.3 for sampling and reporting requirements.
Suspended Solids, Total		mg/L	Per Occurrence	Grab	Voluntary monitoring November 1 through April 30 annually. See Sections 3.2.6.1 through 3.2.6.3 for sampling and reporting requirements.
Suspended Solids, Total		lbs/month	Monthly	Calculated	Calculate and report total monthly total suspended solids loads for the months of May through October annually. See Section 3.2.6.4 for calculation of total monthly loads.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Suspended Solids, Total		lbs/month	Per Occurrence	Calculated	Calculated total monthly total suspended solids loads may also be reported for the months of November through April, as data is available. See Section 3.2.6.4 for calculation of total monthly loads.

3.2.6.1 Surface Water Sampling for Total Phosphorus and Total Suspended Solids

Surface water sampling shall be performed in accordance with Adaptive Management Plan No. WQT-2020-0016 (October 2020). When sampling surface waters for total phosphorus and total suspended solids, sample collection and handling protocols as specified in Section 2.3 of AM Plan No. WQT-2020-0016 (October 2020) shall be followed along with the following Standard Requirements in this permit: “Monitoring Results”, “Sampling and Testing Procedures”, “Recording of Results” and “Reporting of Monitoring Results”.

When testing for total phosphorus and total suspended solids in surface water samples, use the test methods specified in Table 2-9 of AM Plan No. WQT-2020-0016 (October 2020). The methods and protocols listed in Table 2-9 were current at the time this adaptive management plan was approved. See ss. NR 218 and NR 219, Wis. Adm. Code, for up-to-date analytical methods, which may be used in lieu of Table 2-9 analytical methods. Analytical methods used shall enable the laboratory to quantitate total phosphorus at levels below the water quality criterion of 0.075 mg/L. If the required level of quantitation cannot be met by any of the methods available in ch. NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected.

When surface water samples are collected by Water Action Volunteers, the “The Volunteer Monitor's Guide to Quality Assurance Project Plans” shall be implemented. (Available at www.epa.gov; search for “The Volunteer Monitor's Guide to Quality Assurance Project Plans”).

3.2.6.2 Voluntary Surface Water Sampling for Total Phosphorus and Total Suspended Solids

Total phosphorus and total suspended solids monitoring may voluntarily be performed from November 1 through April 30 annually. When voluntary in-stream monitoring is completed monitoring results shall be reported on the monthly eDMR. Report river flow measurements for each day phosphorus and total suspended solids monitoring is performed.

3.2.6.3 Reporting Surface Water Sampling Results for Total Phosphorus, Total Suspended Solids and Flow

The permittee shall report total phosphorus and total suspended solids monitoring results and river flow measurements for surface water samples collected at Sampling Points 602, 603 and 604 on monthly eDMRs. The monitoring results shall be submitted by the date specified on the eDMR.

In addition, all total phosphorus and total suspended solids test results for surface water samples collected at Sampling Points 602, 603, 604 and all other surface water sampling points identified in Adaptive Management Plan No. WQT-2020-0016 (October 2020) shall be reported to the Department using the Department’s Laboratory Data Entry System (LDES). Test results for the year shall be submitted by March 31st of the following year. (Available at dnr.wi.gov; search “Laboratory Data Entry System”). Report river flow measurements for each day phosphorus and total suspended solids monitoring is performed.

3.2.6.4 Total Monthly Total Phosphorus (TP) and Total Suspended Solids (TSS) Loads

Use the following methods to calculate the total monthly phosphorus and total suspended solids loading in the receiving stream expressed as a mass in lbs/month:

- 1) Convert mg/L to lbs/day using the following equation:

$$\text{Daily TP/TSS loading (lbs/day)} = \text{TP/TSS concentration (mg/L)} \times [\text{Daily Flow (cfs)} \div 1.55] \times 8.34$$

- 2) On a monthly basis, average the reported daily TP and TSS loadings, then multiply the averages by the number of days during the month and report the product as "Phosphorus, Total" or "Suspended Solids, Total" (in lbs/month) for the last day of the month on the eDMR.

$$\text{Phosphorus, Total (lbs/month)} = \text{Average of daily TP loading (lbs/day)} \times \text{Number of days/month}$$

$$\text{Suspended Solids, Total (lbs/month)} = \text{Average of daily TSS loading (lbs/day)} \times \text{Number of days/month}$$

4 Land Application Requirements

4.1 Sampling Point(s)

The discharge(s) shall be limited to land application of the waste type(s) designated for the listed sampling point(s) on Department approved land spreading sites or by hauling to another facility.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
002	Combined Incinerated Cake - Incinerated cake from sludges from the GBF and DPF. Incineration of sludge is regulated under the jurisdiction of US EPA Region 5 and subject to the requirements of 40 CFR part 503. While the State of Wisconsin has not been delegated authority for sludge incineration, Form 3400-165 may be sent to the permittee each year and may be completed and returned to DNR, to satisfy federal reporting requirements. US EPA may also impose other 40 CFR part 503 requirements. For state reporting requirements submit form 3400-52 for other methods of disposal.
003	Combined Dewatered Cake - Dewatered cake from sludges from the GBF and DPF. Monitoring requirements and limitations are applicable during any year in which sludge is disposed in a landfill.
052	DPF Dewatered Cake - Monitoring requirements and limitations are applicable during any year in which sludge is disposed in a landfill.
004	Struvite Harvesting Process: Tons of product produced must be reported on an annual basis.

4.2 Monitoring Requirements and Limitations

The permittee shall comply with the following monitoring requirements and limitations.

4.2.1 Sampling Point (Outfall) 003 - Combined Dewatered Cake

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Monthly	Composite	
Arsenic Dry Wt		mg/kg	Monthly	Composite	
Cadmium Dry Wt		mg/kg	Monthly	Composite	
Copper Dry Wt		mg/kg	Monthly	Composite	
Lead Dry Wt		mg/kg	Monthly	Composite	
Mercury Dry Wt		mg/kg	Monthly	Composite	
Molybdenum Dry Wt		mg/kg	Monthly	Composite	
Nickel Dry Wt		mg/kg	Monthly	Composite	
Selenium Dry Wt		mg/kg	Monthly	Composite	
Zinc Dry Wt		mg/kg	Monthly	Composite	
PCB Total Dry Wt		mg/kg	Once	Composite	See Section 4.2.1.1.
Municipal Sludge Priority Pollutant Scan			Once	Composite	As specified in ch. NR 215.03 (1-4), Wis. Adm. Code. See Section 4.2.1.2.

4.2.1.1 Sludge Analysis for PCBs

The permittee shall analyze the sludge for Total PCBs one time during the first year sludge is landfilled. The results shall be reported as "PCB Total Dry Wt". Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is

performed. Analyses shall be performed in accordance with Table EM in s. NR 219.04, Wis. Adm. Code, and the conditions specified in Standard Requirements of this permit. PCB results shall be submitted by January 31, following the specified year of analysis.

