



# WPDES PERMIT

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

**NDP WQC LLC**

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

Water Quality Center  
2811 Fifth Avenue North  
Wisconsin Rapids, WI 54495

The Biron Mill  
621 N Biron Dr  
Wisconsin Rapids, WI 54494

to

**The Wisconsin River**

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 \_\_\_\_\_  
Nate Willis, P.E.  
Wastewater Section Manager

\_\_\_\_\_  
Date Permit Signed/Issued

**PERMIT TERM: EFFECTIVE DATE - August 01, 2025**

**EXPIRATION DATE – July 31, 2030**

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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, Waste Type/Sample Contents and Treatment Description (as applicable)
601	Sampling Point 601 represents the point upstream of the Biron Mill where mercury is monitored in the Wisconsin River.
701	Sampling Point 701 represents the Biron Mill Accelerator Intake.
702	Sampling Point 702 represents the Biron Mill Main River Water System Intake.
703	Sampling Point 703 represents the Biron Mill 45# Steam Condenser Intake.
704	Sampling Point 704 represents the Biron Mill Boiler House 24-Inch Intake.
705	Sampling Point 705 represents the Biron Mill Boiler House 48-Inch Intake.
709	Sampling Point 709 represents the Wisconsin Rapids Emergency Fire Intake

## 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 601 - BM Upstream Monitoring

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury, Total Recoverable		ng/L	Monthly	Grab	

### 1.2.2 Sampling Point 701 - BM ACCELATOR INTAKE; 702- BM MAIN RIVER WATER INTAKE; 703- BM 45# STEAM CONDENSER INTAKE; 704- BM BOILER HOUSE 24-INCH INTAKE; 705- BM BOILER HOUSE 48-Inch 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	

#### 1.2.2.1 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 Biron Mill's cooling water intake system which consists of the following:

- Location:
  - 701 – Biron Mill Accelerator Intake: 44.4319°N, 89.7792°W
  - 702 – Biron Mill Main River Water Intake: 44.4317°N, 89.7797°W
  - 703 – Biron Mill Steam Condenser Intake: 44.4311°N, 89.7794°W
  - 704 – Biron Mill Boiler House 24” Intake: 44.4308°N, 89.7784°W
  - 705 – Biron Mill Boiler House 48” Intake: 44.4308°N, 89.7783°W
- General Description:
  - 701 – Biron Mill Accelerator Intake: The Accelerator intake consists of a 36-inch diameter inlet cut into the retaining wall of Biron Dam on the north side of the Biron Flowage. The top of the inlet pipe is approximately 4 feet below the water surface. It was constructed in 1955.
  - 702 – Biron Mill Main River Water Intake: The Main River intake is also located on the north side of the Biron Flowage. The intake openings are 18 inches apart, located 4 feet below the water's surface at the mill's Filter Plant Building, and covered by a screen that the mill calls the “Shark Cage”.
  - 703 – Biron Mill #45 Steam Condenser Intake: The #45 Condenser Intake is in a hydro-turbine forebay adjacent to the mill's Grinder Building on the south side of the Biron Flowage. A bar rack with dimensions of 16 feet-10 inches wide and a submerged depth of 12 feet-6 inches covers the inlet to the turbine forebay (210 square feet).
  - 704 – Biron Mill Boiler House 24” Intake: The Boiler House 24-Inch Intake, located on the south side of the Biron Flowage, is a 30-inch diameter opening through the outer wall, the top of which is approximately 4 feet below the surface of the water. It was constructed in 1947.
  - 705 – Biron Mill Boiler House 48” Intake: The Boiler House 48-Inch Intake consists of a 5-foot by 5-foot square opening to the river, the top of which is approximately 4 feet below the water surface on the south shore of the Biron Flowage. This intake is used to supply cooling water to the #1 steam condenser and inlet supply to the #26 River Water System. The intake was constructed in 1959.
- Major Components:
  - 701 – Biron Mill Accelerator Intake: A trash rack is used to screen large debris before water enters the plant. The trash rack is 7 feet by 9 feet containing 0.25-inch vertical bars that are spaced 1.5 inches apart. Approximately 7 feet of the trash rack is below the water surface. The trash rack is cleaned periodically by manually raking the debris from the bars. Intake water is conveyed into the Accelerator (clarifier) by one 40 horsepower lift pump on an 18-inch line primary pump and one backup pump with a capacity of 8,000 gpm each. The recirculation water is returned to the intake upstream from the trash rack. Water processed by the Accelerator is sent through coal filter beds into a clear well and is then used for process water. None of the water from Intake 701 is used for cooling purposes.
  - 702 – Biron Mill Main River Water Intake: The Shark Cage is 16 feet wide and 4 feet high and extends 4 feet out from the retention wall into the dam forebay. The side of the Shark Cage opposite the intakes is covered by vertical bars that are ¼-inch thick, spaced 2.25 inches on center, and provides 89% open area. The remaining four sides of the Shark Cage are covered by steel plates with 1-inch diameter holes. Spacing of the holes is unknown, but commercially available perforated screen plate with 1-inch diameter holes provides an open area of 58%. Assuming an open area of 58%, the steel plated sides of the Shark Cage would provide an open area of 46 square feet. The permittee is required to confirm spacing prior to the next permit reissuance. A rotary drum screen, 5 feet in

diameter and 8 feet long with a 14-mesh coarse screen and 60-mesh fine screen, is located down-gradient from each intake (i.e., the two rotary drum screens treat separate intake flows). Intake water passes from inside the cylinder created by the drum screen to the outside for use in the mill. The rotary drum screens are immersed in the water to a depth of 2.5 feet, which provides a wetted area of 63 square feet for each drum screen and discharge screened water to a common wet well where the pumps are located.

- 703 – Biron Mill Steam Condenser Intake: Vertical bars 3/8-inch thick on 3-inch centers make up the bar rack. Two 24-inch diameter pipes downgradient from the bar rack pull a side stream of water off the flow to the hydro-turbine for use as cooling water in the facility. Intake flow occurs mostly due to gravity since the steam condenser is located below the dam, but it is assisted by a steam-driven vacuum. The cooling water is discharged back to the river via Outfall 013. Prior to #45 Condenser, the intake water passes through two self-cleaning strainers with baskets constructed with 3/16-inch diameter holes that provide a total flow through area of 21.2 square feet. All of the water drawn through this intake is used for cooling purposes.
- 704 – Biron Mill Boiler House 24” Intake: This intake has a trash rack to screen large debris from the intake water. The trash rack is located inside the building, is 9 feet by 6 feet and consists of 0.25-inch vertical bars spaced 3 inches apart. Approximately 8 feet of the rack is below the water surface. In addition, this intake has a REX traveling screen consisting of multiple screen panels that are 2 feet high by 6 feet wide with approximately 8 feet of screen below the water surface. The screens are 0.375-inch mesh and are rotated and cleaned periodically by a spray wash system. Through-screen velocity at DIF is calculated to be 1.35 feet per second. Debris is collected for off-site disposal. A 24-inch intake pipe conveys the water to the plant after passing through the traveling screen. All of the water drawn through this intake is used exclusively for cooling purposes.
- 705 – Biron Mill Boiler House 48” Intake: The trash rack for this intake is inside the pump house and is 12.5 feet by 7 feet. It has 1/4-inch vertical bars spaced 3 inches apart. In addition, this intake also has a traveling screen with 0.375-inch mesh that is 7 feet wide by 15 feet deep, with 13 feet of screen below the water surface. Through-screen velocity at DIF is calculated to be 1.27 feet per second. The screens are periodically cleaned with a bar scraper and debris and impinged organisms are collected in a catch pan for off-site disposal. A 48-inch intake pipe conveys water from the traveling screen by gravity to the condenser at the boiler house. Additionally, two variable frequency drive pumps draw water off the 48-inch intake pipe to provide 80 psi non-contact cooling water and process water to the paper mill.
- Maximum Design Intake Flow (DIF):
  - 701 – Biron Mill Accelerator Intake: 12 MGD
  - 702 – Biron Mill Main River Water Intake: 9.36 MGD
  - 703 – Biron Mill Steam Condenser Intake: 19 MGD
  - 704 – Biron Mill Boiler House 24” Intake: 28 MGD
  - 705 – Biron Mill Boiler House 48” Intake: 50 MGD
- Maximum Design Intake Velocity:
  - 701 – Biron Mill Accelerator Intake: 2.63 feet per second
  - 702 – Biron Mill Main River Water Intake: 5.19 feet per second
  - 703 – Biron Mill Steam Condenser Intake: 4.68 feet per second
  - 704 – Biron Mill Boiler House 24” Intake: 1.35 feet per second

- 705 – Biron Mill Boiler House 48” Intake: 1.28 feet per second

### **1.2.2.2 Cooling Water Intake BTA (Best Technology Available) Determination**

The Department has determined that the Biron Mill water intake system, as described above in subsection 1.2.1.1, does not represent BTA for minimizing impingement mortality and entrainment in accordance with the requirements in section s. 283.31(6), Wis. Stats. The permittee shall complete the actions specified in the Schedules section of this permit to bring the intake into conformance with BTA requirements.

