



WPDES PERMIT

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

BNSF Railway Company

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

1835 N 42nd STREET

to

**AN UNNAMED TRIBUTARY TO THE NEMADJI RIVER AND THE NEMADJI RIVER, WITHIN THE ST.
LOUIS AND LOWER NEMADJI WATERSHED IN THE LAKE SUPERIOR DRAINAGE BASIN,
DOUGLAS COUNTY**

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

Michelle BalkLudwig
Wastewater Field Supervisor

Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - October 01, 2026

EXPIRATION DATE - September 30, 2031

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1 In-Plant Requirements

1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
101	Representative grab samples of treated petroleum contact water shall be collected during the discharge season from the manhole located after the concrete storage lagoon prior to discharge to the collection basin.

1.2 Monitoring Requirements and Limitations

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

1.2.1 Sampling Point 101 - OIL/WATER SEPARATOR WATER

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Weekly	Estimated	
Oil & Grease (Hexane)	Daily Max	15 mg/L	Monthly	Grab	
Suspended Solids, Total	Daily Max	40 mg/L	Monthly	Grab	
BETX, Total		µg/L	Annual	Grab	
PAHs		µg/L	Annual	Grab	

1.2.1.1 Inspection of Oil and Water Separator

The oil and water separator shall be inspected at least quarterly for proper operation and records kept on site of the inspection dates, findings, and maintenance performed. Accumulated solids and oil and grease shall be removed periodically to maintain the efficiency of the separator. The water discharge side of the separator shall be kept clean and free of oil sheen or scum.

1.2.1.2 Recovered Waste Oil

The permittee shall document the volume of waste oil recovered, the date of oil removal, who removed it, and the ultimate fate of the waste oil. These records shall be kept on site.

1.2.1.3 Total BETX

Total BETX shall include a summation of the following individual compounds: benzene, ethylbenzene, toluene and total xylenes (including ortho-, meta-, and para-xylene). The following U.S. EPA test methods (602, 624, 8020, 8021, or 8024) shall be used unless an alternate, equivalent method is approved by a letter from the Department. The level of detection for the analysis must be less than 750 µg/L.

1.2.1.4 PAH

Polynuclear aromatic hydrocarbons (PAH) shall include a summation of the following individual compounds: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene,

dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene. The following U.S. EPA test methods (610 or 8310(HPLC)) shall be used unless an alternate, equivalent method is approved by a letter from the Department. The level of detection for the analysis must be less than 0.1 µg/L

2 Surface Water Requirements

2.1 Sampling Point(s)

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

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
001	The discharges to Outfall 001 are limited to the combination of treated petroleum contact water from the oil/water separator with stormwater contaminated by taconite bulk storage piles and associated material handling equipment and activities within the catchment area of the treatment pond. Grab samples shall be taken from manhole 001 located on 39th Avenue East.
003	The discharges to Outfall 003 are limited to the combination of treated petroleum contact water from the oil/water separator with stormwater contaminated by taconite bulk storage piles and associated material handling equipment and activities within the catchment area of the treatment pond. Grab samples shall be taken from the location approved as part of the plan and specification review and approval for the proposed relocation of the outfall to the Nemadji River.