4.2.1.2 Priority Pollutant Scan

The permittee shall analyze the sludge for the priority pollutants as specified in s. NR 215.03 (1-4), Wis. Adm. Code one time during the first year sludge is landfilled. Results shall be reported on a dry weight basis. Results shall be submitted by January 31, following the year of analysis.

4.2.2 Sampling Point (Outfall) 052 - DPF Dewatered Cake

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Per Occurrence	Composite	See subsection 4.2.2.1 for applicable monitoring frequency.
Arsenic Dry Wt		mg/kg	Per Occurrence	Composite	
Cadmium Dry Wt		mg/kg	Per Occurrence	Composite	
Copper Dry Wt		mg/kg	Per Occurrence	Composite	
Lead Dry Wt		mg/kg	Per Occurrence	Composite	
Mercury Dry Wt		mg/kg	Per Occurrence	Composite	
Molybdenum Dry Wt		mg/kg	Per Occurrence	Composite	
Nickel Dry Wt		mg/kg	Per Occurrence	Composite	
Selenium Dry Wt		mg/kg	Per Occurrence	Composite	
Zinc Dry Wt		mg/kg	Per Occurrence	Composite	

4.2.2.1 Monitoring Frequency

When dewatered cake from this sampling point is landfilled, parameters required to be monitored on a "Per Occurrence" basis are required to be monitored at least once during any period of landfilling, with a minimum frequency during any continuous landfilling period of once per two months.

4.2.3 Sampling Point (Outfall) 004 - Struvite Harvesting

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Weight		tons/yr	Annual	Total Annual	

5 Schedules

5.1 Watershed Adaptive Management Option Annual Report Submittals

The permittee shall submit annual reports on the implementation of AM Plan No. WQT-2020-0016 (October 2020) as specified in Section 3.2.1.6 and the following schedule.

Required Action	Due Date
<p>Annual Adaptive Management Report: Submit an annual adaptive management report. The annual adaptive management report shall:</p> <ul style="list-style-type: none"> o Identify those actions from Section 3.2 of the approved adaptive management plan that were completed during the previous calendar year and those actions that are in progress; o Evaluate collected monitoring data; o Document progress in achieving the goals and measures identified in the approved adaptive management plan; o Describe the outreach and education efforts that occurred during the past calendar year; o Identify any corrections or adjustments to the adaptive management plan that are needed to achieve compliance with the phosphorus water quality standards specified in s. NR 102.06, Wis. Adm. Code, and the Lower Fox River Basin Total Maximum Daily Load ("TMDL") for Total Suspended Solids ("TSS"); o Describe any updates needed to Green Bay Metropolitan Sewerage District's approved phosphorus optimization plan; o Submit all water chemistry results from all sample points outlined in AM Plan No. WQT-2020-0016 (October 2020) to the Department using the Department's Laboratory Data Entry System (LDES); and o Submit all biomonitoring results from all locations outlined in AM Plan WQT-2020-0016 (October 2020) to the Department using the Department's Laboratory Data Entry System (LDES). 	03/31/2023
Annual Adaptive Management Report #2: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2024
Annual Adaptive Management Report #3: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2025
Annual Adaptive Management Report #4: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2026
<p>Renewal of Adaptive Management Plan for Permit Reissuance: If the permittee intends to seek renewal of AM Plan No. WQT-2020-0016 (October 2020) per s. NR 217.18, Wis. Adm. Code, for phosphorus or per s. 281.13(7), Wis. Stats., for TSS for the reissued permit term, proposed AM goals and actions based on an updated AM plan shall be submitted to the Department for review and approval. The permittee may propose to adjust load reductions for phosphorus or TSS required by AM Plan No. WQT-2020-0016 (October 2020) either up or down at the beginning of each WPDES permit term to reflect changes in loads associated with point and non-point sources. This schedule may be modified to incorporate any changes in AM goals and actions, removed if the AM program is terminated per the "Adaptive Management Reopener Clause" permit section, or removed if the adaptive management plan has achieved water quality standards as determined by the Department within the AM action area.</p>	10/01/2026

Final Adaptive Management Report for 1st Permit Term: Submit the final Adaptive Management (AM) report documenting progress made during the first permit term under AM in meeting the watershed phosphorus reduction target of 4,727 lbs/yr and the TSS reduction target of 985,935 lbs/yr, as well as the anticipated future reductions in phosphorus and TSS sources and effluent concentrations, which shall be measured in accordance with the AM Plan protocols. The report shall summarize AM activities that have been implemented during the current permit term and state which, if any, actions from the approved AM Plan No. WQT-2020-0016 (October 2020) were not pursued and why. The report shall include an analysis of trends on both a monthly and six-month average basis for phosphorus, and on both a weekly and monthly average basis for TSS, of phosphorus and TSS concentrations and mass effluent discharged. Additionally, there shall be an analysis of any improvements to the quality of surface waters in the Adaptive Management Action Area focusing on phosphorus, TSS and flow results collected during the permit term. The surface water analysis shall evaluate how phosphorus and TSS concentrations, flow, and the in-stream loadings have changed over the permit term in comparison to the implemented AM actions.	11/30/2026
Comply with Adaptive Management Interim Limit: For the second permit term under Adaptive Management the permittee shall comply with an Adaptive Management total phosphorus interim limit no higher than 0.5 mg/L as a 6-month average, in addition to the 1.0 mg/L monthly avg already effective.	03/31/2027
Annual Adaptive Management Report #6: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2027
Annual Adaptive Management Report #7: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2028
Annual Adaptive Management Report #8: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2029
Annual Adaptive Management Report #9: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2030
Annual Adaptive Management Report #10: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2031
Renewal of Adaptive Management Plan for Permit Reissuance: If the permittee intends to seek renewal of AM Plan No. WQT-2020-0016 (October 2020) per s. NR 217.18, Wis. Adm. Code, for phosphorus or per s. 281.13(7), Wis. Stats., for TSS for the reissued permit term, proposed AM goals and actions based on an updated AM plan shall be submitted to the Department for review and approval. The permittee may propose to adjust load reductions for phosphorus or TSS required by AM Plan No. WQT-2020-0016 (October 2020) either up or down at the beginning of each WPDES permit term to reflect changes in loads associated with point and non-point sources. This schedule may be modified to incorporate any changes in AM goals and actions, removed if the AM program is terminated per the "Adaptive Management Reopener Clause" permit section, or removed if the adaptive management plan has achieved water quality standards as determined by the Department within the AM action area.	10/01/2031
Final Adaptive Management Report for 2nd Permit Term: Submit the final Adaptive Management (AM) report documenting progress made during the second permit term under AM in meeting the watershed phosphorus reduction target of 13,238 lbs/yr and the TSS reduction target of 2,760,618 lbs/yr, as well as the anticipated future reductions in phosphorus and TSS sources and effluent concentrations, which shall be measured in accordance with the AM Plan protocols. The report shall summarize AM activities that have been implemented during the current permit term and state which, if any, actions from the approved AM Plan No. WQT-2020-0016 (October 2020) were	11/30/2031

