WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

Neenah Inc., Neenah Mill

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at

135 N Commercial Street
Neenah, WI 54956

to

the Fox River in Winnebago County
Via Outfall 001 at 44.1879111ºN, -88.4590111ºW

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 _____
Bryan Hartsook
Wastewater Field Supervisor

_____
Date Permit Signed/Issued for Modification

PERMIT TERM: EFFECTIVE DATE - November 01, 2022 **EXPIRATION DATE - October 31, 2027**
EFFECTIVE DATE OF MODIFICATION: April 01, 2025

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1 Influent Requirements - Cooling Water Intake Structure (CWIS)

1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
701	INTAKE: Water intake located on the Neenah Canal of the Lower Fox River, above the Neenah Dam, 630 Feet southeast of the Commercial Street Bridge and 65 feet southeast of the railroad bridge. Identified by Neenah Paper Inc as Neenah Mill Process Water Intake #005. Flow is measured by an inline magnetic flow meter located at the outer wall of the water filtration plant room on the first floor.

1.2 Monitoring Requirements and BTA Determinations

The permittee shall comply with the following monitoring requirements.
The intake(s) has been reviewed for compliance with BTA (Best Technology Available) standards and the BTA determination(s) is listed below.

1.2.1 Sampling Point 701 - Water Intake

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
Intake Water Used Exclusively For Cooling		% Flow	Annual	Calculated	

1.2.1.1 CWIS - Authority to Operate and Description

The permittee shall at all times properly operate and maintain all water intake facilities. The permittee shall give advance notice to the Department of any planned changes in the location, design, operation, or capacity of the intake structure. The permittee is authorized to use the Neenah Mill Process Water Intake #005 cooling water intake system which consists of the following:

- Location: Located on Fox River, 50 feet west of Commercial St Bridge. SW/SW Sec 22 T20N R17E.
- General Description: Installed in 1947. Dimensions are 48” x 48” with 21 vertical bars.
- Major Components: 21 vertical 0.375” bars and a plastic barrier surrounding the intake to prevent debris from entering.
- Maximum Design Intake Flow (DIF): 3.99 MGD.
- Maximum Velocity at Intake Point: 0.46 feet/second.

1.2.1.2 Cooling Water Intake BTA (Best Technology Available) Determination

The Neenah Mill Process Water Intake #005 cooling water intake, as described above in subsection 1.2.1.1, is conditionally approved as Best Technology Available for minimizing adverse environmental impact in accordance

with the requirements in section s. 283.31(6), Wis. Stats. and section 316(b) of the Clean Water Act. This approval is conditional upon the Department finding that the intake design evaluation has determined the maximum velocity is less than 0.5 feet per second (fps) at every point up to the screen of mesh size 3/8" or less. Refer to fact sheet's Appendix F: Fox River Intake Structure Evaluation for more information.

1.3 Cooling Water Intake Structure Standard Requirements

The following requirements and provisions apply to all water intake structures identified as sampling points in subsection 1.1.

1.3.1 Future BTA for Cooling Water Intake Structure

BTA determinations for entrainment and impingement mortality at cooling water intake structures will be made in each permit reissuance, in accordance with 40 CFR §125.90-98. **In subsequent permit reissuance applications, the permittee shall provide all the information required in s. NR 111.41, Wis. Adm. Code if the permittee's intake structure meets the applicability criteria in s. NR 111.02, Wis. Adm. Code.**

1.3.2 Intake Screen Discharges and Removed Substances

Floating debris and accumulated trash collected on the cooling water intake trash rack shall be removed and disposed of in a manner to prevent any pollutant from the material from entering the waters of the State pursuant to s. NR 205.07 (3) (a), Wis. Adm. Code, except that backwashes may contain fine materials that originated from the intake water source such as sand, silt, small vegetation or aquatic life.

1.3.3 Endangered Species Act

Nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act or with Wisconsin's endangered species law. Refer to s. NR 111.16(4),Wis. Adm. Code.