2.2 Monitoring Requirements and Effluent Limitations

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

2.2.1 Sampling Point (Outfall) 001 - COMINGLED DISCHARGE -TRIBUTARY

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Weekly	Estimated	
Suspended Solids, Total	Monthly Avg	20 mg/L	Monthly	Grab	
Suspended Solids, Total	Weekly Avg	30 mg/L	Monthly	Grab	
pH Field	Daily Max	9.0 su	Monthly	Grab	
pH Field	Daily Min	6.0 su	Monthly	Grab	
Phosphorus, Total	Monthly Avg	0.225 mg/L	Monthly	Grab	The interim limit expires 9/30/2030 - See permit section Phosphorus Water Quality-Based Effluent Limitation(s) for more information.
Phosphorus, Total	6-Month Avg	0.075 mg/L	Monthly	Grab	The limit becomes effective 10/1/2030 - See permit section Phosphorus Water Quality-Based Effluent Limitation(s) for more information. Compliance is evaluated every six-months on April 30 and October 31.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Phosphorus, Total	6-Month Avg	0.7 lbs/day	Monthly	Calculated	The limit becomes effective 10/1/2030 - See permit section Phosphorus Water Quality-Based Effluent Limitation(s) for more information. Compliance is evaluated every six-months on April 30 and October 31.
Arsenic, Total Recoverable	Monthly Avg	13 µg/L	Monthly	Grab	The limit becomes effective 10/1/2030. See the permit schedule Copper and Arsenic Pollutant Minimization Program for more information.
Copper, Total Recoverable	Weekly Avg	14 µg/L	Monthly	Grab	The limit becomes effective 10/1/2030. See the permit schedule Copper and Arsenic Pollutant Minimization Program for more information.
Hardness, Total as CaCO ₃		mg/L	Monthly	Grab	Monitoring shall coincide with metals monitoring.
Cadmium, Total Recoverable		µg/L	Monthly	Grab	Monitoring is required during the 2029 discharge season.
Chlorine, Total Residual		µg/L	Monthly	Grab	Monitoring is required during the 2029 discharge season.
Acute WET		TU _a	Annual	Grab	Monitoring is required in 2027 and 2029. See the Whole Effluent Toxicity (WET) testing permit section for more information.
Chronic WET		TU _c	Annual	Grab	Annual monitoring through the permit term is required. See the Whole Effluent Toxicity (WET) testing permit section for more information.

2.2.1.1 Potential Outfall Change

The permittee may change the outfall location from the unnamed tributary to the Nemadji River to a direct discharge to the Nemadji River. The permittee shall notify the department when effluent discharge to Outfall 003 begins, and Outfall 001 is taken offline.

2.2.1.2 pH – Grab Sample Analyses

When pH Field limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform pH testing required in this permit using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall utilize a pH probe/meter that incorporates and uses automatic temperature compensation,
- The permittee shall analyze pH samples as soon as possible after collection not to exceed 15 minutes (this may mean transporting samples to an offsite laboratory is not an option), and
- The permittee shall calibrate the pH probe/meter daily, using unexpired 4, 7, and 10 buffers prior to use.

2.2.1.3 Total Residual Chlorine – Grab Sample Analyses

When total residual chlorine (TRC) limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform TRC testing using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall collect samples in a glass bottle and completely fill the bottle with sample so there is no visual headspace,
- The permittee shall analyze TRC samples as soon as possible after collection, not to exceed 15 minutes (this may mean transporting to an offsite laboratory is not an option),
- The permittee shall verify their detection limit at least annually, and
- The permittee shall follow all TRC requirements in their permit.

2.2.1.4 Phosphorus Water Quality-Based Effluent Limitation(s)

The final water quality based effluent limit (WQBEL) for phosphorus is 0.075 mg/L and 0.7 lbs/day as a 6-month average and will take effect on the dated specified in the Compliance Schedule unless:

- (A) As part of the application for the next reissuance, or prior to filing the application, the permittee submits either:
- 1.) A watershed adaptive management plan and a completed Watershed Adaptive Management Request Form 3200-139; or
 - 2.) An application for water quality trading; or
 - 3.) An application for a variance; or
 - 4.) New information or additional data that supports a recalculation of the numeric limitation; and
- (B) The Department modifies, revokes and reissues, or reissues the permit to incorporate a revised limitation before the effective date of the phosphorus WQBEL.