not pursued and why. The report shall include an analysis of trends on both a monthly and six-month average basis for phosphorus, and on both a weekly and monthly average basis for TSS, of phosphorus and TSS concentrations and mass effluent discharged. Additionally, there shall be an analysis of any improvements to the quality of surface waters in the Adaptive Management Action Area focusing on phosphorus, TSS and flow results collected during the permit term. The surface water analysis shall evaluate how phosphorus and TSS concentrations, flow, and the in-stream loadings have changed over the permit term in comparison to the implemented AM actions.	
Annual Adaptive Management Report #12: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2032
Annual Adaptive Management Report #13: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2033
Annual Adaptive Management Report #14: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2034
Annual Adaptive Management Report #15: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2035
Annual Adaptive Management Report #16: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2036
Renewal of Adaptive Management Plan for Permit Reissuance: If the permittee intends to seek renewal of AM Plan No. WQT-2020-0016 (October 2020) per s. NR 217.18, Wis. Adm. Code, for phosphorus or per s. 281.13(7), Wis. Stats., for TSS for the reissued permit term, proposed AM goals and actions based on an updated AM plan shall be submitted to the Department for review and approval. The permittee may propose to adjust load reductions for phosphorus or TSS required by AM Plan No. WQT-2020-0016 (October 2020) either up or down at the beginning of each WPDES permit term to reflect changes in loads associated with point and non-point sources. This schedule may be modified to incorporate any changes in AM goals and actions, removed if the AM program is terminated per the “Adaptive Management Reopener Clause” permit section, or removed if the adaptive management plan has achieved water quality standards as determined by the Department within the AM action area.	10/01/2036
Final Adaptive Management Report for 3rd Permit Term: Submit the final Adaptive Management (AM) report documenting progress made during the third permit term under AM in meeting the watershed phosphorus reduction target of 17,965 lbs/yr and the TSS reduction target of 3,746,553 lbs/yr, as well as the anticipated future reductions in phosphorus and TSS sources and effluent concentrations, which shall be measured in accordance with the AM Plan protocols. The report shall summarize AM activities that have been implemented during the current permit term and state which, if any, actions from the approved AM Plan No. WQT-2020-0016 (October 2020) were not pursued and why. The report shall include an analysis of trends on both a monthly and six-month average basis for phosphorus, and on both a weekly and monthly average basis for TSS, of phosphorus and TSS concentrations and mass effluent discharged. Additionally, there shall be an analysis of any improvements to the quality of surface waters in the Adaptive Management Action Area focusing on phosphorus, TSS and flow results collected during the permit term. The surface water analysis shall evaluate how phosphorus and TSS concentrations, flow, and the in-stream loadings have changed over the permit term in comparison to the implemented AM actions.	11/30/2036
Annual Adaptive Management Report #18: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2037
Annual Adaptive Management Report #19: Submit an Adaptive Management report with the	03/31/2038

required information described in this section (see above).	
Annual Adaptive Management Report #20: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2039
Annual Adaptive Management Report #21: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2040
Annual Adaptive Management Report #22: Submit an Adaptive Management report with the required information described in this section (see above).	03/31/2041
Final Adaptive Management Report: Submit the final Adaptive Management (AM) report documenting progress made throughout the AM project in meeting the watershed phosphorus reduction target of 18,911 lbs/yr and the TSS reduction target of 3,943,740 lbs/yr, and in-stream water quality standards specified in s. NR 102.06, Wis. Adm. Code, for phosphorus and TSS reductions from the Lower Fox River Basin TMDL. The report shall summarize AM activities that have been implemented during the current permit term and state which, if any, actions from the approved AM Plan No. WQT-2020-0016 (October 2020) were not pursued and why. The report shall include an analysis of trends on both a monthly and six-month average basis for phosphorus, and on both a weekly and monthly average basis for TSS, of phosphorus and TSS concentrations and mass effluent discharged. Additionally, there shall be an analysis of any improvements to the quality of surface waters in the Adaptive Management Action Area focusing on phosphorus, TSS and flow results collected during the permit term. The surface water analysis shall evaluate how phosphorus and TSS concentrations, flow, and the in-stream loadings have changed over the permit term in comparison to the implemented AM actions.	11/30/2041
Achieve Water Quality Standards and Adaptive Management Plan Success: The permittee's receiving water identified as the in-stream sampling point 602 SWIMS Station ID 10046799 (Lat: 44° 32' 8.98" N, Long: 88° 0' 24.12" W) shall comply with phosphorus water quality standards specified in s. NR 102.06, Wis. Adm. Code, and the approved total maximum daily load for total suspended solids as defined in the EPA approved Lower Fox River Basin TMDL. Compliance with the TMDL means meeting the loading capacity for the receiving water specified in the EPA approved Lower Fox River Basin TMDL. The permittee shall continue to comply with applicable phosphorus effluent limits required under s. 217.18(3)(e)3, Wis. Adm. Code, expressed as a 6-month average and 1.0 mg/L as a monthly average, and TSS effluent limits in effect. Continued monitoring of surface waters identified within AM Plan WQT-2020-0016 (October 2020) at a minimum of monthly May through October for phosphorus and TSS is required.	03/31/2042

5.2 Temperature Limits Compliance & Dissipative Cooling Evaluation (GBF Outfall 001)

This schedule requires the permittee to achieve compliance by the specified date

Required Action	Due Date
Preliminary Compliance Report: Submit a preliminary compliance report indicating alternatives to achieve the final temperature limits. Informational Note: Refer to the Surface Water subsection titled 'Dissipative Cooling Demonstration - POTW Weekly Average Limits' regarding requests for Department consideration of dissipative cooling per s. NR 106.59, Wis. Adm. Code, as well as re-evaluation of the limits pursuant to NR 106 Subchapters V & VI or NR 102.26, Wis. Adm. Code.	04/01/2023
Action Plan: Submit an action plan for complying with all applicable effluent temperature limits.	04/01/2024
Construction Plans: Submit construction plans (if construction is required for complying with	10/01/2024

effluent temperature limits) and include plans and specifications with the submittal.	
Initiate Actions: Initiate actions identified in the plan.	04/01/2025
Complete Actions: Complete actions necessary to achieve compliance with effluent temperature limits.	10/01/2025

5.3 Mercury Pollutant Minimization Program (GBF Outfall 001)

As a condition of the variance to the water quality based effluent limitation(s) for mercury granted in accordance with s. NR 106.145(6), Wis. Adm. Code, the permittee shall perform the following actions.