## **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 ch. NR 111, Wis. Adm. Code. **In subsequent permit reissuance applications, the permittee shall provide all the information required in s. NR 111.40, Wis. Adm. Code.**

Exemptions from some permit application requirements are possible in accordance with s. NR 111.42(1), Wis. Adm. Code, where information already submitted is sufficient. If an exemption is desired, a request for reduced application material requirements must be submitted at least 2 years and 6 months prior to permit expiration. Past submittals and previously conducted studies may satisfy some or all of the application material requirements.

### **1.3.2 Visual or Remote Inspections**

The permittee shall conduct a weekly visual inspection or employ a remote monitoring device during periods when the cooling water intake is in operation. The inspection frequency shall be weekly to ensure the intakes are maintained and operated to function as designed.

### **1.3.3 Reporting Requirements for Cooling Water Intake**

The permittee shall adhere to the reporting requirements listed below.

#### **1.3.3.1 Annual Certification Statement and Report**

Submit an annual certification statement signed by the authorized representative with information on the following, no later than January 31<sup>st</sup> for the previous year:

- Certification that water intake structure technologies are being maintained and operated as set forth in this permit, or a justification to allow a modification of the practices. Include a summary of the required Visual or Remote Inspections.
- If there are substantial modifications to the operation of any unit that impacts the cooling water withdrawals or operation of the water intake structure, provide a summary of those changes.
- If the information contained in the previous year’s annual certification is still applicable, the certification may simply state as such.

### **1.3.4 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.

### **1.3.5 Endangered Species Act**

Nothing in this permit authorizes take for the purpose of a facility's compliance with the Endangered Species Act.



## 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)
113	Sampling Point 113 represents the field blank that accompanies mercury monitoring at the Biron Mill.
114	Sampling Point 114 represents the field blank that accompanies mercury monitoring at the Water Quality Center.

### 2.2 Monitoring Requirements and Limitations

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

#### 2.2.1 Sampling Point 113 - BM MERCURY FIELD BLANK; 114 - WQC MERCURY FIELD BLANK

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury, Total Recoverable		ng/L	Monthly	Blank	

##### 2.2.1.1 Total Recoverable 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) 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 day that mercury samples are collected at the Water Quality Center. 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).

<b>Sampling Point Designation</b>	
<b>Sampling Point Number</b>	<b>Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)</b>
011	Biron Mill Sampling point 011 represents the combined discharge of PM 25 deaerator vacuum pump seal water and PM 25 vacuum pump seal water prior to discharge to the Wisconsin River via Outfall 011.
018	Biron Mill Sampling point 018 represents the combined discharge of PM 26 deaerator vacuum pump seal water and PM 26 vacuum pump seal water prior to discharge to the Wisconsin River via Outfall 018.
012	At Biron Mill Sampling Point 012, noncontact cooling waters (boiler house condenser, oil heat exchanger and other sources) and roof drainage (kraft pulp receiving and OMC buildings), if present, shall be monitored after mixing, but prior to discharging to the Wisconsin River via Outfall 012.
013	At Biron Mill Sampling Point 013, noncontact cooling waters (groundwood and thermo-mechanical pulping, whitewater and oil heat exchangers, 45# Steam Condenser, and all other sources), Wisconsin River intrusion water and stormwater, if present, shall be monitored after mixing, but prior to discharging to the Wisconsin River via Outfall 013.
001	At Water Quality Center Sampling Point 001, Water Quality Center final effluent shall be sampled prior to discharge to the Wisconsin River via Outfall 001.
003	At Water Quality Center Sampling Point 003, groundwater from beneath the liner of the Water Quality Center's Aeration Basin 3 shall be monitored prior to discharge via Outfall 003 to a ditch that flows to Cranberry Creek (WQC).
005	At Water Quality Center Sampling Point 005 (816), groundwater from beneath the liners of Areas 3, 4 and 5 of the Water Quality Center's landfill shall be monitored prior to discharge via Outfall 005 to a mitigated wetland near 5th Avenue.
006	At Water Quality Center Sampling Point 006 (822), groundwater from beneath the liners of Areas 6 and 7 of the Water Quality Center's landfill shall be monitored prior to discharge via Outfall 006 to a ditch that flows to Cranberry Creek (WQC). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO INITIAL USE.
007	Water Quality Center Sampling Point 007 represents uncontaminated runoff from Areas 6 and 7 of the Water Quality Center's landfill prior to discharge from the sedimentation basin to a ditch that flows to Cranberry Creek (WQC). NO MONITORING REQUIRED.

#### 3.2 Monitoring Requirements and Effluent Limitations

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

### 3.2.1 Sampling Point (Outfall) 011 – PM 025 VPSW + DVPSW COMBINED

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Calculated	See s. 3.2.1.2
Copper, Total Recoverable		µg/L	Monthly	Flow Prop Comp	See s. 3.2.1.3
Temperature Maximum	Weekly Avg	61 deg F	Daily	Continuous	Limit effective April beginning 2031
Temperature Maximum	Weekly Avg	69 deg F	Daily	Continuous	Limit effective May beginning 2031
Temperature Maximum	Weekly Avg	79 deg F	Daily	Continuous	Limit effective June beginning 2031
Temperature Maximum	Weekly Avg	88 deg F	Daily	Continuous	Limit effective July 2031 and August 2030
Temperature Maximum	Weekly Avg	77 deg F	Daily	Continuous	Limit effective September beginning 2030
Temperature Maximum	Weekly Avg	75 deg F	Daily	Continuous	Limit effective October beginning 2030
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	Flow Prop Comp	See s. 3.2.1.7
Chronic WET	Monthly Avg	3.3 TU <sub>c</sub>	See Listed Qtr(s)	Flow Prop Comp	See s. 3.2.1.7

#### 3.2.1.1 No Discharge Reporting

If production from PM 25 is idled, the permittee shall notify the Department’s basin representative of the production status of this machine. In these cases, the permittee is directed to specify the flow as zero, and no other monitoring or reporting is required for this outfall. The permittee shall notify the Department’s basin representative when discharge/production resumes.

#### 3.2.1.2 Calculated Flow Rate

The permittee is required to track the volume of water discharged from both PM 25 lines (vacuum pump seal water and deaerator vacuum pump seal water). The permittee shall add the flows for a day and report the sum as the flow rate for Sampling Point 011.

#### 3.2.1.3 Flow Proportional Copper Sampling

When monitoring for copper, the permittee shall take a grab sample type at both the vacuum pump seal water and deaerator vacuum pump seal water lines from PM 25, combine that into one composite sample on a monthly flow-proportional basis to be analyzed, and report the test result as the total recoverable copper concentration for Sampling Point 011. For example, if the monthly average flow rate of the vacuum pump seal water line is 0.3 MGD, and the monthly average flow rate of the deaerator vacuum pump seal water line is 0.7 MGD, then the copper grab sample should be comprised of 70% of the deaerator line and 30% of the vacuum pump line.

#### 3.2.1.4 Effluent Temperature Monitoring

For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). 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. For seasonal discharges collect

measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

### 3.2.1.5 Effluent Temperature Limitations

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. Limits, which are effective beginning August 1, 2030, are summarized in the following table and go into effect per the compliance schedule:

<b>Weekly Average Limit (degrees Fahrenheit)</b>	<b>Month</b>
61	April
69	May
79	June
88	July + August
77	September
75	October

### 3.2.1.6 Additives

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the 'Additives' subsection of the Standard Requirements.

### 3.2.1.7 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Wisconsin River

**Instream Waste Concentration (IWC):** 30%

**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, 75, 50, 25, 12.5% and any additional selected by the permittee.

#### **WET Testing Frequency:**

**Acute** tests are required during the following quarters:

- **Acute:** April – June 2027, July – September 2029

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 **July through September 2030**.

**Chronic** tests are required during the following quarters:

- **Chronic:** July – September 2025, October – December 2026, April – June 2027, January – March 2028, July – September 2029

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 **July through September 2030**.

**Testing:** When taking the flow-proportional sample, the permittee shall take a grab sample type at both the vacuum pump seal water and deaerator vacuum pump seal water lines from PM 25, combine that into one composite sample on an *annual* flow-proportional basis to be analyzed. For example, if the *annual* average flow rate of the vacuum pump seal water line is 0.3 MGD, and the monthly average flow rate of the deaerator vacuum pump seal water line is 0.7 MGD, then the sample should be comprised of 70% of the deaerator line and 30% of the vacuum pump line. 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, 2<sup>nd</sup> 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<sub>a</sub>) is greater than **1.0** for either species (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). The TU<sub>a</sub> 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<sub>c</sub>) is greater than **3.3** for either species. The TU<sub>c</sub> 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 (Outfall) 018 – PM 26 VPSW + DVPSW COMBINED

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Flow Rate		MGD	Daily	Calculated	See s. 3.2.2.2
Copper, Total Recoverable		µg/L	Monthly	Flow Prop Comp	See s. 3.2.2.3
Temperature Maximum	Daily Max	120 deg F	Daily	Continuous	Limit effective year-round
Temperature Maximum	Weekly Avg	66 deg F	Daily	Continuous	Limit effective March beginning 2031
Temperature Maximum	Weekly Avg	61 deg F	Daily	Continuous	Limit effective April beginning 2031
Temperature Maximum	Weekly Avg	69 deg F	Daily	Continuous	Limit effective May 2031 and November 2030
Temperature Maximum	Weekly Avg	79 deg F	Daily	Continuous	Limit effective June beginning 2031
Temperature Maximum	Weekly Avg	88 deg F	Daily	Continuous	Limit effective July 2031 and August 2030
Temperature Maximum	Weekly Avg	77 deg F	Daily	Continuous	Limit effective September beginning 2030

<b>Monitoring Requirements and Effluent Limitations</b>					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Temperature Maximum	Weekly Avg	75 deg F	Daily	Continuous	Limit effective October beginning 2030
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	Flow Prop Comp	See s. 3.2.2.7
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	Flow Prop Comp	See s. 3.2.2.7

**3.2.2.1 No Discharge Reporting**

If production from PM 26 is idled, the permittee shall notify the Department’s basin representative of the production status of this machine. In these cases, the permittee is directed to specify the flow as zero, and no other monitoring or reporting is required for this outfall. The permittee shall notify the Department’s basin representative when discharge/production resumes.