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	FIELD BLANK: In-plant Sample Point 101 is included in the permit to satisfy the need for a field blank when mercury monitoring is conducted for Outfall 001.

2.2 Monitoring Requirements and Limitations

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

2.2.1 Sampling Point 101 - Mercury Field Blank Results

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Mercury, Total Recoverable		ng/L	Quarterly	Blank	See permit subsection 2.2.1.1

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.

3 Surface Water Requirements

3.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)**
001	OUTFALL: The treated process wastewater from the activated sludge treatment system is sampled prior to discharge to the Fox River via Outfall 001. Composite samples are collected from the 24-hour flow proportional peristaltic meter pump system located on the first floor of the wastewater treatment plant (WWTP) room. Grab samples are collected from the 24-hour flow proportional dipper system installed as a backup. Flow is continuously measured using the magnetic flow meter located in the WWTP room on the first floor. Temperature and pH measured with a continuous inline meter in the WWTP room.
005	WLA: WLA Requirements for treated wastewater discharge via Outfall 001. Mass based parameters calculated using concentrations reported at sample point 001. Flow is measured with a magnetic flow meter located in the WWTP room on the first floor. Temperature is measured with a continuous inline meter located on the first floor of the wastewater treatment plant room.

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 - Treated Process Wastewater

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Continuous	
Temperature		deg F	Daily	Continuous	
BOD_5, Total		mg/L	Daily	24-Hr Flow Prop Comp	ELG limits
BOD_5, Total	Daily Max	1,703 lbs/day	Daily	Calculated	
BOD_5, Total	Monthly Avg	895 lbs/day	Daily	Calculated	
Suspended Solids, Total		mg/L	Daily	24-Hr Flow Prop Comp	See TMDL section below
Suspended Solids, Total	Daily Max	1,091 lbs/day	Daily	Calculated	
Suspended Solids, Total	Monthly Avg	334 lbs/day	Daily	Calculated	
Copper, Total Recoverable	Daily Max	61 µg/L	Weekly	24-Hr Flow Prop Comp	
Copper, Total Recoverable	Monthly Avg	61 µg/L	Weekly	24-Hr Flow Prop Comp	
Copper, Total Recoverable	Daily Max	1.76 lbs/day	Weekly	Calculated	

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Phosphorus, Total	Rolling 12 Month Avg	1.0 mg/L	Weekly	24-Hr Flow Prop Comp	Existing concentration limits that are already in effect (Interim, TBEL, WQBELs dictated by s. NR 217.13, Wis. Adm. Code) will be maintained to prevent backsliding.
Phosphorus, Total	6-Month Avg	4.8 lbs/day	Weekly	Calculated	See Phosphorus section(s) below.
Phosphorus, Total	Monthly Avg	14.5 lbs/day	Weekly	Calculated	See TMDL section below.
Phosphorus, Total		lbs/month	Monthly	Calculated	Calculate the Total Monthly Discharge of phosphorus and report on the last day of the month on the DMR. See TMDL section below.
Phosphorus, Total		lbs/yr	Monthly	Calculated	Calculate the 12-month rolling sum of total monthly mass of phosphorus discharged and report on the last day of the month on the DMR. See TMDL section below.
Mercury, Total Recoverable		ng/L	Quarterly	Grab	Monitoring for the last 24 months of permit term. See permit subsection 3.2.1.1.
Hardness, Total as $CaCO_3$		mg/L	Quarterly	24-Hr Flow Prop Comp	
PFOS		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule and permit subsection 3.2.1.8 and 3.2.1.9
PFOA		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule and permit subsection 3.2.1.8 and 3.2.1.9
pH (Minimum)	Daily Min	5.0 su	Daily	Continuous	See "Continuous pH Monitoring" below for pH limits and allowed excursions.