If Adaptive Management or Water Quality Trading is approved as part of the permit application for the next reissuance or as part of an application for a modification or revocation and reissuance, the plan and specifications submittal, construction, and final effective dates for compliance with the total phosphorus WQBEL may change in the reissued or modified permit. In addition, the numeric value of the WQBEL may change based on new information (e.g. a TMDL) or additional data. If a variance is approved for the next reissuance, interim limits and conditions will be imposed in the reissued permit in accordance with ss. 283.15 or 283.16, Stats., and applicable regulations. A permittee may apply for a variance to the phosphorus WQBEL at the next reissuance even if the permittee did not apply for a phosphorus variance as part of this permit reissuance.

Any increase in the limit is subject to s. NR 102.05(1) and ch. NR 207, Wis. Adm. Code. When a six-month average effluent limit is specified for Total Phosphorus the applicable averaging periods are May through October and November through April.

2.2.1.5 Alternative Approaches to Phosphorus WQBEL Compliance

Rather than upgrading its wastewater treatment facility to comply with WQBELs for total phosphorus, the permittee may use Water Quality Trading or the Watershed Adaptive Management Option, to achieve compliance under ch. NR 217, Wis. Adm. Code, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. The permittee may also implement an upgrade to its wastewater treatment facility in combination with Water Quality Trading or the Watershed Adaptive Management Option to achieve compliance, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. If the Final Compliance Alternatives Plan concludes that a variance will be pursued, the Plan shall provide information regarding the basis for the variance.

2.2.1.6 Submittal of Permit Application for Next Reissuance and Adaptive Management or Pollutant Trading Plan or Variance Application

The permittee shall submit the permit application for the next reissuance at least 6 months prior to expiration of this permit. If the permittee intends to pursue adaptive management to achieve compliance with the phosphorus water quality based effluent limitation, the permittee shall submit with the application for the next reissuance: a completed Watershed Adaptive Management Request Form 3200-139, the completed Adaptive Management Plan and final plans for any system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code. If the permittee intends to pursue pollutant trading to achieve compliance, the permittee shall submit an application for water quality trading with the application for the next reissuance. If system upgrades will be used in combination with pollutant trading to achieve compliance with the final water quality-based limit, the reissued permit will specify a schedule for the necessary upgrades. If the permittee intends to seek a variance, the permittee shall submit an application for a variance with the application for the next reissuance.

2.2.1.7 Whole Effluent Toxicity (WET) Testing

Primary Control Water for Acute Tests: A synthetic (standard) laboratory water may be used as the dilution water and primary control.

Primary Control Water for Chronic Tests: Unnamed Tributary to the Nemadji River upstream of the confluence with Outfall 001. If flow is not present in the tributary, then dilution water may be collected from the Nemadji River upstream of the confluence with the tributary.

Instream Waste Concentration (IWC): 100%

Acute Mixing Zone Concentration: N/A

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

- **Acute:** 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- **Chronic:** 100, 75, 50, 25, 12.5% and any additional selected by the permittee.

WET Testing Frequency:

Acute tests are required twice during the permit term:

- 2027
- 2029

Chronic tests are required each year of the permit term ideally during different months.

Annual Chronic WET testing shall continue after the permit expiration date (until the permit is reissued).

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

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

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than **1.0** for either species (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).

2.2.2 Sampling Point (Outfall) 003 - COMBINED DISCHARGE - NEMADJI RIVER

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Weekly	Estimated	
Suspended Solids, Total	Monthly Avg	20 mg/L	Monthly	Grab	
Suspended Solids, Total	Weekly Avg	30 mg/L	Monthly	Grab	
pH Field	Daily Max	9.0 su	Monthly	Grab	
pH Field	Daily Min	6.0 su	Monthly	Grab	
Phosphorus, Total		mg/L	Monthly	Grab	
Chlorine, Total Residual		mg/L	Monthly	Grab	Monitoring is required during Outfall 003's first discharge season.
Acute WET		TU_a	Annual	Grab	Tests are required during Outfall 003's first two discharge seasons. See the Whole Effluent Toxicity (WET) testing permit section for more information.
Chronic WET		TU_c	Annual	Grab	Tests are required during Outfall 003's first two discharge seasons. See the Whole Effluent Toxicity (WET) testing permit section for more information.