**3.2.2.2 Calculated Flow Rate**

Removed from this permit are sampling points 027 and 028, which represent the vacuum pump seal water and deaerator vacuum pump seal water lines from PM 26, respectively. A total daily sample type is required at 027, and an estimated sample result is acceptable at 028 when evaluating flow rate at both sampling points. The permittee shall add the flows and report the sum as the flow rate for Sampling Point 018.

**3.2.2.3 Copper Sampling**

When monitoring for copper, the permittee shall take a grab sample type at both the vacuum pump seal water and deaerator vacuum pump seal water lines from PM 26, combine that into one composite sample on a monthly flow-proportional basis to be analyzed, and report the test result as the total recoverable copper concentration for Sampling Point 018. For example, if the monthly average flow rate of the vacuum pump seal water line is 0.3 MGD, and the monthly average flow rate of the deaerator vacuum pump seal water line is 0.7 MGD, then the copper grab sample should be comprised of 70% of the deaerator line and 30% of the vacuum pump line.

**3.2.2.4 Effluent Temperature Monitoring**

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. In either case, report the maximum temperature measured during the day on the DMR. For seasonal discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

**3.2.2.5 Effluent Temperature Limitations**

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. Limits, which are effective beginning May 1, 2030, are summarized in the following table and go into effect per the compliance schedule:

Weekly Average Limit (degrees Fahrenheit)	Month
66	March

61	April
69	May + November
79	June
88	July + August
77	September
75	October

### 3.2.2.6 Additives

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the ‘Additives’ subsection of the Standard Requirements.

### 3.2.2.7 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Wisconsin River

**Instream Waste Concentration (IWC):** 5%

**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 are required during the following quarters:

- **Acute:** April – June 2027, July – September 2029

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 **July through September 2030**.

**Chronic** tests are required during the following quarters:

- **Chronic:** April – June 2027, July – September 2029

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 **July through September 2030**.

**Testing:** When taking the flow-proportional sample, the permittee shall take a grab sample type at both the vacuum pump seal water and deaerator vacuum pump seal water lines from PM 26, combine that into one composite sample on an annual flow-proportional basis to be analyzed. For example, if the annual average flow rate of the vacuum pump seal water line is 0.3 MGD, and the monthly average flow rate of the deaerator vacuum pump seal water line is 0.7 MGD, then the sample should be comprised of 70% of the deaerator line and 30% of the vacuum pump line. 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, 2<sup>nd</sup> 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 (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). 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 20 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).

### 3.2.3 Sampling Point (Outfall) 012 - BM NCCW (boiler house)

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
Chlorine, Total Residual	Daily Max	38 µg/L	Monthly	Grab	
Chlorine, Total Residual	Weekly Avg	17 µg/L	Monthly	Grab	
Chlorine, Total Residual	Monthly Avg	17 µg/L	Monthly	Grab	
Temperature Maximum	Daily Max	120 deg F	Daily	Continuous	
Temperature Maximum	Weekly Avg	66 deg F	Daily	Continuous	Limit effective March beginning 2031
Temperature Maximum	Weekly Avg	61 deg F	Daily	Continuous	Limit effective April beginning 2031
Temperature Maximum	Weekly Avg	69 deg F	Daily	Continuous	Limit effective May beginning 2031
Temperature Maximum	Weekly Avg	79 deg F	Daily	Continuous	Limit effective June beginning 2031
Temperature Maximum	Weekly Avg	88 deg F	Daily	Continuous	Limit effective July 2031 and August 2030
Temperature Maximum	Weekly Avg	77 deg F	Daily	Continuous	Limit effective September beginning 2030
Temperature Maximum	Weekly Avg	75 deg F	Daily	Continuous	Limit effective October beginning 2030

#### 3.2.3.1 Effluent Temperature Monitoring

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. In either case, report the maximum temperature



measured during the day on the DMR. For seasonal discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

### 3.2.3.2 Effluent Temperature Limitations

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. Limits, which are effective after August 1, 2030, are summarized in the following table:

Weekly Average Limit (degrees Fahrenheit)	Month
66	March
61	April
69	May + November
79	June
88	July + August
77	September
75	October

### 3.2.3.3 Additives

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the 'Additives' subsection of the Standard Requirements.

### 3.2.3.4 Total Residual Chlorine

Monitoring for total residual chlorine is not required during a calendar month when water discharged via Outfall 012 is not treated with either chlorine in any form or any other halogen.

### 3.2.4 Sampling Point (Outfall) 013 - BM NCCW (pulping)

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
Chlorine, Total Residual	Daily Max	38 µg/L	Monthly	Grab	
Chlorine, Total Residual	Weekly Avg	17 µg/L	Monthly	Grab	
Chlorine, Total Residual	Monthly Avg	17 µg/L	Monthly	Grab	
Temperature Maximum	Daily Max	120 deg F	Daily	Continuous	
Temperature Maximum	Weekly Avg	62 deg F	Daily	Continuous	Limit effective February beginning 2031

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Temperature Maximum	Weekly Avg	66 deg F	Daily	Continuous	Limit effective March beginning 2031
Temperature Maximum	Weekly Avg	61 deg F	Daily	Continuous	Limit effective April beginning 2031
Temperature Maximum	Weekly Avg	69 deg F	Daily	Continuous	Limit effective May beginning 2031
Temperature Maximum	Weekly Avg	79 deg F	Daily	Continuous	Limit effective June beginning 2031
Temperature Maximum	Weekly Avg	88 deg F	Daily	Continuous	Limit effective July 2031 and August 2030
Temperature Maximum	Weekly Avg	77 deg F	Daily	Continuous	Limit effective September beginning 2030
Temperature Maximum	Weekly Avg	75 deg F	Daily	Continuous	Limit effective October beginning 2030

### 3.2.4.1 Effluent Temperature Monitoring

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. In either case, report the maximum temperature measured during the day on the DMR. For seasonal discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

### 3.2.4.2 Effluent Temperature Limitations

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. Limits effective starting August 1, 2030 are summarized in the following table:

<b>Weekly Average Limit (degrees Fahrenheit)</b>	<b>Month</b>
62	February
66	March
61	April
69	May
79	June
88	July + August
77	September
75	October

### 3.2.4.3 Additives

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the 'Additives' subsection of the Standard Requirements.

### 3.2.4.4 Total Residual Chlorine

Monitoring for total residual chlorine is not required during a calendar month when water discharged via Outfall 013 is not treated with either chlorine in any form or any other halogen.

### 3.2.5 Sampling Point (Outfall) 001 - WQC EFFLUENT

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD <sub>5</sub> , Total		mg/L	Daily	24-Hr Flow Prop Comp	Monitoring/reporting daily May through October
BOD <sub>5</sub> , Total		mg/L	5/Week	24-Hr Flow Prop Comp	Monitoring/reporting 5x/week November through April
BOD <sub>5</sub> , Total	Daily Max	19,522 lbs/day	Daily	Calculated	Monitoring/reporting daily May through October
BOD <sub>5</sub> , Total	Monthly Avg	10,032 lbs/day	Daily	Calculated	Monitoring/reporting daily May through October
BOD <sub>5</sub> , Total	Daily Max	19,522 lbs/day	5/Week	Calculated	Monitoring/reporting 5x/week November through April
BOD <sub>5</sub> , Total	Monthly Avg	10,032 lbs/day	5/Week	Calculated	Monitoring/reporting 5x/week November through April
Suspended Solids, Total		mg/L	5/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Daily Max	27,194 lbs/day	5/Week	Calculated	
Suspended Solids, Total	Monthly Avg	13,829 lbs/day	5/Week	Calculated	
Phosphorus, Total	Rolling 12 Month Avg	1.0 mg/L	Weekly	24-Hr Flow Prop Comp	
Phosphorus, Total	Monthly Avg	185 lbs/day	Weekly	Calculated	
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.