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
pH (Maximum)	Daily Max	9.0 su	Daily	Continuous	See "Continuous pH Monitoring" below for pH limits and allowed excursions.
pH Total Exceedance Time Minutes	Monthly Total	446 minutes	Daily	Continuous	See "Continuous pH Monitoring" below for pH limits and allowed excursions.
pH Exceedances Greater Than 60 Minutes	Daily Max	0 Number	Daily	Continuous	See "Continuous pH Monitoring" below for pH limits and allowed excursions.
Acute WET		TU_a	See Listed Qtr(s)	24-Hr Flow Prop Comp	See permit subsection 3.2.1.10

3.2.1.1 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), Wis. Adm. 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.

3.2.1.2 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.

3.2.1.3 Total Maximum Daily Load (TMDL) Limitations

Approved TMDL: The Lower Fox River Basin TMDL Waste Load Allocation (WLA) for Total Phosphorus and Total Suspended Solids (TSS) was approved by the U.S. Environmental Protection Agency in March 2012. The approved TMDL WLA limits for Total Phosphorus are a monthly average of 14.5 lbs/day, a 6-month average of 4.8 lbs/day and a rolling 12 month average of 1.0mg/L. The approved TMDL WLA limits for TSS are a daily maximum of 1,091 lbs/day and a monthly average of 334 lbs/day.

3.2.1.4 Lower Fox River Basin Total Maximum Daily Load (TMDL) Calculations

TMDL total lbs/month and lbs/yr effluent results shall be calculated as follows:
Total Monthly Discharge (lbs/month): = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.
12-Month Rolling Sum of Total Monthly Discharge (lbs/yr): = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

3.2.1.5 TMDL Limitations for Total Phosphorus

The approved TMDL phosphorus WLA for this permittee is 927 lbs/yr WLA**,** which results in calculated phosphorus mass limits of a 14.5 lbs/day monthly average and a 4.8 lbs/day 6-month average.

The 12-month rolling sum of total monthly phosphorus (lbs/yr) shall be reported each month for direct comparison to the facility's WLA.

3.2.1.6 TMDL Limitations for Total Suspended Solids

The approved TMDL TSS WLA for this permittee is 81,301 lbs/yr WLA, and results in calculated TSS mass limits of 1,091 lbs/day daily maximum and a 334 lbs/day monthly average. The 12-month rolling sum of total monthly TSS (lbs/yr) shall be reported each month for direct comparison to the facility's WLA.

3.2.1.7 Continuous pH Monitoring

The permittee shall maintain the pH of the discharge within the range of 5.0 to 9.0 standard units (s.u.) except excursions are permitted subject to the following conditions:

- The pH is monitored continuously;
- The total time during which the pH is outside the range of 5.0 to 9.0 s.u. shall not exceed 446 minutes in any calendar month;
- No individual pH excursion outside the range of 5.0 to 9.0 s.u. shall exceed 60 minutes in duration;
- No individual pH excursion shall be outside the range of 4.0 to 11.0 s.u.; and
- On a daily basis, the permittee shall report the minimum and maximum pH, the total time that the pH is outside the range of 5.0 to 9.0 s.u. and the number of pH excursions outside the range of 5.0 to 9.0 that exceed 60 minutes in duration.

3.2.1.8 PFOS/PFOA Sampling and Reporting Requirements

For grab samples, as defined per s. NR 218.04(10), Wis. Adm. Code, a single sample at a location as defined by the sample point description shall be taken during the time of the day most representative to capture all potential discharges. If extra equipment besides the sample bottle is used to collect the sample, it is recommended that a one-time equipment blank is collected with the first sample. An equipment blank would be collected by passing laboratory-verified PFAS-free water over or through field sampling equipment before the collection of a grab sample to evaluate potential contamination from the equipment used during sample.

If any equipment blanks are performed, these results shall be reported in the comments section of the eDMR and shall also documented in the reports submitted as part of the PFOS/PFOA Minimization Plan Determination of Need schedule of the permit.

3.2.1.9 PFOS/PFOA Minimization Plan Determination of Need

The permittee shall monitor PFOS and PFOA as specified in the table above and report on the effluent concentrations including trends in monthly and annual average PFOS and PFOA concentrations as specified in the PFOS/PFOA Minimization Plan Determination of Need Schedule.