2.2.2.1 Potential Outfall Change

The permittee may change the outfall location from the unnamed tributary to the Nemadji River to a direct discharge to the Nemadji River. The permittee shall notify the department when effluent discharge to Outfall 003 begins and Outfall 001 is taken offline.

2.2.2.2 pH – Grab Sample Analyses

When pH Field limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform pH testing required in this permit using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall utilize a pH probe/meter that incorporates and uses automatic temperature compensation,
- The permittee shall analyze pH samples as soon as possible after collection not to exceed 15 minutes (this may mean transporting samples to an offsite laboratory is not an option), and
- The permittee shall calibrate the pH probe/meter daily, using unexpired 4, 7, and 10 buffers prior to use.

2.2.2.3 Total Residual Chlorine – Grab Sample Analyses

When total residual chlorine (TRC) limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform TRC testing using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall collect samples in a glass bottle and completely fill the bottle with sample so there is no visual headspace,
- The permittee shall analyze TRC samples as soon as possible after collection, not to exceed 15 minutes (this may mean transporting to an offsite laboratory is not an option),
- The permittee shall verify their detection limit at least annually, and
- The permittee shall follow all TRC requirements in their permit.

2.2.2.4 Whole Effluent Toxicity (WET) Testing

Primary Control Water for Acute Tests: A synthetic (standard) laboratory water may be used as the dilution water and primary control.

Primary Control Water for Chronic Tests: Nemadji River

Instream Waste Concentration (IWC): 18%

Acute Mixing Zone Concentration: N/A

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

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

WET Testing Frequency:

Acute and **Chronic** tests are required during the first two years of discharge via Outfall 003.

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

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

Determination of Positive Results: An acute toxicity test shall be considered positive if the Toxic Unit - Acute (TU_a) is greater than **1.0** for either species (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 Tier 1 Industrial Storm Water Requirements

3.1 Exclusions

These requirements are not applicable to discharges of contaminated stormwater to a municipal combined sewer system or non-storm water discharges covered under other sections of this WPDES permit.

3.2 Water Quality Standards

3.2.1 Outstanding and Exceptional Resource Waters

The permittee may not establish a new storm water discharge of pollutants to an ORW or an ERW unless the storm water pollution prevention plan is designed to prevent the discharge of pollutants to any ORW or ERW in excess of background levels within the water body.

- If the permittee has an existing storm water discharge to an ERW, it may not increase the discharge of pollutants if the increased discharge would result in a violation of water quality standards.
- If the permittee has an existing storm water discharge to an ORW, it may increase the discharge of pollutants provided all of the following are met:
 - The pollutant concentration within the receiving water and under the influence of the existing discharge would not increase as compared to the level that existed prior to coverage under this permit.
 - The increased discharge would not result in a violation of any water quality standard.

3.2.2 Impaired Water Bodies and Total Maximum Daily Load Requirements

3.2.2.1 Impaired Water Bodies

A permittee that discharges a pollutant of concern via storm water to an impaired water body shall include a written section in the storm water pollution prevention plan that specifically identifies control measures and management practices that will collectively be used to reduce, with the goal of eliminating, the storm water discharge of pollutant(s) of concern that contribute to the impairment of the water body and explain why these control measures and management practices were chosen as opposed to other alternatives.

3.2.2.2 Total Maximum Daily Load (TMDL)

A State and Federally approved wasteload allocation is applicable for this facility. The permittee shall assess whether the TMDL wasteload allocation for the facility's discharge is being met through the existing pollutant controls or whether additional control measures are necessary and feasible. The assessment of the feasibility of additional control measures shall focus on the ability to improve pollution prevention and treatment system effectiveness and the adequacy of implementation and maintenance of the permittee's storm water pollution prevention plan controls.

3.2.2.3 Fish and Aquatic Life Waters

The permittee's existing storm water discharge to a fish and aquatic life water may not increase the discharge of pollutants if the increased discharge would result in a violation of water quality standards.