Required Action	Due Date
<p>Annual Mercury Progress Reports: Submit an annual mercury progress report. The annual mercury progress report shall:</p> <p>Indicate which mercury pollutant minimization activities or activities outlined in the approved Pollutant Minimization Plan have been implemented;</p> <p>Include an analysis of trends in monthly and annual total effluent mercury concentrations based on mercury sampling; and</p> <p>Include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury such as loads from industries into the collection system.</p> <p>The first annual mercury progress report is to be submitted by the Due Date.</p>	03/31/2023
Annual Mercury Progress Report #2: Submit a mercury progress report as defined above.	03/31/2024
Annual Mercury Progress Report #3: Submit a mercury progress report as defined above.	03/31/2025
Annual Mercury Progress Report #4: Submit a mercury progress report as defined above.	03/31/2026
<p>Final Mercury Report: Submit a final report documenting the success in reducing mercury concentrations in the effluent, as well as the anticipated future reduction in mercury sources and mercury effluent concentrations. The report shall summarize mercury pollutant minimization activities that have been implemented during the current permit term and state which, if any, pollutant minimization activities from the approved pollutant minimization plan were not pursued and why. The report shall include an analysis of trends in monthly and annual total effluent mercury concentrations based on mercury sampling during the current permit term. The report shall also include an analysis of how influent and effluent mercury varies with time and with significant loading of mercury such as loads from industries into the collection system.</p>	10/01/2026
If the permittee intends to reapply for a mercury variance per s. NR 106.145, Wis. Adm. Code, for the reissued permit, a detailed pollutant minimization plan outlining the pollutant minimization activities proposed for the upcoming permit term shall be submitted along with the final report.	
Annual Mercury Reports After Permit Expiration: In the event that this permit is not reissued on time, the permittee shall continue to submit annual mercury reports each year covering pollutant minimization activities implemented and mercury concentration trends.	

5.4 Sludge Management Plan

A management plan is required for the sludge management system.

Required Action	Due Date
Sludge Management Plan Submittal: Submit a sludge management plan for Department approval to optimize the sludge management system performance and demonstrate compliance with ch. NR 204, Wis. Adm. Code, by the Due Date. This management plan shall address: 1) specify information on treatment processes, 2) sludge characteristics, 3) outfall descriptions, 4) sludge transport, 5) availability of storage, 6) disposal options, 7) monitoring procedures, 8) record keeping and reporting, 9) contingency plans, and 10) any other pertinent information. Once approved, all sludge management activities must be completed in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes.	04/01/2023

5.5 Mixing Zone Study Submittal GBF (Outfall 001)

The permittee shall submit a mixing zone study by the specified date.

Required Action	Due Date
Submit Mixing Zone Study: Submit a mixing zone study that demonstrates that a 10:1 (receiving water to effluent) dilution ratio is appropriate for calculating effluent limitations for the Green Bay Facility (Outfall 001).	04/01/2025

6 Standard Requirements

NR 205, Wisconsin Administrative Code: The conditions in ss. NR 205.07(1) and NR 205.07(2), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(2).

6.1 Reporting and Monitoring Requirements

6.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

6.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

6.1.3 Pretreatment Sampling Requirements

Sampling for pretreatment parameters (cadmium, chromium, copper, lead, nickel, zinc, and mercury) shall be done during a day each month when industrial discharges are occurring at normal to maximum levels. The sampling of the influent and effluent for these parameters shall be coordinated. All 24 hour composite samples shall be flow proportional.

6.1.4 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;

- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

6.1.5 Reporting of Monitoring Results

The permittee shall use the following conventions when reporting effluent monitoring results:

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD₅ and Total Suspended Solids shall be considered to be limits of quantitation
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as "0" (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, "0" would be reported for any day during the month that no discharge occurred.

6.1.6 Compliance Maintenance Annual Reports

Compliance Maintenance Annual Reports (CMAR) shall be completed using information obtained over each calendar year regarding the wastewater conveyance and treatment system. The CMAR shall be submitted and certified by the permittee in accordance with ch. NR 208, Wis. Adm. Code, by June 30, each year on an electronic report form provided by the Department.

In the case of a publicly owned treatment works, a resolution shall be passed by the governing body and submitted as part of the CMAR, verifying its review of the report and providing responses as required. Private owners of wastewater treatment works are not required to pass a resolution; but they must provide an Owner Statement and responses as required, as part of the CMAR submittal.

The CMAR shall be certified electronically by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The certification verifies that the electronic report is true, accurate and complete.

6.1.7 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application. All pertinent sludge information,

including permit application information and other documents specified in this permit or s. NR 204.06(9), Wis. Adm. Code shall be retained for a minimum of 5 years.

6.1.8 Other Information

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 correct information to the Department.

6.1.9 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

6.2 System Operating Requirements

6.2.1 Noncompliance Reporting

Sanitary sewer overflows and sewage treatment facility overflows shall be reported according to the 'Sanitary Sewer Overflows and Sewage Treatment Facility Overflows' section of this permit.

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department's regional office within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources

immediately of any discharge not authorized by the permit. **The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.**

6.2.2 Flow Meters

Flow meters shall be calibrated annually, as per s. NR 218.06, Wis. Adm. Code.

6.2.3 Raw Grit and Screenings

All raw grit and screenings shall be disposed of at a properly licensed solid waste facility or picked up by a licensed waste hauler. If the facility or hauler are located in Wisconsin, then they shall be licensed under chs. NR 500-555, Wis. Adm. Code.

6.2.4 Sludge Management

All sludge management activities shall be conducted in compliance with ch. NR 204 "Domestic Sewage Sludge Management", Wis. Adm. Code.

6.2.5 Prohibited Wastes

Under no circumstances may the introduction of wastes prohibited by s. NR 211.10, Wis. Adm. Code, be allowed into the waste treatment system. Prohibited wastes include those:

- which create a fire or explosion hazard in the treatment work;
- which will cause corrosive structural damage to the treatment work;
- solid or viscous substances in amounts which cause obstructions to the flow in sewers or interference with the proper operation of the treatment work;
- wastewaters at a flow rate or pollutant loading which are excessive over relatively short time periods so as to cause a loss of treatment efficiency; and
- changes in discharge volume or composition from contributing industries which overload the treatment works or cause a loss of treatment efficiency.

6.2.6 Bypass

This condition applies only to bypassing at a sewage treatment facility that is not a scheduled bypass, approved blending as a specific condition of this permit, a sewage treatment facility overflow or a controlled diversion as provided in the sections titled 'Scheduled Bypass', 'Blending' (if approved), 'SSO's and Sewage Treatment Facility Overflows' and 'Controlled Diversions' of this permit. Any other bypass at the sewage treatment facility is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats.

The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the Noncompliance Reporting section of this permit.

6.2.7 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for bypassing specified in the above section titled 'Bypass' are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

6.2.8 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation. Sewage treatment facilities that have multiple treatment units to treat variable or seasonal loading conditions may shut down redundant treatment units when necessary for efficient operation. The following requirements shall be met during controlled diversions:

- Effluent from the sewage treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion does not include blending as defined in s. NR 210.03(2e), Wis. Adm. Code, and as may only be approved under s. NR 210.12. A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in sewage treatment facility records and such records shall be available to the department on request.