If, after reviewing the data, the Department determines that a minimization plan for PFOS and PFOA is necessary based on the procedures in s. NR 106.98(4), Wis. Adm. Code, the department will notify the permittee in writing that a PFOS and PFOA minimization plan that satisfies the requirements in s. NR 106.99, Wis. Adm. Code, is required. The permittee shall submit an initial plan for department approval no later than 90 days after written notification was sent from the department in accordance with s. NR 106.985(2)(a), Wis. Adm. Code. Pursuant to s. NR 106.985(2)(b), Wis. Adm. Code, as soon as possible after department approval of the PFOS and PFOA minimization plan, the department will modify or revoke and reissue the permit in accordance with public notice procedures under ch. 283, Wis. Stats., and ch. NR 203, Wis. Adm. Code, to include the PFOS and PFOA minimization plan and other related terms and condition.

If, however, the Department determines that a PFOS and PFOA minimization plan is unnecessary based on the procedures in s. NR 106.98(4), Wis. Adm. Code, the Department shall notify the permittee that no further action is required. Per s. NR 106.98(3)(a), Wis. Adm. Code, the department may reduce monitoring frequency to once every 3 months (quarterly) on a case-by-case basis, but only after at least 12 representative results have been generated. If the permittee requests a reduction in monitoring and the department agrees a reduction would be appropriate, the permit

may be modified in accordance with public notice procedures under ch. 283, Wis. Stats., and ch. NR 203, Wis. Adm. Code, to incorporate this change.

3.2.1.10 Whole Effluent Toxicity (WET) Testing

Primary Control Water: Lower Fox River

Instream Waste Concentration (IWC): N/A

Acute Mixing Zone Concentration: N/A

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

- **Acute:** 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.

WET Testing Frequency:
Acute tests are required during the following quarters:

- **Acute:** April 1st – June 30th, 2023; July 1st – September 30th, 2024; October 1st – December 31st, 2025; January 1st – March 31st, 2026; April 1st – June 30th, 2027.

  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 for April 1st – June 30th, 2028.

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 (TUa) is greater than 1.0 for either species. The TUa shall be calculated as follows: TUa = 100 ÷ LC_{50}.**

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 (Outfall) 005 - WATER QUALITY INFO FOR WLA

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow River		cfs	Daily	Continuous	
BOD_5, Total	Daily Max - Variable	lbs/day	Daily	Calculated	

Monitoring Requirements and Effluent Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
WLA Value		lbs/day	Daily	Calculated	
WLA Adjusted Value		lbs/day	Daily	Calculated	
WLA Previous Day River Temp		deg F	Daily	Continuous	
WLA 7 Day Sum Of WLA Values		lbs/day	Daily	Calculated	
WLA Previous 4 Day Avg River Flow		cfs	Daily	Calculated	
WLA 7 Day Sum Of BOD_5 Discharged	Daily Max - Variable	lbs/day	Daily	Calculated	

3.2.2.1 Waste Load Allocation Requirements

Definitions:

• Point source allocation values (pounds per day BOD5) in Table 1 represent water quality related effluent limitations. The flow and temperature conditions used to determine a point source allocation value for a given day shall be the representative measurements of the flow averaged over the previous 4 days and temperature of the previous day.
• A representative measurement of flow shall be defined as the daily average flow value derived from continuous river flow monitoring data for the Fox River collected at the Rapide Croche Dam. Daily average flow values reported by the Lower Fox River Discharge Association for the Rapide Croche Dam location are acceptable for use with Table 1.
• A representative measurement of temperature shall be defined as the daily average temperature value derived from continuous river temperature monitoring data for the Fox River collected at the Rapide Croche Dam. Daily average temperature values reported by the Lower Fox River Discharge Association for the Rapide Croche Dam location are acceptable for use with Table 1.