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
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.
Temperature Maximum	Daily Max	105 deg F	Daily	Continuous	Limit effective year-round
Temperature Maximum	Weekly Avg	86 deg F	Daily	Continuous	Limit effective May beginning 2031
Temperature Maximum	Weekly Avg	96 deg F	Daily	Continuous	Limit effective June beginning 2031
Temperature Maximum	Weekly Avg	100 deg F	Daily	Continuous	Limit effective July beginning 2031
Mercury, Total Recoverable		ng/L	Monthly	Grab	
PFOS		ng/L	Monthly	Grab	
PFOA		ng/L	Monthly	Grab	
WLA BOD <sub>5</sub> Value		lbs/day	Daily	Calculated	Monitoring/reporting daily May through October
WLA BOD <sub>5</sub> Adjusted Value		lbs/day	Daily	Calculated	Monitoring/reporting daily May through October
WLA BOD <sub>5</sub> Discharged	Daily Max - Variable	lbs/day	Daily	Calculated	Monitoring/reporting daily May through October
WLA Previous Day River Flow		cfs	Daily	Continuous	Monitoring/reporting daily May through October
WLA Previous Day River Temp		deg F	Daily	Continuous	Monitoring/reporting daily May through October
WLA 5 Day Sum of BOD <sub>5</sub> Discharged		lbs	Daily	Calculated	Monitoring/reporting daily May through October
WLA 5 Day Sum of WLA Values		lbs	Daily	Calculated	Monitoring/reporting daily May through October
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	
pH (Continuous)			Daily	Continuous	See "Continuous pH Monitoring" below for pH limits and allowed excursions

### 3.2.5.1 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.

### 3.2.5.2 Effluent Temperature Monitoring

For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13). 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.

### 3.2.5.3 Effluent Temperature Limitations

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 (effective after 04/01/2030) can be compared to the weekly averages of the reported daily maximum temperatures. Limits are summarized in the following table:

Weekly Average Limit (degrees Fahrenheit)	Month
86	May
96	June
100	July

### 3.2.5.4 Total Maximum Daily Load (TMDL) Limitations for Total Phosphorus

The Wisconsin River Basin TMDL for total phosphorus was approved by the U.S. Environmental Protection Agency on April 26, 2019. Additional Site-Specific Criteria (SSC) for Lakes Petenwell, Castle Rock, and Wisconsin and the related Waste Load Allocation (WLA) included in Appendix K of the TMDL report were adopted by rule in s. NR 102.06 (7), Wis. Adm. Code, on June 1, 2020, and approved by the U.S. Environmental Protection Agency on July 9, 2020. The permittee's approved SSC-based WLA is 32,220 lbs/year, and results in calculated phosphorus mass limit of **185 lbs/day, expressed as a monthly 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.

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.

### 3.2.5.5 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.

### 3.2.5.6 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.

### 3.2.5.7 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.

### 3.2.5.8 Additives

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the 'Additives' subsection of the Standard Requirements.

### 3.2.5.9 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Wisconsin River

**Instream Waste Concentration (IWC):** 18%

**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 are required during the following quarters:

- **Acute:** July – September 2025, October – December 2026, April – June 2027, January – March 2028, July – September 2029

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 **July through September 2030**.

**Chronic** tests are required during the following quarters:

- **Chronic:** July – September 2025, October – December 2026, April – June 2027, January – March 2028, July – September 2029

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 **July through September 2030**.

**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, 2<sup>nd</sup> 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 (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). 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 **5.6** 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).

### **3.2.5.10 Waste Load Allocation Requirements**

Each year during the months of May through October the total daily discharge of BOD<sub>5</sub> from Outfall 001 is limited to the more restrictive of 13,554 lbs/day (daily maximum) and the following wasteload allocated water quality related effluent limitations.

#### **Definitions:**

- Flow in the following wasteload allocation tables shall be defined as the daily average flow value derived from continuous river flow monitoring data for the Wisconsin River collected at the Biron Dam. If such flow data is unavailable for any day, the daily average flow value shall be derived from continuous river flow monitoring data for the Wisconsin River collected by the Wisconsin Valley Improvement Company for the Wisconsin Rapids Dam and Centralia Dam.

- Temperature in the following wasteload allocation tables shall be defined as the daily average temperature value derived from continuous river temperature monitoring data for the Wisconsin River collected at the Wisconsin Rapids Dam. If such temperature data are unavailable for any day, the daily average temperature value shall be derived from continuous river temperature monitoring data for the Wisconsin River collected at the Biron Dam. Daily average temperature values reported by the Wisconsin Valley Improvement Company for the Wisconsin Rapids Dam and Biron Dam locations are acceptable.
- Point source allocation values (pounds per day BOD<sub>5</sub>) in the following wasteload allocation tables 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 and temperature of the *previous* day.

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

- The sum of the actual daily discharges of BOD<sub>5</sub> for any 5-consecutive-day period shall not exceed the sum of the daily point source wasteload allocation values for the same 5-consecutive-day period.
- For any one-day period, the actual discharge of BOD<sub>5</sub> shall not exceed 120.5% of the point source wasteload allocation value for that day.

**Monitoring Requirements:** The same 24-hour period used for the collection of composite and continuous samples for river flow and temperature shall be used for effluent flow and BOD<sub>5</sub>. Presently, the Wisconsin Valley Improvement Company utilizes the 24-hour monitoring period ending at 7:00 a.m. for river flow and temperature.

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

- Daily river flow (cfs);
- Daily river temperature (°F);
- Daily point source wasteload allocation value (lbs BOD<sub>5</sub> per day);
- Daily adjusted point source wasteload allocation value (point source allocation value multiplied by 1.205) (lbs BOD<sub>5</sub> per day).
- Actual daily discharge value of BOD<sub>5</sub> (lbs BOD<sub>5</sub> per day);

**Point Source Wasteload Allocation Values:** Point source wasteload allocation values are provided in the following tables.

**3.2.5.10.1 Point Source Wasteload Allocated Values for May and June in Pounds per Day of BOD<sub>5</sub>**

Temperature (previous day average in °F)	Flow at Biron Dam (previous day average in cfs)									
	0 to 999	1000 to 1199	1200 to 1499	1500 to 1999	2000 to 2499	2500 to 2999	3000 to 3999	4000 to 4999	5000 to 5999	6000 or MORE
≥82	7077	8446	10895	15184	20746	26987	27935	54320	62473	62473
78 TO 81	7077	8801	11493	16259	22703	29761	30546	61519	62473	62473
74 TO 77	7077	9151	12137	17511	24812	32945	33847	62473	62473	62473
70 TO 73	7077	9775	13070	19007	27454	37249	38288	62473	62473	62473
66 TO 69	7316	11463	15331	22379	32640	44590	45686	62473	62473	62473
62 TO 65	8938	13988	18733	27677	40666	55952	57433	62473	62473	62473
58 TO 61	11377	17831	24052	35733	53204	62473	62473	62473	62473	62473
54 TO 57	15205	24021	32787	48368	62473	62473	62473	62473	62473	62473
50 TO 53	21390	34430	47521	62473	62473	62473	62473	62473	62473	62473



46 TO 49	32022	51972	62473	62473	62473	62473	62473	62473	62473	62473
42 TO 45	51354	62473	62473	62473	62473	62473	62473	62473	62473	62473
≤41	62473	62473	62473	62473	62473	62473	62473	62473	62473	62473

**3.2.5.10.2 Point Source Wasteload Allocated Values for July and August in Pounds per Day of BOD<sub>5</sub>**

Temperature (previous day average in °F)	Flow at Biron Dam (previous day average in cfs)									
	0 to 999	1000 to 1199	1200 to 1499	1500 to 1999	2000 to 2499	2500 to 2999	3000 to 3999	4000 to 4999	5000 to 5999	6000 or MORE
≥82	7077	7077	7077	8867	12705	17298	17846	38025	52545	60338
78 TO 81	7077	7077	7077	10373	15210	20939	21633	46842	62473	62473
74 TO 77	7077	7077	8071	12122	18074	25056	25720	57453	62473	62473
70 TO 73	7077	7077	9227	14114	21268	29715	30648	62473	62473	62473
66 TO 69	7077	8477	11711	17785	26774	37386	38435	62473	62473	62473
62 TO 65	7077	11103	15270	23205	34922	48915	50370	62473	62473	62473
≤61	9181	14997	20645	31495	47465	62473	62473	62473	62473	62473

**3.2.5.10.3 Point Source Wasteload Allocated Values for September and October in Pounds per Day of BOD<sub>5</sub>**

Temperature (previous day average in °F)	Flow at Biron Dam (previous day average in cfs)									
	0 to 999	1000 to 1199	1200 to 1499	1500 to 1999	2000 to 2499	2500 to 2999	3000 to 3999	4000 to 4999	5000 to 5999	6000 or MORE
≥82	7077	7077	7077	7077	7615	11083	11524	26409	37122	42826
78 TO 81	7077	7077	7077	7077	9612	13988	14474	33969	48226	55907
74 TO 77	7077	7077	7077	7275	11965	17506	18084	43865	60546	62473
70 TO 73	7077	7077	7077	9202	14987	21846	22455	54548	62473	62473
66 TO 69	7077	7077	7579	12629	20082	28944	29872	62473	62473	62473
62 TO 65	7077	7245	10763	17486	27499	39378	40403	62473	62473	62473
58 TO 61	7077	10586	15443	24802	38724	55324	56966	62473	62473	62473
54 TO 57	8832	15838	22865	36387	56713	62473	62473	62473	62473	62473
50 TO 53	13917	24564	35358	56236	62473	62473	62473	62473	62473	62473
46 TO 49	22581	39556	56743	62473	62473	62473	62473	62473	62473	62473
42 TO 45	38425	62473	62473	62473	62473	62473	62473	62473	62473	62473
≤41	62473	62473	62473	62473	62473	62473	62473	62473	62473	62473

**3.2.6 Sampling Point (Outfall) 003 - WQC AERATION BASIN 3 GW**

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Monthly	Estimated	

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	1.8 mg/L	Monthly	Grab	Limit effective June through September beginning August 1, 2028.
Copper, Total Recoverable		µg/L	Quarterly	Grab	
PFOS		ng/L	Monthly	Grab	
PFOA		ng/L	Monthly	Grab	
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	Grab	
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	Grab	

**3.2.6.1 Total Metals Analyses**

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

**3.2.6.2 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.

**3.2.6.3 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.

**3.2.6.4 Whole Effluent Toxicity (WET) Testing**

**Primary Control Water:** Wisconsin River

**Instream Waste Concentration (IWC):** 100%

**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, 75, 50, 25, 12.5% and any additional selected by the permittee.

**WET Testing Frequency:**

**Acute** tests are required during the following quarters:

- **Acute:** April – June 2027, July – September 2029

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 **July – September 2030**.