6.2.9 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6.2.10 Operator Certification

The wastewater treatment facility shall be under the direct supervision of a state certified operator. In accordance with s. NR 114.53, Wis. Adm. Code, every WPDES permitted treatment plant shall have a designated operator-in-charge holding a current and valid certificate. The designated operator-in-charge shall be certified at the level and in all subclasses of the treatment plant, except laboratory. Treatment plant owners shall notify the department of any changes in the operator-in-charge within 30 days. Note that s. NR 114.52(22), Wis. Adm. Code, lists types of facilities that are excluded from operator certification requirements (i.e. private sewage systems, pretreatment facilities discharging to public sewers, industrial wastewater treatment that consists solely of land disposal, agricultural digesters and concentrated aquatic production facilities with no biological treatment).

6.3 Sewage Collection Systems

6.3.1 Sanitary Sewage Overflows and Sewage Treatment Facility Overflows

6.3.1.1 Overflows Prohibited

Any overflow or discharge of wastewater from the sewage collection system or at the sewage treatment facility, other than from permitted outfalls, is prohibited. The permittee shall provide information on whether any of the following conditions existed when an overflow occurred:

- The sanitary sewer overflow or sewage treatment facility overflow was unavoidable to prevent loss of life, personal injury or severe property damage;
- There were no feasible alternatives to the sanitary sewer overflow or sewage treatment facility overflow such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or preventative maintenance activities;
- The sanitary sewer overflow or the sewage treatment facility overflow was caused by unusual or severe weather related conditions such as large or successive precipitation events, snowmelt, saturated soil conditions, or severe weather occurring in the area served by the sewage collection system or sewage treatment facility; and
- The sanitary sewer overflow or the sewage treatment facility overflow was unintentional, temporary, and caused by an accident or other factors beyond the reasonable control of the permittee.

6.3.1.2 Permittee Response to Overflows

Whenever a sanitary sewer overflow or sewage treatment facility overflow occurs, the permittee shall take all feasible steps to control or limit the volume of untreated or partially treated wastewater discharged, and terminate the discharge as soon as practicable. Remedial actions, including those in NR 210.21 (3), Wis. Adm. Code, shall be implemented consistent with an emergency response plan developed under the CMOM program.

6.3.1.3 Permittee Reporting

Permittees shall report all sanitary sewer overflows and sewage treatment overflows as follows:

- The permittee shall notify the department by telephone, fax or email as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the overflow;
- The permittee shall, no later than five days from the time the permittee becomes aware of the overflow, provide to the department the information identified in this paragraph using department form number 3400-184. If an overflow lasts for more than five days, an initial report shall be submitted within 5 days as required in this paragraph and an updated report submitted following cessation of the overflow. At a minimum, the following information shall be included in the report:
 - The date and location of the overflow;
 - The surface water to which the discharge occurred, if any;
 - The duration of the overflow and an estimate of the volume of the overflow;
 - A description of the sewer system or treatment facility component from which the discharge occurred such as manhole, lift station, constructed overflow pipe, or crack or other opening in a pipe;
 - The estimated date and time when the overflow began and stopped or will be stopped;
 - The cause or suspected cause of the overflow including, if appropriate, precipitation, runoff conditions, areas of flooding, soil moisture and other relevant information;
 - Steps taken or planned to reduce, eliminate and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
 - A description of the actual or potential for human exposure and contact with the wastewater from the overflow;

- Steps taken or planned to mitigate the impacts of the overflow and a schedule of major milestones for those steps;
- To the extent known at the time of reporting, the number and location of building backups caused by excessive flow or other hydraulic constraints in the sewage collection system that occurred concurrently with the sanitary sewer overflow and that were within the same area of the sewage collection system as the sanitary sewer overflow; and
- The reason the overflow occurred or explanation of other contributing circumstances that resulted in the overflow event. This includes any information available including whether the overflow was unavoidable to prevent loss of life, personal injury, or severe property damage and whether there were feasible alternatives to the overflow.

NOTE: A copy of form 3400-184 for reporting sanitary sewer overflows and sewage treatment facility overflows may be obtained from the department or accessed on the department's web site at <http://dnr.wi.gov/topic/wastewater/SSOreport.html>. As indicated on the form, additional information may be submitted to supplement the information required by the form.

- The permittee shall identify each specific location and each day on which a sanitary sewer overflow or sewage treatment facility overflow occurs as a discrete sanitary sewer overflow or sewage treatment facility overflow occurrence. An occurrence may be more than one day if the circumstances causing the sanitary sewer overflow or sewage treatment facility overflow results in a discharge duration of greater than 24 hours. If there is a stop and restart of the overflow at the same location within 24 hours and the overflow is caused by the same circumstance, it may be reported as one occurrence. Sanitary sewer overflow occurrences at a specific location that are separated by more than 24 hours shall be reported as separate occurrences; and
- A permittee that is required to submit wastewater discharge monitoring reports under NR 205.07 (1) (r) shall also report all sanitary sewer overflows and sewage treatment facility overflows on that report.

6.3.1.4 Public Notification

The permittee shall notify the public of any sanitary sewer and sewage treatment facility overflows consistent with its emergency response plan required under the CMOM (Capacity, Management, Operation and Maintenance) section of this permit and s. NR 210.23 (4) (f), Wis. Adm. Code. Such public notification shall occur promptly following any overflow event using the most effective and efficient communications available in the community. At minimum, a daily newspaper of general circulation in the county(s) and municipality whose waters may be affected by the overflow shall be notified by written or electronic communication.

6.3.2 Capacity, Management, Operation and Maintenance (CMOM) Program

- The permittee shall have written documentation of the Capacity, Management, Operation and Maintenance (CMOM) program components in accordance with s. NR 210.23(4), Wis. Adm. Code. Such documentation shall be available for Department review upon request. The Department may request that the permittee provide this documentation or prepare a summary of the permittee's CMOM program at the time of application for reissuance of the WPDES permit.
- The permittee shall implement a CMOM program in accordance with s. NR 210.23, Wis. Adm. Code.
- The permittee shall at least annually conduct a self-audit of activities conducted under the permittee's CMOM program to ensure CMOM components are being implemented as necessary to meet the general standards of s. NR 210.23(3), Wis. Adm. Code.

6.3.3 Sewer Cleaning Debris and Materials

All debris and material removed from cleaning sanitary sewers shall be managed to prevent nuisances, run-off, ground infiltration or prohibited discharges.

- Debris and solid waste shall be dewatered, dried and then disposed of at a licensed solid waste facility.
- Liquid waste from the cleaning and dewatering operations shall be collected and disposed of at a permitted wastewater treatment facility.
- Combination waste including liquid waste along with debris and solid waste may be disposed of at a licensed solid waste facility or wastewater treatment facility willing to accept the waste.

6.4 Surface Water Requirements

6.4.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

6.4.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits:

Weekly/Monthly/Six-Month/Annual Average Concentration = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Weekly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

Monthly Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

Six-Month Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

Annual Average Mass Discharge (lbs/day): Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the entire year.