Determination of Effluent Limitations: For purposes of determining compliance with the waste load allocated water quality related effluent limitations, the following conditions shall be met:

• The sum of the actual daily discharges of BOD5 for any 7 consecutive day period may not exceed the sum of the daily point source allocation values from Table 1 for the same 7 consecutive day period.
• For any one day period, the actual discharge of BOD5 shall not exceed 138% of the point source allocation value from Table 1 for that day.

Monitoring Requirements: The same 24-hour period shall be utilized for the collection of composite and continuous samples for river flow and temperature and all effluent characteristics listed in Table 3.2.2 above., including effluent flow and BOD5.

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

• The daily average river flow value (cfs);
•The daily average river temperature value (°F);
• The average of the previous 4 days' river flow values (cfs);
• The daily point source allocation value (lbs BOD5 per day);
• The actual daily discharge value of BOD5 (lbs BOD5 per day);

• The sum of the actual daily discharge values of BOD5 (lbs BOD5) for each 7 consecutive day period (present day's discharge plus the 6 previous days' discharge);
• The sum of the total daily point source allocation values (lbs BOD5) for each 7 consecutive day period (present day's allocation plus the 6 previous days' allocation). If there is no lbs/day BOD5 value available, but there was a discharge, for one or more days of the seven consecutive days, add the values from the table only from those days corresponding to days actual measured values are available. If there is no discharge, use a zero for that day. For all days on which there is no measured value the permittee shall submit a written explanation to the Watershed Engineer; and
• The daily adjusted point source allocation value (percent adjustment factor x point source allocation value)

Waste load Allocated Water Quality Related Effluent Limitations Restriction: In no case shall the waste load allocated water quality related effluent limitations be less stringent than the applicable categorical effluent limitations contained in Table 3.2.1 above.

Table 1. Point Source Wasteload Allocated Values (lbs per day of BOD_5)
(River mile 40.0 to 32.4)

MAY-JUNE

Temperature (previous day average in °F)	Flow at Rapide Croche Dam (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	1066	1126	1214	1289	1362	1435	1519	1615	1735	1871	2072	2199	2397	3485	4185
82 TO 85	1143	1216	1314	1402	1492	1592	1709	1842	1994	2043	2144	2248	2655	3787	4631
78 TO 81	1266	1352	1462	1571	1696	1842	1956	1989	2056	2136	2206	2400	3116	4339	4656
74 TO 77	1389	1482	1607	1750	1923	1952	1991	2096	2138	2190	2292	2768	3505	4656	4656
70 TO 73	1509	1609	1766	1932	1939	1978	2O88	2129	2191	2266	2535	3185	3892	4656	4656
66 TO 69	1631	1747	1938	1932	1962	2077	2125	2188	2278	2472	2916	3641	4366	4656	4656
62 TO 65	178O	1940	1923	1943	2063	2120	2198	2300	2583	2911	3559	4116	4656	4656	4656
58 TO 61	1965	1918	1922	2049	2118	2223	2409	2764	3158	3684	4134	4656	4656	4656	4656
54 TO 57	1902	1894	2032	2125	2270	2632	3074	3702	4064	4440	4656	4656	4656	4656	4656
50 TO 53	1873	1943	2135	2374	2932	3505	4181	4640	4656	4656	4656	4656	4656	4656	4656
46 TO 49	1947	2139	2585	3321	4281	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656
42 TO 45	2221	2775	3781	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656
≤41	3249	4249	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656

JULY

Temperature (previous day average in °F)	Flow at Rapide Croche Dam (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	1048	1048	1048	1048	1048	1048	1190	1369	1591	1834	1975	1994	2078	2378	3059
82 TO 85	1048	1048	1048	1048	1087	1263	1462	1680	1942	1983	1998	2066	2158	2770	3578
78 TO 81	1048	1048	1048	1202	1406	1635	1891	2010	2033	2037	2090	2166	2308	3473	4451
74 TO 77	1048	1083	1264	1485	1746	1913	2030	2060	2066	2117	2181	2293	2761	4227	4656
70 TO 73	1141	1276	1515	1799	1908	1942	2056	2100	2156	2207	2297	2657	3285	4656	4656
66 TO 69	1317	1494	1797	191O	1938	2056	2104	2168	2255	2326	2651	3133	3877	4656	4656
62 TO 65	1532	1770	1908	1924	2051	2109	2191	2298	2513	2765	3149	3728	4602	4656	4656
≤61	1827	19O9	1908	2044	2118	2230	2448	2741	3045	3350	3831	4543	4656	4656	4656