3.2.2.4 Toxic Pollutants

In accordance with s. NR 102.12 Wis. Adm. Code, new and increased discharges as defined in ch. NR 207, Wis. Adm. Code, of persistent, bioaccumulating toxic substances to the Great Lakes waters or their tributaries, shall be limited to the maximum extent practicable when such discharges result from the contamination of storm water by contact with raw materials, products, by-products or wastes used or stored by the permittee.

3.3 Storm Water Pollution Prevention Plan (SWPPP)

Storm Water Pollution Prevention Plan (SWPPP): The permittee shall continue to implement the Storm Water Pollution Prevention Plan (SWPPP) for the facility. An amended SWPPP shall be submitted as required in the compliance schedule by **September 30, 2027**.

Purpose of SWPPP: The SWPPP prepared by the permittee has:

1. Identified the sources of storm water and non-storm water contamination to the storm water drainage system;
2. Identified and prescribed appropriate “source area control” best management practices (BMP) to reduce pollutants in contaminated storm water prior to discharge and for each BMP describe the maintenance and servicing necessary to ensure that the BMP performs as intended;
3. Prescribed actions needed either to bring non-storm water discharges under a WPDES permit or to remove these discharges from the storm drainage system;
4. Prescribed an implementation schedule to ensure that the storm water management actions contained in the SWPPP are carried out and evaluated on a regular basis.

3.3.1 Required SWPPP Content

The SWPPP shall conform to the requirements specified in s. NR 216.27(3), Wis. Adm. Code.

3.3.2 Incorporation of Other Plans by Reference

When plans are developed, or activities are conducted in accordance with other federal, state, or local regulatory approvals that meet the requirements of ch. NR 216, Wis. Adm. Code, these plans may be incorporated into the SWPPP by reference to avoid unnecessary duplication of regulatory requirements.

3.3.3 SWPPP Retention

The SWPPP shall be kept at the facility and made available to the Department upon request. If stormwater discharges are made to a municipal system that is subject to a WPDES permit, the SWPPP shall also be made available to that municipality upon request.

3.3.4 SWPPP Amendments

The permittee shall amend the SWPPP if any of the following circumstances occur:

1. When expansion, production increases, process modifications, changes in material handling or storage, or other activities are planned which will result in significant increases in the exposure of pollutants to storm water discharged either to waters of the state or to storm water treatment devices. The amendment shall contain a description of the new activities that contribute to the increased pollutant loading, planned source control activities that will be used to control pollutant loads, an estimate of the new or increased discharge of pollutants following treatment, and when appropriate, a description of the effect of the new or increased discharge on existing storm water treatment facilities.
2. The comprehensive annual facility site compliance inspection, quarterly visual inspection of storm water quality, or other means reveals that the provisions of the SWPPP are ineffective in controlling storm water pollutants discharged to waters of the state.
3. Upon written notice that the Department finds the SWPPP to be ineffective in achieving the conditions of this permit.

3.4 Monitoring Requirements

3.4.1 Purpose

Monitoring includes site inspections. The purpose of monitoring is to evaluate storm water outfalls for the presence of non-storm water discharges and evaluate the effectiveness of the permittee's pollution prevention activities in controlling contamination of storm water discharges.

3.4.2 Evaluation of Non-Storm Water Discharges

The permittee shall evaluate storm water for non-storm water contributions to the storm drainage system. If the permittee identifies an unauthorized discharge of pollutants, the permittee shall immediately take action to cease the discharge and shall contact the department to determine if WPDES permit authorization is required.

3.4.3 Evaluation of Storm Water Discharges

The permittee shall continue to evaluate storm water outfalls for storm water contributions to the storm drainage system. Any monitoring shall be representative of the storm water discharges from the facility.