Total Monthly Discharge: = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

Total Annual Discharge: = sum of total monthly discharges for the calendar year.

12-Month Rolling Sum of Total Monthly Discharge: = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

6.4.3 Effluent Temperature Requirements

Weekly Average Temperature – The permittee shall use the following formula for calculating effluent results to determine compliance with the weekly average temperature limit (as applicable): Weekly Average Temperature = the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

Cold Shock Standard – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock. ‘Cold Shock’ means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

Rate of Temperature Change Standard – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state.

6.4.4 Visible Foam or Floating Solids

There shall be no discharge of floating solids or visible foam in other than trace amounts.

6.4.5 Surface Water Uses and Criteria

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

- a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.
- c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

6.4.6 Percent Removal

During any 30 consecutive days, the average effluent concentrations of CBOD₅ and of total suspended solids shall not exceed 15% of the average influent concentrations, respectively. This requirement does not apply to removal of total suspended solids if the permittee operates a lagoon system and has received a variance for suspended solids granted under NR 210.07(2), Wis. Adm. Code.

6.4.7 *E. coli*

The monthly limit for *E. coli* shall be expressed as a geometric mean. In calculating the geometric mean, a value of 1 is used for any result of 0.

6.4.8 Seasonal Disinfection

Disinfection shall be provided from May 1 through September 30 of each year. Monitoring requirements and the limitations for *E. coli* apply only during the period in which disinfection is required. Whenever chlorine is used for disinfection or other uses, the limitations and monitoring requirements for residual chlorine shall apply. A dechlorination process shall be in operation whenever chlorine is used.

6.4.9 Total Residual Chlorine Requirements (When De-Chlorinating Effluent)

Test methods for total residual chlorine, approved in ch. NR 219 - Table B, Wis. Adm. Code, normally achieve a limit of detection of about 20 to 50 micrograms per liter and a limit of quantitation of about 100 micrograms per liter. Reporting of test results and compliance with effluent limitations for chlorine residual and total residual halogens shall be as follows:

- Sample results which show no detectable levels are in compliance with the limit. These test results shall be reported on Wastewater Discharge Monitoring Report Forms as "< 100 µg/L". (Note: 0.1 mg/L converts to 100 µg/L)
- Samples showing detectable traces of chlorine are in compliance if measured at less than 100 µg/L, unless there is a consistent pattern of detectable values in this range. These values shall also be reported on Wastewater Discharge Monitoring Report Forms as "<100 µg/L." The facility operating staff shall record actual readings on logs maintained at the plant, shall take action to determine the reliability of detected results (such as re-sampling and/or calculating dosages), and shall adjust the chemical feed system if necessary to reduce the chances of detects.
- Samples showing detectable levels greater than 100 µg/L shall be considered as exceedances, and shall be reported as measured.
- To calculate average or mass discharge values, a "0" (zero) may be substituted for any test result less than 100 µg/L. Calculated values shall then be compared directly to the average or mass limitations to determine compliance.

6.4.10 Whole Effluent Toxicity (WET) Monitoring Requirements

In order to determine the potential impact of the discharge on aquatic organisms, static-renewal toxicity tests shall be performed on the effluent in accordance with the procedures specified in the *"State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2nd Edition"* (PUB-WT-797, November 2004) as required by NR 219.04, Table A, Wis. Adm. Code). All of the WET tests required in this permit, including any required retests, shall be conducted on the *Ceriodaphnia dubia* and fathead minnow species. Receiving water samples shall not be collected from any point in contact with the permittee's mixing zone and every attempt shall be made to avoid contact with any other discharge's mixing zone.

6.4.11 Whole Effluent Toxicity (WET) Identification and Reduction

Within 60 days of a retest which showed positive results, the permittee shall submit a written report to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, which details the following:

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including some or all of the following actions:
 - (a) Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
 - (b) Identify the compound(s) causing toxicity
 - (c) Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
 - (d) Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;

- If no actions have been taken, the reason for not taking action.

The permittee may also request approval from the Department to postpone additional retests in order to investigate the source(s) of toxicity. Postponed retests must be completed after toxicity is believed to have been removed.

6.4.12 Reopener Clause

Pursuant to s. 283.15(11), Wis. Stat. and 40 CFR 131.20, the Department may modify or revoke and reissue this permit if, through the triennial standard review process, the Department determines that the terms and conditions of this permit need to be updated to reflect the highest attainable condition of the receiving water.

6.5 Pretreatment Program Requirements

The permittee is required to operate an industrial pretreatment program as described in the program initially approved by the Department of Natural Resources including any subsequent program modifications approved by the Department, and including commitments to program implementation activities provided in the permittee's annual pretreatment program report, and that complies with the requirements set forth in 40 CFR Part 403 and ch. NR 211, Wis. Adm. Code. To ensure that the program is operated in accordance with these requirements, the following general conditions and requirements are hereby established:

6.5.1 Inventories

The permittee shall implement methods to maintain a current inventory of the general character and volume of wastewater that industrial users discharge to the treatment works and shall provide an updated industrial user listing annually and report any changes in the listing to the Department by March 31 of each year as part of the annual pretreatment program report required herein.

6.5.2 Regulation of Industrial Users

6.5.2.1 Limitations for Industrial Users:

The permittee shall develop, maintain, enforce and revise as necessary local limits to implement the general and specific prohibitions of the state and federal General Pretreatment Regulations.

6.5.2.2 Control Documents for Industrial Users (IUs)

The permittee shall control the discharge from each significant industrial user through individual discharge permits as required by s. NR 211.235, Wis. Adm. Code and in accordance with the approved pretreatment program procedures and the permittee's sewer use ordinance. The discharge permits shall be modified in a timely manner during the stated term of the discharge permits according to the sewer use ordinance as conditions warrant. The discharge permits shall include at a minimum the elements found in s. NR 211.235(1), Wis. Adm. Code and references to the approved pretreatment program procedures and the sewer use ordinance.

6.5.2.3 Review of Industrial User Reports, Inspections and Compliance Monitoring

The permittee shall require the submission of, receive, and review self-monitoring reports and other notices from industrial users in accordance with the approved pretreatment program procedures. The permittee shall randomly sample and analyze industrial user discharges and conduct surveillance activities to determine independent of information supplied by the industrial users, whether the industrial users are in compliance with pretreatment standards and requirements. The inspections and monitoring shall also be conducted to maintain accurate knowledge of local industrial processes, including changes in the discharge, pretreatment equipment operation, spill prevention control plans, slug control plans, and implementation of solvent management plans.

The permittee shall inspect and sample the discharge from each significant industrial user as specified in the permittee's approved pretreatment program or as specified in NR 211.235(3). The permittee shall evaluate whether industrial users identified as significant need a slug control plan according to the requirements of NR 211.235(4). If a slug control plan is needed, the plan shall contain at a minimum the elements specified in s. NR 211.235(4)(b), Wis. Adm. Code.