Table 1. Point Source Wasteload Allocated Values (lbs per day of BOD_5)
(River mile 40.0 to 32.4)

AUGUST

Temperature (previous day average in °F)	Flow at Rapide Croche Dam (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	1048	1048	1048	1048	1048	1048	1048	1055	1217	1403	1701	1995	2058	2270	2698
82 TO 85	1048	1048	1048	1048	1048	1048	1185	1343	1545	1772	2000	2050	2131	2526	3179
78 TO 81	1048	1048	1048	1064	1212	1383	158O	1797	1911	2003	2073	2141	2257	3144	4023
74 TO 77	1048	1048	1155	1322	1523	1751	1879	1921	2020	2057	2152	2246	2553	3844	4656
70 TO 73	1096	1201	1385	1609	1858	1881	1995	2026	2073	2139	2246	2459	3008	4602	4656
66 TO 69	1264	1403	1645	1866	1881	1997	2035	2088	2168	2262	2454	2893	3570	4656	4656
62 TO 65	1464	1657	1870	1874	1994	2041	2111	2204	2328	2566	2917	3450	4279	4656	4656
≤61	1738	1877	1863	1986	2048	2145	2276	2555	2833	3118	3561	4240	4656	4656	4656

SEPTEMBER

Temperature (previous day average in °F)	Flow at Rapide Croche Dam (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	1048	1048	1048	1048	1048	1048	1048	1048	1048	1118	1356	1712	2074	2274	2721
82 TO 85	1048	1048	1048	1048	1048	1048	1048	1135	1291	1473	1781	2015	2133	2514	3182
78 TO 81	1048	1048	1048	1048	1102	1223	1374	1551	1781	1940	1991	2108	2240	3085	4023
74 TO 77	1048	1048	1109	1222	1373	1558	1779	1927	1952	1988	2068	2216	2458	3773	4656
70 TO 73	1109	1170	1297	1470	1691	1824	1927	1951	1997	2061	2181	2329	2873	4533	4656
66 TO 69	1242	1337	1525	1772	1826	1929	1960	2009	2O85	2179	2318	2742	3417	4656	4656
62 TO 65	1407	1559	1828	1820	1925	1964	2028	2115	2238	2394	2744	3282	4142	4656	4656
58 TO 64	1644	1838	1810	1915	1966	2056	2179	2343	2646	2928	3372	4070	4656	4656	4656
54 TO 57	1828	1794	1898	1970	2098	2279	2655	2990	3351	3727	4329	4656	4656	4656	4656
50 TO 53	1772	1874	1973	2165	2543	3050	3488	3953	4461	4656	4656	4656	4656	4656	4656
46 TO 49	1861	1967	2252	2931	3595	4200	4656	4656	4656	4656	4656	4656	4656	4656	4656
42 TO 45	2021	2344	3368	4337	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656
≤41	2775	3792	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656

Table 1. Point Source Wasteload Allocated Values (lbs per day of BOD_5)
(River mile 40.0 to 32.4)

OCTOBER

Temperature (previous day average in °F)	Flow at Rapide Croche Dam (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
≥66	1135	1199	1350	1568	1842	1849	1874	1918	1995	2090	2275	2653	3400	4656	4656
62 TO 65	1267	1391	1642	1843	1847	1876	1936	2018	2142	2289	2622	3200	4114	4656	4656
58 TO 61	1473	1691	1836	1835	1872	1954	2072	2226	2494	2786	3253	3988	4656	4656	4656
54 TO 57	1778	1727	1812	1868	1984	2157	2433	2820	3193	3581	4209	4656	4656	4656	4656
50 TO 53	1697	1781	1857	2033	2294	2846	3296	3769	4292	4656	4656	4656	4656	4656	4656
46 TO 49	1753	1834	2093	2620	3355	3972	4637	4656	4656	4656	4656	4656	4656	4656	4656
42 TO 45	1859	2144	3004	4046	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656
≤41	2344	3351	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656	4656