Annual Facility Site Compliance Inspection: The permittee shall perform and document the results of the Annual Facility Site Compliance Inspections (AFSCI). The inspections shall be adequate to verify that the site drainage conditions and potential pollution sources identified in the SWPPP remain accurate, and that the best management practices prescribed in the SWPPP are being implemented, properly operated and adequately maintained. Information reported shall include: the inspection date, inspection personnel, scope of the inspection, major observations, and revisions needed in the SWPPP. The permittee shall maintain completed AFSCI inspection reports on-site with the SWPPP and make them available to the Department upon request.

Visual Inspections: The permittee shall perform and document quarterly visual inspections of storm water discharge quality at each storm water discharge outfall. Inspections shall be conducted within the first 30 minutes of discharge or as soon thereafter as practical, but not exceeding 60 minutes. The inspections shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. Information reported shall include the inspection date, inspection personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination. The permittee shall maintain copies of completed quarterly inspection reports on-site with the SWPPP and make them available to the Department upon request.

Annual Chemical Storm Water Sampling and Analysis: The permittee shall, as directed by the Department, monitor for any pollutant which has an effluent limitation is contained in this permit; any other toxic or hazardous pollutants from present or past activity at the site that remain in contact with precipitation or storm water and which could be discharged to the waters of the state, and which are not regulated by another environmental program or the following parameters which might be present in significant concentrations: Oil and grease, pH, total suspended solids, 5-day biological oxygen demand, chemical oxygen demand and total phosphorus. The permittee may be asked to perform sampling for any of the following reasons:

- Sampling results show a reasonable potential that a storm water discharge from the facility will exceed a water quality standard.
- The Department believes that a storm water discharge from the facility may be a significant contributor of a pollutant to a water of the state.
- Additional sampling is needed to determine the effectiveness of the permittee's SWPPP.
- The Department determines that the sampling is needed to assess compliance with the permit.

3.5 Stormwater Records Retention

Pursuant to ss. NR 216.29(7), Wis. Adm. Code, all stormwater records (e.g. inspection reports, sampling results, etc.) shall be retained for 5 years beyond the date that record was made and shall be made available to the department upon request.

3.6 Monitoring Waivers

The department may waive specific monitoring requirements for the following reasons:

1. The permittee indicates that either an employee could not reasonably be present at the facility at the time of the snowmelt or runoff event, or that attempts to meet the monitoring requirement would endanger employee safety or well-being.
2. The permittee indicates that there were no snowmelt or runoff events large enough to conduct a quarterly visual inspection at an outfall.
3. An inactive or remote facility (such as an inactive mining operation) demonstrates that monitoring and inspection activities are impractical or unnecessary. At a minimum, the Department shall establish an alternative requirement that the permittee make site inspections by a qualified individual at least once in every 3-year period.

The permittee can demonstrate to the Department's satisfaction that the sources of storm water contamination are outside of the permittee's property boundary and are not associated with the permittee's activities. The demonstration shall be presented in the SWPPP and submitted to the Department for evaluation.

4 Schedules

4.1 Updated Stormwater Pollution Prevention Plan (SWPPP)

Required Action	Due Date
Management Plan: Update the SWPPP plan in accordance with NR 216.27(3) to reflect the current conditions of the facility grounds.	09/30/2027

4.2 Outfall 001 - Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus

No later than 30 days following each compliance date, the permittee shall notify the Department in writing of its compliance or noncompliance with the required action. If a submittal is part of the required action then a timely submittal fulfills the written notification requirement.