6.5.2.4 Enforcement and Industrial User Compliance Evaluation & Violation Reports

The permittee shall enforce the industrial pretreatment requirements including the industrial user discharge limitations of the permittee's sewer use ordinance. The permittee shall investigate instances of noncompliance by collecting and analyzing samples and collecting other information with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Investigation and response to instances of noncompliance shall be in accordance with the permittee's sewer use ordinance and approved Enforcement Response Plan.

The permittee shall make a semiannual report on forms provided or approved by the Department. The semiannual report shall include an analysis of industrial user significant noncompliance (i.e. the Industrial User Compliance Evaluation, also known as the SNC Analysis) as outlined in s. NR 211.23(1)(j), Wis. Adm. Code, and a summary of the permittee's response to all industrial noncompliance (i.e. the Industrial User Violation Report). The Industrial User Compliance Evaluation Report shall include monitoring results received from industrial users pursuant to s. NR 211.15(1)-(5), Wis. Adm. Code. The Industrial User Violation Report shall include copies of all notices of noncompliance, notices of violation and other enforcement correspondence sent by the permittee to industrial users, together with the industrial user's response. The Industrial User Compliance Evaluation and Violation Reports for the period January through June shall be provided to the Department by September 30 of each year and for the period July through December shall be provided to the Department by March 31 of the succeeding year, unless alternate submittal dates are approved.

6.5.2.5 Publication of Violations

The permittee shall publish a list of industrial users that have significantly violated the municipal sewer use ordinance during the calendar year, in the largest daily newspaper in the area by March 31 of the following year pursuant to s. NR 211.23(1)(j), Wis. Adm. Code. A copy of the newspaper publication shall be provided as part of the annual pretreatment report specified herein.

6.5.2.6 Multijurisdictional Agreements

The permittee shall establish agreements with all contributing jurisdictions as necessary to ensure compliance with pretreatment standards and requirements by all industrial users discharging to the permittee's wastewater treatment system. Any such agreement shall identify who will be responsible for maintaining the industrial user inventory, issuance of industrial user control mechanisms, inspections and sampling, pretreatment program implementation, and enforcement.

6.5.3 Annual Pretreatment Program Report

The permittee shall evaluate the pretreatment program, and submit the Pretreatment Program Report to the Department on forms provided or approved by the Department by March 31 annually, unless an alternate submittal date is approved. The report shall include a brief summary of the work performed during the preceding calendar year, including the numbers of discharge permits issued and in effect, pollution prevention activities, number of inspections and monitoring surveys conducted, budget and personnel assigned to the program, a general discussion of program progress in meeting the objectives of the permittee's pretreatment program together with summary comments and recommendations.

6.5.4 Pretreatment Program Modifications

- **Future Modifications:** The permittee shall within one year of any revisions to federal or state General Pretreatment Regulations submit an application to the Department in duplicate to modify and update its approved pretreatment program to incorporate such regulatory changes as applicable to the permittee. Additionally, the Department or the permittee may request an application for program modification at any time where necessary to improve program effectiveness based on program experience to date.
- **Modifications Subject to Department Approval:** The permittee shall submit all proposed pretreatment program modifications to the Department for determination of significance and opportunity for comment in accordance with the requirements and conditions of s. NR 211.27, Wis. Adm. Code. Any substantial proposed program modification shall be subject to Department public noticing and formal approval prior to implementation. A substantial program modification includes, but is not limited to, changes in enabling legal authority to administer and enforce pretreatment conditions and requirements; significant changes in program administrative or operational procedures; significant reductions in monitoring frequencies; significant reductions in program resources including personnel commitments, equipment, and funding levels; changes (including any relaxation) in the local limitations for substances enforced and applied to users of the sewerage treatment works; changes in treatment works sludge disposal or management practices which impact the pretreatment program; or program modifications which increase pollutant loadings to the treatment works. The Department shall use the procedures outlined in s. NR 211.30, Wis. Adm. Code for review and approval/denial of proposed pretreatment program modifications. The permittee shall comply with local public participation requirements when implementing the pretreatment program.

6.5.5 Program Resources

The permittee shall have sufficient resources and qualified personnel to carry out the pretreatment program responsibilities as listed in ss. NR 211.22 and NR 211.23, Wis. Adm. Code.

6.6 Land Application Requirements

6.6.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations

In the event that new federal sludge standards or regulations are promulgated, the permittee shall comply with the new sludge requirements by the dates established in the regulations, if required by federal law, even if the permit has not yet been modified to incorporate the new federal regulations.

6.6.2 General Sludge Management Information

The General Sludge Management Form 3400-48 shall be completed and submitted prior to any significant sludge management changes.

6.6.3 Sludge Samples

All sludge samples shall be collected at a point and in a manner which will yield sample results which are representative of the sludge being tested, and collected at the time which is appropriate for the specific test.

6.6.4 Land Application Characteristic Report

Each report shall consist of a Characteristic Form 3400-49 and Lab Report. The Characteristic Report Form 3400-49 shall be submitted electronically by January 31 following each year of analysis.

Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report is true, accurate and complete. The Lab Report must be sent directly to the facility's DNR sludge representative or basin engineer unless approval for not submitting the lab reports has been given.

The permittee shall use the following convention when reporting sludge monitoring results: Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg .

All results shall be reported on a dry weight basis.

6.6.5 Calculation of Water Extractable Phosphorus

When sludge analysis for Water Extractable Phosphorus is required by this permit, the permittee shall use the following formula to calculate and report Water Extractable Phosphorus:

Water Extractable Phosphorus (% of Total P) =

$$[\text{Water Extractable Phosphorus (mg/kg, dry wt)} \div \text{Total Phosphorus (mg/kg, dry wt)}] \times 100$$

6.6.6 Monitoring and Calculating PCB Concentrations in Sludge

When sludge analysis for "PCB, Total Dry Wt" is required by this permit, the PCB concentration in the sludge shall be determined using either congener-specific analysis or Aroclor analysis. The permittee may decide which of these analyses is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code:

- If congener-specific analysis is employed: All PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection (LOD) and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported.
- If Aroclor analysis is employed, reporting protocols, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected, then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If the LOD cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of an interference.

6.6.7 Annual Land Application Report

Land Application Report Form 3400-55 shall be submitted electronically by January 31, each year whether or not non-exceptional quality sludge is land applied. Non-exceptional quality sludge is defined in s. NR 204.07(4), Wis. Adm. Code. Following submittal of the electronic Annual Land Application Report Form 3400-55, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

6.6.8 Other Methods of Disposal or Distribution Report

The permittee shall submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

6.6.9 Approval to Land Apply

Bulk non-exceptional quality sludge as defined in s. NR 204.07(4), Wis. Adm. Code, may not be applied to land without a written approval letter or Form 3400-122 from the Department unless the Permittee has obtained permission from the Department to self approve sites in accordance with s. NR 204.06 (6), Wis. Adm. Code. Analysis of sludge characteristics is required prior to land application. Application on frozen or snow covered ground is restricted to the extent specified in s. NR 204.07(3) (l), Wis. Adm. Code.