4 Schedules

4.1 PFOS/PFOA Minimization Plan Determination of Need

The permittee shall submit a PFOS/PFOA Minimization Plan Determination of Need report as specified by permit subsection 3.2.1.9, in accordance with the following schedule.

Required Action	Due Date
Report on Effluent Discharge: Submit a report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations. This analysis should also include a comparison to the applicable narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code. This report shall include all PFOS and PFOA data collected including any voluntary influent, intake, in-plant, collection system sampling, and blank sample results.	01/31/2024
Report on Effluent Discharge and Evaluation of Need: Submit a final report on effluent PFOS and PFOA concentrations and include an analysis of trends in monthly and annual average PFOS and PFOA concentrations of data collected over the last 24 months. The report shall also provide a comparison on the likelihood of the facility needing to develop a PFOS/PFOA minimization plan. This report shall include all PFOS and PFOA data collected including any voluntary influent, intake, in-plant, collection system sampling, and blank sample results. The permittee shall also submit a request to the department to evaluate the need for a PFOS/PFOA minimization plan. If the department determines a PFOS/PFOA minimization plan is needed based on a reasonable potential evaluation, the permittee will be required to develop a minimization plan for department approval no later than 90 days after written notification was sent from the department. The department will modify or revoke and reissue the permit to include PFOS/PFOA minimization plan reporting requirements along with a schedule of compliance to meet WQBELs. Effluent monitoring of PFOS and PFOA shall continue as specified in the permit until the modified permit is issued. If, however, the department determines there is no reasonable potential for the facility to discharge PFOS or PFOA above the narrative standard in s. NR 102.04(8)(d), Wis. Adm. Code, no further action is required and effluent monitoring of PFOS and PFOA shall continue as specified in the permit.	01/31/2025

4.2 Industrial Intake Structure Evaluation

The permittee shall evaluate the design of the current intake structure to determine the maximum design velocity.

Required Action	Due Date
Submit Status Update: The permittee shall submit an update of intake evaluation planning.	06/01/2023
Submit Status Update: The permittee shall submit an update of intake evaluation planning.	06/01/2024
Intake Structure Evaluation Plan: The permittee shall submit intake structure engineer drawings.	01/31/2025
Maximum Intake Design Velocity Calculation : The permittee shall submit calculations of the maximum intake design velocity at every point up until the first screen of mesh size 3/8” or less. If the maximum intake design velocity exceeds 0.5 feet per second at any point, permittee shall submit a plan to comply with the 2020 Guidance for Evaluating Intake Structures Using Best Professional	01/31/2025

Judgement (BPJ).	
Submit Status Update: If applicable, the permittee shall submit an update of intake modification progress.	01/31/2026
Complete Modifications to Meet BTA Criteria: If applicable, the permittee shall complete intake structure modifications as approved by the Department to meet intake criteria found in the 2020 Guidance for Evaluating Intake Structures Using Best Professional Judgement (BPJ).	10/31/2027

4.3 Biocide Use Certification

Pursuant NR 284.12(2)(b) Wis. Adm. Code, permittee shall certify that chlorophenolic-containing biocides are not in use at the facility.

Required Action	Due Date
Biocide Use Certification : The certification of nonuse of chlorophenolic-containing biocides must be in the form of a notarized affidavit signed by the authorized representative and must state that chlorophenolic-containing biocides are not in use at the facility.	10/31/2027

5 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), 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(3).

5.1 Reporting and Monitoring Requirements

5.1.1 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 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.

5.1.2 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.

5.1.3 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.

5.1.4 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 BOD_5 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.