**Chronic** tests are required during the following quarters:

- **Chronic:** July – September 2025, October – December 2026, April – June 2027, January – March 2028, July – September 2029

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 **July through September 2030**.

**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, 2<sup>nd</sup> 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<sub>a</sub>) is greater than 1.0 for either species (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). The TU<sub>a</sub> 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<sub>c</sub>) is greater than 1.0 for either species. The TU<sub>c</sub> 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).

**3.2.7 Sampling Point (Outfall) 005 - WQC LF GW (areas 3, 4 and 5)**

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Monthly	Estimated	

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	1.8 mg/L	Monthly	Grab	Limit effective June through September beginning August 1, 2028.
Copper, Total Recoverable		µg/L	Quarterly	Grab	
Zinc, Total Recoverable	Daily Max	93 µg/L	Quarterly	Grab	
Zinc, Total Recoverable	Weekly Avg	93 µg/L	Quarterly	Grab	
Zinc, Total Recoverable	Daily Max	0.21 lbs/day	Quarterly	Calculated	
Zinc, Total Recoverable	Weekly Avg	0.17 lbs/day	Quarterly	Calculated	
Hardness, Total as CaCO <sub>3</sub>		mg/L	Quarterly	Grab	
PFOS		ng/L	Monthly	Grab	
PFOA		ng/L	Monthly	Grab	
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	Grab	
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	Grab	

### 3.2.7.1 Total Metals Analyses

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

### 3.2.7.2 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 be documented in the reports submitted as part of the PFOS/PFOA Minimization Plan Determination of Need schedule of the permit.

### 3.2.7.3 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.

### 3.2.7.4 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Mitigated Wetland

**Instream Waste Concentration (IWC):** 100%

**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, 75, 50, 25, 12.5% and any additional selected by the permittee.

#### **WET Testing Frequency:**

**Acute** tests are required during the following quarters:

- **Acute:** October – December 2026, April – June 2027, July – September 2029

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 **July through September 2030**.

**Chronic** tests are required during the following quarters:

- **Chronic:** July – September 2025, October – December 2026, April – June 2027, January – March 2028, July – September 2029

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 **July through September 2030**.

**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, 2<sup>nd</sup> 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 (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). 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 **1.0** 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).

### 3.2.8 Sampling Point (Outfall) 006 - PH: WQC LF GW (areas 6 and 7)

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Monthly	Estimated	PLACEHOLDER OUTFALL: MONITORING FOR ALL PARAMETERS NOT REQUIRED UNTIL ACTIVATION. DEPARTMENT APPROVAL TO ACTIVATE REQUIRED PRIOR TO COMMENCING DISCHARGE.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	1.8 mg/L	Monthly	Grab	Limit effective June through September beginning August 1, 2028.
Copper, Total Recoverable		µg/L	Quarterly	Grab	
PFOS		ng/L	Monthly	Grab	
PFOA		ng/L	Monthly	Grab	
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	Grab	
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	Grab	

#### 3.2.8.1 Outfall Activation

30 days prior to commencing discharge through Outfall 006, the permittee shall notify the department's compliance representative to activate this outfall. Upon activation, all monitoring and reporting requirements contained within s. 3.2.8 and ss. 3.2.8.1 – 3.2.8.5 are applicable. No public noticing of this outfall activation will be provided.

#### 3.2.8.2 Total Metals Analyses

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

#### 3.2.8.3 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 be documented in the reports submitted as part of the PFOS/PFOA Minimization Plan Determination of Need schedule of the permit.

### 3.2.8.4 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.

### 3.2.8.5 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Wisconsin River

**Instream Waste Concentration (IWC):** 100%

**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, 75, 50, 25, 12.5% and any additional selected by the permittee.

#### **WET Testing Frequency:**

**Acute** tests are required during the following quarters:

- **Acute:** April – June 2027, July – September 2029

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 **July through September 2030**.

**Chronic** tests are required during the following quarters:

- **Chronic:** July – September 2025, October – December 2026, April – June 2027, January – March 2028, July – September 2029

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 **July through September 2030**.

**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, 2<sup>nd</sup> 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<sub>a</sub>) is greater than **1.0** for either species (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). The TU<sub>a</sub> 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<sub>c</sub>) is greater than **1.0** for either species. The TU<sub>c</sub> 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).



## 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, WasteType/Sample Contents and Treatment Description (as applicable)
099	At Water Quality Center Sampling Point 099, wastewater treatment system sludge from the Water Quality Center shall be sampled prior to land application via Outfall 099.

### 4.2 Monitoring Requirements and Limitations

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

#### 4.2.1 Sampling Point (Outfall) 099 - WQC SLUDGE

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Quarterly	Grab Comp	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Grab Comp	
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total		Percent	Quarterly	Grab Comp	
Phosphorus, Total		Percent	Annual	Grab Comp	
Phosphorus, Water Extractable		% of Tot P	Annual	Grab Comp	
Potassium, Total Recoverable		Percent	Annual	Grab Comp	
pH Field		su	Annual	Grab	
Chloride		Percent	Annual	Grab Comp	
Fluoride		mg/kg	Once	Grab Comp	Sample once in 2027.
Aluminum Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Barium, Total Recoverable		mg/kg	Once	Grab Comp	Sample once in 2027.
Boron Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Cadmium Dry Wt		mg/kg	Annual	Grab Comp	
Calcium Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Copper Dry Wt		mg/kg	Annual	Grab Comp	
Iron Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Lead Dry Wt		mg/kg	Annual	Grab Comp	
Magnesium Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Manganese Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Molybdenum Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Nickel Dry Wt		mg/kg	Annual	Grab Comp	
Sodium Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
Strontium, Total Recoverable		mg/kg	Once	Grab Comp	Sample once in 2027.
Zinc Dry Wt		mg/kg	Annual	Grab Comp	
Dioxin, 2,3,7,8-TCDD TE		ng/kg	Annual	Calculated	
Dioxin, 2,3,7,8-TCDD Dry Wt		ng/kg	Annual	Grab Comp	
Furan, 2,3,7,8-TCDF Dry Wt		ng/kg	Annual	Grab Comp	
PCB Total Dry Wt		mg/kg	Once	Grab Comp	Sample once in 2027.
PFOA + PFOS		µg/kg	Annual	Calculated	
Priority Pollutant Scan			Once	Grab Comp	As specified in ch. NR 215.03 (1-6), Wis. Adm. Code (excluding asbestos). Use grab samples for mercury, cyanide and VOCs. U
PFAS Dry Wt			Annual	Grab Comp	Monitoring required regardless of whether sludge is landspread. Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.
Dioxins & Furans (all congeners)			Once	Grab Comp	As specified in ch. NR 106.115, Wis. Adm. Code.

#### 4.2.1.1 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

#### 4.2.1.2 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

#### 4.2.1.3 Dry Weight Basis

Report all monitoring results, except for total solids and pH, on a dry weight basis.

#### 4.2.1.4 Test Methods

For those parameters not listed in Table EM of ch. NR 219, Wis. Adm. Code, the permittee may use SW-846 methods as listed in Tables B, C, and D of ch. NR 219. The permittee may use EPA Method 7780 for strontium. The permittee may also use any other test method that is approved by the Department prior to use.

#### 4.2.1.5 Sludge Monitoring for PFAS

Sampling shall occur for perfluoroalkyl and polyfluoroalkyl compounds (PFAS) listed in the table below and as indicated in sampling point sections above. Monitoring shall occur at each sample point when sludge is generated regardless of the end use (i.e. land applied, hauled to another facility, landfilled).