6.6.10 Soil Analysis Requirements

Each site requested for approval for land application must have the soil tested prior to use. Each approved site used for land application must subsequently be soil tested such that there is at least one valid soil test in the four years prior to land application. All soil sampling and submittal of information to the testing laboratory shall be done in accordance with UW Extension Bulletin A-2100. The testing shall be done by the UW Soils Lab in Madison or Marshfield, WI or at a lab approved by UW. The test results including the crop recommendations shall be submitted to the DNR contact listed for this permit, as they are available. Application rates shall be determined based on the crop nitrogen recommendations and with consideration for other sources of nitrogen applied to the site.

6.6.11 Land Application Site Evaluation

For non-exceptional quality sludge, as defined in s. NR 204.07(4), Wis. Adm. Code, a Land Application Site Request Form 3400-053 shall be submitted to the Department for the proposed land application site. The Department will evaluate the proposed site for acceptability and will either approve or deny use of the proposed site. The permittee may obtain permission to approve their own sites in accordance with s. NR 204.06(6), Wis. Adm. Code.

6.6.12 Landfilling of Sludge

General: Sewage sludge may not be disposed of in a municipal solid waste landfill unless the landfill meets the requirements of chs. NR 500 to 536, Wis. Adm. Code, and is an approved facility as defined in s. 289.01(3), Wis. Stats. Any facility accepting sewage sludge shall be approved by the Department in writing to accept sewage sludge. Disposal of sewage sludge in a municipal solid waste landfill shall be in accordance with ss. NR 506.13 and 506.14. Sewage sludge may not be disposed of in a surface disposal unit as defined in s. NR 204.03(62).

Approval: The permittee shall obtain approval from the Department prior to the disposal of sludge at a Wisconsin licensed landfill.

6.6.13 Sludge Landfilling Reports

The permittee shall report the volume of sludge disposed of at any landfill facility on Form 3400-52. The permittee shall include the name and address of the landfill, the Department license number or other state's designation or license number for all landfills used during the report period and a letter of acceptability from the landfill owner. In addition, any permittee utilizing landfills as a disposal method shall submit to the Department any test results used to

indicate acceptability of the sludge at a landfill. Form 3400-52 shall be submitted annually by January 31, each year whether or not sludge is landfilled.

6.6.14 Sludge Incineration Reports

The permittee shall report the volume of sludge combusted at an on-site incinerator on Form 3400-52. Submittal of Form 3400-52 is required annually by January 31, each year whether or not sludge is incinerated.

7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report	March 31, 2023	29
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #2	March 31, 2024	29
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #3	March 31, 2025	29
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #4	March 31, 2026	29
Watershed Adaptive Management Option Annual Report Submittals - Renewal of Adaptive Management Plan for Permit Reissuance	October 1, 2026	29
Watershed Adaptive Management Option Annual Report Submittals -Final Adaptive Management Report for 1st Permit Term	November 30, 2026	30
Watershed Adaptive Management Option Annual Report Submittals - Comply with Adaptive Management Interim Limit	March 31, 2027	30
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #6	March 31, 2027	30
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #7	March 31, 2028	30
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #8	March 31, 2029	30
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #9	March 31, 2030	30
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #10	March 31, 2031	30
Watershed Adaptive Management Option Annual Report Submittals - Renewal of Adaptive Management Plan for Permit Reissuance	October 1, 2031	30
Watershed Adaptive Management Option Annual Report Submittals -Final Adaptive Management Report for 2nd Permit Term	November 30, 2031	31
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #12	March 31, 2032	31
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #13	March 31, 2033	31
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #14	March 31, 2034	31
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #15	March 31, 2035	31

Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #16	March 31, 2036	31
Watershed Adaptive Management Option Annual Report Submittals - Renewal of Adaptive Management Plan for Permit Reissuance	October 1, 2036	31
Watershed Adaptive Management Option Annual Report Submittals -Final Adaptive Management Report for 3rd Permit Term	November 30, 2036	31
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #18	March 31, 2037	31
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #19	March 31, 2038	32
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #20	March 31, 2039	32
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #21	March 31, 2040	32
Watershed Adaptive Management Option Annual Report Submittals - Annual Adaptive Management Report #22	March 31, 2041	32
Watershed Adaptive Management Option Annual Report Submittals -Final Adaptive Management Report	November 30, 2041	32
Watershed Adaptive Management Option Annual Report Submittals - Achieve Water Quality Standards and Adaptive Management Plan Success	March 31, 2042	32
Temperature Limits Compliance & Dissipative Cooling Evaluation (GBF Outfall 001) -Preliminary Compliance Report	April 1, 2023	32
Temperature Limits Compliance & Dissipative Cooling Evaluation (GBF Outfall 001) -Action Plan	April 1, 2024	32
Temperature Limits Compliance & Dissipative Cooling Evaluation (GBF Outfall 001) -Construction Plans	October 1, 2024	33
Temperature Limits Compliance & Dissipative Cooling Evaluation (GBF Outfall 001) -Initiate Actions	April 1, 2025	33
Temperature Limits Compliance & Dissipative Cooling Evaluation (GBF Outfall 001) -Complete Actions	October 1, 2025	33
Mercury Pollutant Minimization Program (GBF Outfall 001) -Annual Mercury Progress Reports	March 31, 2023	33
Mercury Pollutant Minimization Program (GBF Outfall 001) -Annual Mercury Progress Report #2	March 31, 2024	33
Mercury Pollutant Minimization Program (GBF Outfall 001) -Annual Mercury Progress Report #3	March 31, 2025	33
Mercury Pollutant Minimization Program (GBF Outfall 001) -Annual Mercury Progress Report #4	March 31, 2026	33
Mercury Pollutant Minimization Program (GBF Outfall 001) -Final Mercury Report	October 1, 2026	33

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Mercury Pollutant Minimization Program (GBF Outfall 001) -Annual Mercury Reports After Permit Expiration	See Permit	33
Sludge Management Plan -Sludge Management Plan Submittal	April 1, 2023	34
Mixing Zone Study Submittal GBF (Outfall 001) -Submit Mixing Zone Study	April 1, 2025	34
Compliance Maintenance Annual Reports (CMAR)	by June 30, each year	36
Industrial User Compliance Evaluation and Violation Reports	Semiannual	46
Pretreatment Program Report	Annually	46
General Sludge Management Form 3400-48	prior to any significant sludge management changes	47
Characteristic Form 3400-49 and Lab Report	by January 31 following each year of analysis	48
Land Application Report Form 3400-55	by January 31, each year whether or not non-exceptional quality sludge is land applied	48
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied	49
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	35

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:
Northeast Region, 2984 Shawano Avenue, Green Bay, WI 54313-6727