5.1.5 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, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

5.1.6 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.

5.1.7 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.

5.2 System Operating Requirements

5.2.1 Noncompliance Reporting

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 as directed at the end of this permit 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**.

5.2.2 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass 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.

5.2.3 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 unscheduled bypassing 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.

5.2.4 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation provided the following requirements are met:

- Effluent from the wastewater 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 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 wastewater treatment facility records and such records shall be available to the department on request.

5.2.5 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.

5.2.6 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).

5.2.7 Spill Reporting

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

5.2.8 Planned Changes

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

5.2.9 Duty to Halt or Reduce Activity

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

5.3 Surface Water Requirements

5.3.1 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.

5.3.2 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.

5.3.3 Effluent Temperature Requirements

Weekly Average Temperature – If temperature limits are included in this permit, Weekly Average Temperature shall be calculated as 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 pursuant to Wis. Adm. Code, s. NR 102.28. '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 pursuant to Wis. Adm. Code, s. NR 102.29.

5.3.4 Visible Foam or Floating Solids

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

5.3.5 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.

5.3.6 Compliance with Phosphorus Limitation

Compliance with the concentration limitation for phosphorus shall be determined as a rolling twelve-month average and shall be calculated as follows:

First, determine the pounds of phosphorus for an individual month by multiplying the average of all the concentration values for phosphorus (in mg/L) for that month by the total flow for the month in Million Gallons times the conversion factor of 8.34.

Then, the monthly pounds of phosphorus determined in this manner shall be summed for the most recent 12 months and inserted into the numerator of the following equation.

$$\text{Average concentration of P in mg/L} = \frac{\text{Total lbs of P discharged (most recent 12 months)}}{\text{Total flow in MG (most recent 12 months)} \times 8.34}$$

The compliance calculation shall be performed each month with a reported discharge volume after substituting data from the most recent month(s) for the oldest month(s). A calculated value in excess of the concentration limitation will be considered equivalent to a violation of a monthly average.

5.3.7 PFOS and PFOA Requirements

The laboratory performing the analysis on any samples shall be certified for the applicable PFAS compounds in the aqueous matrix by the Wisconsin Laboratory Certification Program established under s. 299.11, Wis. Stats., in accordance with s. NR 149.41, Wis. Adm. Code. If the EPA Office of Water publishes a 1600 series isotope dilution method for the analysis of PFAS in wastewater, the department recommends the use of the EPA method.
The department may reject any sample results if results are produced by a laboratory that is not in compliance with certification requirements under ch. NR 149, Wis. Adm. Code.

5.3.8 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.

5.3.9 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 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. Conduct toxicity screening tests on the effluent at a minimum of once per month for six months to determine if toxicity recurs. Screening tests are WET tests using fewer effluent concentrations conducted on the most sensitive species. If any of the screening tests contain toxicity, conduct a toxicity identification evaluation (TIE) to determine the cause. TIE methods are available from USEPA "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003) and "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F).

  (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 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
PFOS/PFOA Minimization Plan Determination of Need -Report on Effluent Discharge	January 31, 2024	14
PFOS/PFOA Minimization Plan Determination of Need -Report on Effluent Discharge and Evaluation of Need	January 31, 2025	14
Industrial Intake Structure Evaluation -Submit Status Update	June 1, 2023	14
Industrial Intake Structure Evaluation -Submit Status Update	June 1, 2024	14
Industrial Intake Structure Evaluation -Intake Structure Evaluation Plan	January 31, 2025	14
Industrial Intake Structure Evaluation -Maximum Intake Design Velocity Calculation	January 31, 2025	15
Industrial Intake Structure Evaluation -Submit Status Update	January 31, 2026	15
Industrial Intake Structure Evaluation -Complete Modifications to Meet BTA Criteria	October 31, 2027	15
Biocide Use Certification -Biocide Use Certification	October 31, 2027	15
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	16

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 - Oshkosh, 625 E. CTY RD Y, Suite 700, Oshkosh, WI 54901