<b>PERFLUOROALKYLCARBOXILIC Acids (PFCAs)</b>	
PFBA	Perfluorobutanoic acid
PFPeA	Perfluroropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluroroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA	Perfluorotridecanoic acid
PFTeDA	Perfluorotetradecanoic acid
<b>PERFLUOROALKYLSULFONIC Acids (PFSAs)</b>	
PFBS	Perfluorobutane sulfonic acid
PFPeS	Perfluroropentane sulfonic acid
PFHxS	Perfluorohexane sulfonic acid
PFHpS	Perfluoroheptane sulfonic acid
PFOS	Perfluorooctane sulfonic acid
PFNS	Perfluorononane sulfonic acid
PFDS	Perfluorodecane sulfonic acid
PFDoS	Perfluorododecane sulfonic acid
<b>TELOMER SULFONIC Acids</b>	
4:2 FTSA	4:2 fluorotelomersulfonic acid
6:2 FTSA	6:2 fluorotelomersulfonic acid
8:2 FTSA	8:2 fluorotelomersulfonic acid
<b>PERFLUOROCTANCESULFONAMIDES (FOSAs)</b>	
PFOSA	Perfluorooctane sulfonamide
N-MeFOSA	N-Methyl perfluorooctane sulfonamide
N-EtFOSA	N-Ethyl perfluorooctane sulfonamide
<b>PERFLUOROCTANCESULFONAMIDOACETIC Acids</b>	
N-MeFOSAA	N-Methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA	N-Ethyl perfluorooctane sulfonamidoacetic acid

NATIVE PERFLUOROOCETANESULFONAMIDOETHANOLS (FOSEs)	
N-MeFOSE	N-Methyl perfluorooctane sulfonamidoethanol
N-EtFOSE	N-Ethyl perfluorooctane sulfonamidoethanol
PERFLUOROALKYLETHERCARBOXYLIC Acids (PFECAs)	
HFPO-DA	Hexafluoropropylene oxide dimer acid
DONA	4,8-dioxa-3H-perfluorononanoic acid
CHLORO-PERFLUOROALKYLSULFONATE	
F-53B Major	9-chloroehexadecafluoro-3-oxanone-1-sulfonic acid
F-53B Minor	11-chloroelcosafuoro-3-oxaundecane-1-sulfonic acid

*Note: If WDNR Lab Certification removes a particular compound from the reporting list above and upon receiving written communication from the department, reporting for that compound is no longer required.*

#### 4.2.1.6 Sampling and Reporting Sludge Samples for PFAS

Representative sludge samples shall be collected at each sample point as listed. At minimum, liquid sludge storage/digesters should be thoroughly mixed prior to sampling. Cake sludge samples should consist of seven equal size discrete samples and be collected from different areas and depths then composited into one sample for laboratory analysis.

Note: If additional equipment is used for collecting sludge samples (i.e., shovels, compositing buckets, bottles, etc.), then a one-time equipment blank is recommended to be collected with the first sample. An equipment blank sample is collected by passing laboratory verified PFAS-free water over or through field sampling equipment before the collection of a representative sludge sample. The equipment blank result shall be reported on the annual Sludge Characteristics Form (3400-049) in the comment section when reporting PFAS concentrations in the sludge.

The permittee shall report each of the PFAS sludge monitoring results on the annual Sludge Characteristics and Monitoring Form (3400-049) as provided by the department. The permittee shall also report the summation of PFOS and PFOA on this same form. All results shall be reported in dry weight. The annual Sludge Characteristics and Monitoring Form (3400-049) are due January 31, of the year following the collection of the sludge samples.

The laboratory performing the analysis on any samples shall be certified for the applicable PFAS compounds in the solids matrix by the Wisconsin Laboratory Certification Program established under s. 299.11, Wis. Stats., and 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 solids, 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.

#### 4.2.1.7 PFAS Land Application Requirements

The department recommends the landspreading and/or land application of sludge be done in a manner consistent with the most recent version of the “Interim Strategy for Land Application of Biosolids and Industrial Sludges containing PFAS.”

#### 4.2.1.8 Grab Composite Sample Type

The permittee may use a composite of daily grab samples obtained over a period of one to thirty-days. Grab composite samples consisting of individual grab samples taken in a single day are acceptable. In determining how many days to take a grab composite sample, the permittee may also consider the required holding time for the

parameters being sampled. For example, if a parameter's lab test requires no more than 14 days from collection to extraction, then the grab composite should be less than 14 days.

### 4.3 Sludge Application Rate Limitations

The permittee shall comply with the following sludge application rate limitations. Additional land application rate limitations and reporting requirements are provided in the Standard Requirements section of this permit.

#### 4.3.1 Nitrogen Limitations

Total pounds of nitrogen land applied per acre per year shall be limited to the nitrogen needs of the cover crop minus any other nitrogen added to the land application site, including fertilizer or manure. Nitrogen applied may be calculated based on plant available nitrogen as long as the release of nitrogen from the organic material is credited to future years. Nitrogen applied may be based on information provided by the landowner or operator with respect to alternate sources of nitrogen. If plant available nitrogen is not taken into consideration, the total Kjeldahl nitrogen (TKN as N) applied to a site from all sources during a calendar year shall not exceed 165 pounds per acre per year, except when alternate numerical nitrogen loading limits are approved in writing.

#### 4.3.2 pH Limitation

The pH of the sludge and soil mixture shall be 6.5 s.u. or greater at the time that the sludge is applied. If the concentration of cadmium in the sludge is 2 mg/kg or less (dry weight basis), the pH of the sludge and soil mixture may be less than 6.5.

#### 4.3.3 Total Dioxin Equivalents Limitations

- Total dioxin equivalents (TDE) shall not exceed 1.2 ng/kg in the soil profile after application and incorporation of Water Quality Center sludge. The soil profile shall include the sludge plus underlying litter and soil to a depth of 15 centimeters below the litter-soil interface.
- Sludge may be applied on sites where livestock will graze only if resulting total dioxin equivalents do not exceed 0.5 ng/kg in the soil profile based on the previous 3-month average of sludge test results. The soil profile shall include the sludge plus underlying litter and soil to a depth of 2 centimeters below the litter soil interface if livestock graze on the site before the sludge is incorporated or 15 centimeters below the litter soil interface if livestock graze on the site after the sludge is incorporated.
- Total dioxin equivalents for sludge applied to agricultural sites and sites where livestock will graze, in soil and in the mix of sludge and soil shall be calculated as follows:

$$\text{TDE (ng/kg)} = 2,3,7,8\text{-TCDD TE (ng/kg)} = [2,3,7,8\text{-TCDD in ng/kg}] + 0.1 \times [2,3,7,8\text{-TCDF in ng/kg}]$$

Where: TDE = Total dioxin equivalents

[2,3,7,8-TCDD in ng/kg] = concentration of 2,3,7,8-TCDD in units of ng/kg dry weight basis.

[2,3,7,8-TCDF in ng/kg] = concentration of 2,3,7,8-TCDF in units of ng/kg dry weight basis.

#### 4.3.4 Dioxin Toxic Equivalence Alternative Limitations

If the cumulative TDE load predicted for an application site exceeds TDE limits specified above, the permittee shall not apply any more Water Quality Center sludge to the site unless the following alternative dioxin toxic equivalence limits are met.

- When the dioxin toxic equivalence (dioxin TEQ) of Water Quality Center sludge is less than 1.2 ng/kg, the permittee may apply the sludge to agricultural sites with greater than 1.2 ng/kg dioxin TEQ in the soil profile if the permittee demonstrates that application of the sludge lowers the dioxin TEQ in the soil profile.

- When the dioxin TEQ of the permittee’s sludge is less than 0.5 ng/kg, the permittee may apply sludge to sites where livestock will graze that exceed 0.5 ng/kg dioxin TEQ in the soil profile if the permittee demonstrates that application of the sludge lowers the dioxin TEQ in the soil profile.
- Dioxin TEQ for sludge and soil profile shall be calculated as follows:

Dioxin toxic equivalence or dioxin TEQ in ng/kg =  $\sum C_x \times TEF_x$

Where:

$C_x$  = Concentration of congener “x” in units of ng/kg. When a congener is not detected, a zero may be used in the above equation for the concentration of the congener.

$TEF_x$  = Toxicity equivalency factor for congener “x” as provided in the following table.

Dioxin Congener	TEF	Furan Congener	TEF
2,3,7,8-TCDD	1	2,3,7,8-TCDF	0.1
1,2,3,7,8-PeCDD	1	1,2,3,7,8-PeCDF	0.03
1,2,3,4,7,8-HxCDD	0.1	2,3,4,7,8-PeCDF	0.3
1,2,3,6,7,8-HxCDD	0.1	1,2,3,4,7,8- HxCDF	0.1
1,2,3,7,8,9-HxCDD	0.1	1,2,3,6,7,8- HxCDF	0.1
1,2,3,4,6,7,8-HpCDD	0.01	1,2,3,7,8,9- HxCDF	0.1
OCDD Dry Wt	0.0003	2,3,4,6,7,8- HxCDF	0.1
		1,2,3,4,6,7,8-HpCDF	0.01
		1,2,3,4,7,8,9- HpCDF	0.01
		OCDF	0.0003

#### 4.4 Soil Monitoring Requirements

- Prior to the application of Water Quality Center sludge on an agricultural site, the permittee shall predict the resulting cumulative load of total dioxin equivalents (TDE) at the site. As part of the prediction the permittee shall assume all total dioxin equivalents from previous applications of Water Quality Center sludge are still present in the soil profile unless soil from the application site has been tested for 2,3,7,8-TCDD and 2,3,7,8-TCDF. If the soil from the application site was tested for 2,3,7,8-TCDD and 2,3,7,8-TCDF prior to application of Water Quality Center sludge, the soil test results, and any Water Quality Center sludge applications subsequent to the soil test, must be used in the prediction of resulting of total dioxin equivalents cumulative loads.

If the predicted cumulative total dioxin equivalents load exceeds **0.8 ng/kg in the soil profile**, or **0.35 ng/kg in the soil profile for sites where livestock will graze**, the permittee shall either use another application site or, prior to application of Water Quality Center sludge, test the application site for the seventeen 2,3,7,8-substituted dioxin and furan congeners listed in 4.3.4 and use the soil test results to predict the cumulative total dioxin equivalents load that will result from application of the sludge.

If the cumulative load of total dioxin equivalents predicted for an application site exceeds total dioxin equivalents limits specified above in 4.3.3, the permittee shall not apply any more Water Quality Center sludge to the site unless the alternative dioxin toxic equivalence (TEQ) limits specified above in 4.3.4 are met.

- Even though the 17 congeners only have a once per permit term monitoring frequency, the permittee shall, at least once each calendar year that sludge is land applied, test one of its approved agricultural land application sites for the seventeen dioxin and furan congeners listed above.

#### 4.5 Application Site Restriction

- Sludge that contains greater than 10 ng/kg total dioxin equivalents (TDE) shall not be applied within the range of Prairie Chickens (*Tympanuchus cupido*), or any other threatened or endangered wildlife species, unless the sludge is incorporated into the soil within 21 days of application.
- Sludge shall not be applied within 1200 feet of a public water supply when the sludge contains detectable concentrations of either 2,3,7,8-TCDD or 2,3,7,8-TCDF.

#### 4.6 Reporting Requirements

The permittee shall comply with the following reporting requirements.

##### 4.6.1 Daily Log

<b>Daily Log – Monitoring Requirements and Limitations</b>				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department.				
Parameters	Limit	Units	Sample Frequency	Sample Type
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Application Rate	-	Tons/Acre/Day	Daily	Calculated

##### 4.6.2 Annual Report

<b>Annual Report – Summary of Monitoring Requirements and Limitations</b>				
The Annual Report is due by January 31 <sup>st</sup> of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Amount Per Site	-	Tons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

#### **4.6.3 Total Dioxin Equivalents Loadings Reporting**

By **February 28th of each year**, the permittee shall report cumulative total dioxin equivalents loadings in the soil profile for each land application site that received Water Quality Center sludge during the previous year (ng TDE per kg soil or ppt on a dry weight basis). When soil monitoring results are available, the permittee shall use the results in the calculation of cumulative TDE loadings or in place of a calculated loading if the soil testing was performed after sludge applied.

#### **4.6.4 Soil Monitoring Results Reporting**

The results of annual soil testing for the seventeen 2,3,7,8-substituted dioxin and furan congeners as required above shall be reported by February 28th of the following year beginning February 28, 2026.



## 5 Schedules

### 5.1 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
<b>Land Application Management Plan:</b> Submit a management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	11/30/2025

### 5.2 Total Dioxin Equivalents Loadings Report

By February 28th of each year, the permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during the previous calendar year.

Required Action	Due Date
<b>Annual Total Dioxin Equivalents Loading Report:</b> The permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during 2025. If no land application occurred, then this report is not required.	02/28/2026
<b>Annual Total Dioxin Equivalents Loading Report:</b> The permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during 2026. If no land application occurred, then this report is not required.	02/28/2027
<b>Annual Total Dioxin Equivalents Loading Report:</b> The permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during 2027. If no land application occurred, then this report is not required.	02/28/2028
<b>Annual Total Dioxin Equivalents Loading Report:</b> The permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during 2028. If no land application occurred, then this report is not required.	02/28/2029
<b>Annual Total Dioxin Equivalents Loading Report:</b> The permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during 2029. If no land application occurred, then this report is not required.	02/28/2030
<b>Ongoing Annual Total Dioxin Equivalents Loading Reports:</b> In the event that this permit is not reissued by the expiration date and is administratively continued, the permittee shall report the cumulative loading of total dioxin equivalents for each site that received sludge during the previous year by February 28th of the following year. If no land application occurred, then this report is not required.	

### 5.3 Cooling Water Intake Structures - General

Required Action	Due Date
<b>Annual Certification Statement:</b> The permittee shall submit an Annual Certification on the intake structure, as required by s. 1.3.3.1 of this WPDES permit.	01/31/2026
<b>Annual Certification Statement:</b> The permittee shall submit an Annual Certification on the intake structure, as required by s. 1.3.3.1 of this WPDES permit.	01/31/2027

<b>Annual Certification Statement:</b> The permittee shall submit an Annual Certification on the intake structure, as required by s. 1.3.3.1 of this WPDES permit.	01/31/2028
<b>Annual Certification Statement:</b> The permittee shall submit an Annual Certification on the intake structure, as required by s. 1.3.3.1 of this WPDES permit.	01/31/2029
<b>CWIS Application Materials Due:</b> Unless an exemption has been authorized, the permittee shall submit the application materials required in s. NR 111.40(2)(c), Wis. Adm. Code by the Due Date.	12/01/2029
<b>Annual Certification Statement:</b> The permittee shall submit an Annual Certification on the intake structure, as required by s. 1.3.3.1 of this WPDES permit.	01/31/2030
<b>Ongoing Annual Certification Statements:</b> In the event this permit is not reissued by the expiration date and is administratively continued, the permittee shall continue to submit annual certification statements by January 31st of each year.	

### 5.4 Cooling Water Intake Structures - Upgrades (Intakes 701, 702, 703, 704, and 705)

Required Action	Due Date
<b>Report on Intake Structure:</b> Submit a report on the location, design, operation and capacity of the existing intake structure.	07/31/2026
<b>Action Plan:</b> Submit a plan describing actions needed to achieve BTA (Best Technology Available) requirements.	07/31/2027
<b>Status Update:</b> The permittee shall submit a report documenting the status of compliance with federal and state BTA requirements.	07/31/2028
<b>Complete Actions:</b> Complete actions necessary to achieve compliance with the BTA requirements.	07/31/2029

### 5.5 PFOS/PFOA Minimization Plan Determination of Need

Required Action	Due Date
<p><b>Report on Effluent Discharge:</b> 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.</p> <p>This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results.</p>	07/31/2026
<p><b>Report on Effluent Discharge and Evaluation of Need:</b> 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.</p> <p>This report shall include all additional PFOS and PFOA data that may be collected including any influent, intake, in-plant, collection system sampling, and blank sample results.</p>	07/31/2027

<p>The permittee shall also submit a request to the department to evaluate the need for a PFOS/PFOA minimization plan.</p> <p>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.</p> <p>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.</p>	
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### 5.6 Ammonia Limits Compliance (Outfalls 003, 005, and 006)

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

Required Action	Due Date
<b>Preliminary Compliance Report:</b> Submit a preliminary compliance report indicating alternatives to achieving the final ammonia limits.	07/31/2026
<b>Action Plan:</b> Submit an action plan on how compliance will be achieved for the ammonia effluent limit by the Due Date.	07/31/2027
<b>Initiate Actions:</b> The permittee shall initiate actions necessary to achieve compliance with the 1.8 mg/L ammonia limits by the Due Date	01/31/2028
<b>Complete Actions:</b> The permittee shall complete actions necessary to come into compliance with the 1.8 mg/L monthly average ammonia limits for Outfalls 003, 005, and 006.	07/31/2028

### 5.7 Temperature Limits Compliance (Outfalls 001, 011, 012, 013 and 018)

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

Required Action	Due Date
<b>Preliminary Compliance Report:</b> Submit a preliminary compliance report indicating alternatives to achieve the final temperature limits. Informational Note: Refer to NR 106 Subchapters V & VI or NR 102.26, Wis. Adm. Code, for information regarding the re-evaluation of limits.	07/31/2026
<b>Action Plan:</b> Submit an action plan for complying with all applicable effluent temperature limits.	07/31/2027
<b>Construction Plans:</b> Submit construction plans (if construction is required for complying with effluent temperature limits) and include plans and specifications with the submittal. If construction is not required for complying with effluent temperature limits, provide an update on the progress which is being made towards compliance.	07/31/2028
<b>Initiate Actions:</b> Initiate actions identified in the plan.	07/31/2029
<b>Complete Actions:</b> Complete actions necessary to achieve compliance with effluent temperature limits.	07/31/2030

### 5.8 Permit Application Submittal

The permittee shall file an application for permit reissuance in accordance with NR 200, Wis. Adm. Code.

<b>Required Action</b>	<b>Due Date</b>
<b>Permit Application Submittal:</b> Submit a complete permit application to the Department no later than 180 days prior to permit expiration.	12/01/2029

## 6 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).

### 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 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 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.

#### **6.1.4 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 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.

#### **6.1.5 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.

#### **6.1.6 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.

#### **6.1.7 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.

### **6.2 System Operating Requirements**

### 6.2.1 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.**

### 6.2.2 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.

### 6.2.3 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.

#### **6.2.4 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.

#### **6.2.5 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.

#### **6.2.6 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).

#### **6.2.7 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.

#### **6.2.8 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.



### **6.2.9 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.

## **6.3 Land Application Requirements**

### **6.3.1 General Sludge Management Information**

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

### **6.3.2 Land Application Characteristic Report**

The analytical results from testing of liquid wastes, by-product solids and sludges that are land applied shall be reported annually on the Characteristic Report Form 3400 49. The report form shall be submitted electronically no later than the date indicated on the form. 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 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.

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 sludge results shall be reported on a dry weight basis.

### **6.3.3 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 as follows.

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 the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection 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. Note: It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187, and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, 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 congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003 mg/kg as possible for each congener. If the aforementioned limits of detection 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. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C – Florisil	3611B – Alumina
3640A - Gel Permeation	3660B - Sulfur Clean Up (using copper shot instead of powder)
3630C - Silica Gel	3665A - Sulfuric Acid Clean Up

### **6.3.4 Annual Land Application Report**

The annual totals for the land application loadings of liquid wastes, by-product solids and sludges to field spreading sites shall be submitted electronically on the Annual Land Application Report Form 3400-55 by January 31, each year whether or not waste is land applied. 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 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.

### **6.3.5 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 waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the ‘eReport Certify’ page by a responsible executive 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.

### **6.3.6 Land Application Site Approval**

The permittee is authorized to landspread permitted liquid wastes, by-product solids and sludges on sites approved in writing by the Department in accordance with ss. NR 214.17(2) and 214.18(2), Wis. Adm. Code. Any site use restrictions or granting of case-by-case exceptions shall be identified in the approval letter. If the permittee wishes to have approval for additional sites, application shall be made using Land Application Site Request Form 3400-053. Complete information shall be submitted about each site, including location maps and soil maps, any soil analyses results and other information showing that the site complies with all application requirements and permit conditions. Spreading on a site may commence upon receipt of Department approval. If an existing spreading site is found by the Department to be environmentally unacceptable, a written notice will be issued to withdraw approval of that site.

### **6.3.7 Operating Requirements/Management Plan**

All land application sites used for treatment of liquid wastes, by-product solids and sludges shall be operated in accordance with a Department approved management plan. The management plan shall be consistent with the requirements of this permit, ss. NR 214.17 (3) and (6), and NR 214.18 (3) and (6), Wis. Adm. Code. If operational changes are needed, the land application management plan shall be amended by submitting a written request to the Department for approval. A land application management plan shall be submitted for approval at least 60 days prior to land application.

### **6.3.8 Chloride Requirements for Liquid Wastes and By-Product Solids**

The total pounds of chloride applied shall be limited to 340 pounds per acre per 2 year period. Calculate the chloride loading as follows:

$$\text{Wet Weight Solids: } \frac{\text{lbs of solids} \times \% \text{solids} \times \% \text{chloride}}{\text{acres land applied} \times 100 \times 100} = \text{lbs chloride/acre}$$

$$\text{Liquid: } \frac{\text{mg/L chloride} \times (\text{millions of gallons}) \times 8.34}{\text{acres land applied}} = \text{lbs chloride/acre}$$

### 6.3.9 Nitrogen Requirements for Liquid Wastes and By-Product Solids and Sludges

NR 214.17(4) and NR 214.18(4) Wis. Adm. Code specify that the total pounds of nitrogen land applied per acre per year shall be limited to the nitrogen needs of the cover crop minus any other nitrogen added to the land application site, including fertilizer or manure. Nitrogen applied can be calculated on the basis of plant available nitrogen, as long as the release of nitrogen from the organic material is credited to future years. This permit requires that the Total Kjeldahl Nitrogen calendar year application amount shall not exceed 165 pounds per acre per year, except when alternate numerical nitrogen loading limits (consistent with the above sections of NR 214) are approved in writing via the Department's land application management plan approval. Calculate nitrogen loading as follows ("TKN" represents "Total Kjeldahl Nitrogen"):

$$\text{Wet Weight Solids and Sludges: } \frac{\text{lbs of solids} \times \% \text{solids} \times \% \text{TKN}}{\text{acres land applied} \times 100 \times 100} = \text{lbs TKN/acre}$$

$$\text{Liquid: } \frac{\text{mg/L TKN} \times (\text{millions of gallons}) \times 8.34}{\text{acres land applied}} = \text{lbs TKN/acre}$$

### 6.3.10 Ponding

The volume of liquid wastes land applied shall be limited to prevent ponding, except for temporary conditions following rainfall events. If ponding occurs all land application shall cease immediately. The permittee shall land apply only the liquid wastes that are permitted.

### 6.3.11 Runoff

The volume of liquid wastes land applied shall be limited to prevent runoff. If runoff occurs all land application shall cease immediately. The permittee shall land apply only the liquid wastes that are permitted.

### 6.3.12 Soil Incorporation Requirements

- **Liquid Sludge Requirements:** The Department may require that liquid sludge be incorporated into the soil on specific land application sites when necessary to prevent surface runoff or objectionable odors. Requirements and procedures for incorporation of liquid sludge, when such incorporation may be necessary, shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- **Cake Sludge Requirements:** After land application, cake sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- **Liquid Wastewater Requirements:** The Department may require that liquid wastewater be incorporated or injected into the soil on specific land application sites when necessary to prevent surface runoff or objectionable odors. Requirements and procedures for injection or incorporation of liquid wastewater, when such injection or incorporation is necessary, shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the

Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

- **By-Product Solids Requirements:** The Department may limit the volume of by-products solids that are landspread on a specific site when necessary to prevent surface runoff or leaching of contaminants to groundwater and objectionable odors. By-product solids shall, after application, be plowed, disced, or otherwise incorporated into the soil. Requirements and procedures for the incorporation of byproduct solids into the soil shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

### **6.3.13 Field Stockpiles**

The permittee is encouraged to landspread the by-product solids or sludges as they are transported to the fields; but if it becomes necessary to stockpile solids in the fields, the stockpiles shall be spread within 72 hours or as specified in the approved management plan.

### **6.3.14 Additional Requirements from ch. NR 214, Wis. Adm. Code**

The requirements of s. NR 214.17 (4)(c) [pathogen prohibition for human consumption crop fields], (4)(d)1 [no adverse soil effects], (4)(d)10 [allowable whey spreading rates], and (4)(e)1-3 [by-product solids spreading within agricultural practices and not cause contamination] for landspreading of liquid wastes and by product solids and s. NR 214.18 (4)(b),(d)-(h) [application, nutrient, pH, metals, and PCB limitations] for sludge spreading systems are included by reference in this permit. The permittee shall comply with these requirements.

## 7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Application Management Plan -Land Application Management Plan	November 30, 2025	38
Total Dioxin Equivalents Loadings Report -Annual Total Dioxin Equivalents Loading Report	February 28, 2026	38
Total Dioxin Equivalents Loadings Report -Annual Total Dioxin Equivalents Loading Report	February 28, 2027	38
Total Dioxin Equivalents Loadings Report -Annual Total Dioxin Equivalents Loading Report	February 28, 2028	38
Total Dioxin Equivalents Loadings Report -Annual Total Dioxin Equivalents Loading Report	February 28, 2029	38
Total Dioxin Equivalents Loadings Report -Annual Total Dioxin Equivalents Loading Report	February 28, 2030	38
Total Dioxin Equivalents Loadings Report -Ongoing Annual Total Dioxin Equivalents Loading Reports	See Permit	38
Cooling Water Intake Structures - General -Annual Certification Statement	January 31, 2026	38
Cooling Water Intake Structures - General -Annual Certification Statement	January 31, 2027	38
Cooling Water Intake Structures - General -Annual Certification Statement	January 31, 2028	39
Cooling Water Intake Structures - General -Annual Certification Statement	January 31, 2029	39
Cooling Water Intake Structures - General -CWIS Application Materials Due	December 1, 2029	39
Cooling Water Intake Structures - General -Annual Certification Statement	January 31, 2030	39
Cooling Water Intake Structures - General -Ongoing Annual Certification Statements	See Permit	39
Cooling Water Intake Structures - Upgrades (Intakes 701, 702, 703, 704, and 705) -Report on Intake Structure	July 31, 2026	39
Cooling Water Intake Structures - Upgrades (Intakes 701, 702, 703, 704, and 705) -Action Plan	July 31, 2027	39
Cooling Water Intake Structures - Upgrades (Intakes 701, 702, 703, 704, and 705) -Status Update	July 31, 2028	39
Cooling Water Intake Structures - Upgrades (Intakes 701, 702, 703, 704, and 705) -Complete Actions	July 31, 2029	39
PFOS/PFOA Minimization Plan Determination of Need -Report on Effluent Discharge	July 31, 2026	39
PFOS/PFOA Minimization Plan Determination of Need -Report on Effluent Discharge and Evaluation of Need	July 31, 2027	39
Ammonia Limits Compliance (Outfalls 003, 005, and 006) -Preliminary Compliance Report	July 31, 2026	40

Ammonia Limits Compliance (Outfalls 003, 005, and 006) -Action Plan	July 31, 2027	40
Ammonia Limits Compliance (Outfalls 003, 005, and 006) -Initiate Actions	January 31, 2028	40
Ammonia Limits Compliance (Outfalls 003, 005, and 006) -Complete Actions	July 31, 2028	40
Temperature Limits Compliance (Outfalls 001, 011, 012, 013 and 018) - Preliminary Compliance Report	July 31, 2026	40
Temperature Limits Compliance (Outfalls 001, 011, 012, 013 and 018) - Action Plan	July 31, 2027	40
Temperature Limits Compliance (Outfalls 001, 011, 012, 013 and 018) - Construction Plans	July 31, 2028	40
Temperature Limits Compliance (Outfalls 001, 011, 012, 013 and 018) - Initiate Actions	July 31, 2029	40
Temperature Limits Compliance (Outfalls 001, 011, 012, 013 and 018) - Complete Actions	July 31, 2030	40
Permit Application Submittal -Permit Application Submittal	December 1, 2029	41
General Sludge Management Form 3400-48	prior to any significant sludge management changes	46
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	47
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit	47
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	42

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:

West Central Region, 1300 W. Clairemont Ave, Eau Claire, WI 54701