Required Action	Due Date
Operational Evaluation Report: The permittee shall prepare an operational evaluation report and submit it for Department approval. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor modifications that would enable compliance with the final phosphorus WQBEL (water quality based effluent limit) or some improved level of effluent quality using the existing wastewater treatment system. If the operational evaluation report concludes that the facility can achieve the final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements or minor facility modifications, the report shall contain a schedule for implementation of the improvements or other report recommendations necessary to meet final phosphorus WQBELs. The implementation schedule shall be based on providing compliance with the final phosphorus WQBEL as soon as reasonably possible. Once the report is approved by the Department, the permittee shall take the steps called for in the operational evaluation report and follow the schedule of implementation as approved. If the Department approved report concludes that the facility cannot achieve the phosphorus limit with source reduction measures, operational improvements or other minor facility modifications, the permittee shall initiate a Facility Planning Study and comply with the remaining schedule of compliance. Regardless of the conclusion of the operational evaluation report, the report shall also include a plan and implementation schedule for optimizing the treatment plant's removal of phosphorus during the period prior to complying with the WQBELs. Once the operational evaluation report is approved by the Department, the permittee shall proceed with implementation of the optimization plan and follow the schedule of implementation as approved.	09/30/2027
Facility Plan: The permittee shall submit a Facility Plan that evaluates feasible alternatives for meeting the phosphorus WQBELs. Alternatives may include: upgrading wastewater treatment facilities, selecting the Watershed Adaptive Management Option pursuant to s. NR 217.18, Wis. Adm. Code, using Water Quality Trading in conjunction with or in place of facility upgrading, site-specific water quality criteria development, or a variance from water quality standards pursuant to s. 283.15, Stats.	09/30/2028
Final Plans and Specifications: If the facility plan concluded that upgrading of the permittee's wastewater treatment system is necessary to meet final water quality based effluent limits, submit construction plans and specifications for Department approval.	03/30/2029
Construction Progress Report: Submit a progress report on meeting the final WQBEL for	09/30/2029

phosphorus.	
Complete Construction: Complete construction of wastewater treatment system upgrades. Comply with the final phosphorus limits.	09/30/2030

4.3 Outfall 001 - Copper and Arsenic Pollutant Minimization Program

Required Action	Due Date
Plan Development: The permittee shall develop and submit to the Department a plan for a cost-effective pollutant minimization program (PMP) which has as its goal the reduction of copper and arsenic for the purpose of maintaining the effluent at or below the water quality based effluent limitation (Copper – weekly average of 14 ug/L and Arsenic – monthly average of 13 ug/L). The PMP plan shall specify actions to be taken that consist of investigation of treatment technologies and efficiencies, process changes, wastewater reuse or other pollution prevention techniques that are appropriate for that facility, taking account of the permittee's overall treatment strategies, facilities plans and operational circumstances. The plan shall also identify past pollution prevention or minimization efforts implemented by the permittee. The PMP shall also include: 1) An annual review and semi-annual monitoring of potential sources of the pollutant, which may include fish tissue monitoring and other bio-uptake sampling; 2) A control strategy designed to maintain potential sources of the pollutant at levels which will insure compliance with the water quality based effluent limitation; and 3) Implementation schedule to meet the limits as soon as possible. Past documented pollution prevention or treatment may be used to satisfy all or part of this PMP requirement. NOTE: The Department will notify the permittee of acceptance of or comments on the proposed PMP. If the Department has not notified the permittee within 90 days of the Department's receipt of the PMP, the permittee may assume the PMP has been accepted.	03/31/2027
Status Report: The permittee shall submit to the Department an annual status report that provides: 1) All minimization program monitoring results for the previous year; 2) A list of potential sources of the pollutant; and 3) A summary of all actions taken to reduce or eliminate the identified sources of the pollutant or treatment solutions.	09/30/2027
Annual Status Report: The permittee shall submit to the Department an annual status report.	09/30/2028
Annual Status Report: The permittee shall submit to the Department an annual status report.	09/30/2029
Achieve Compliance: The permittee shall achieve compliance with the water quality-based effluent limits for Copper weekly average for 14 ug/L and Arsenic monthly average of 13 ug/L.	09/30/2030

5 Standard Requirements

Chapter 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), Wis. Adm. Code.

5.1 Reporting and Monitoring Requirements

5.1.1 Monitoring Results

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

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

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report pursuant s. NR 205.07(1)(r)2., Wis. Adm. Code.

For the purpose of meeting sampling frequency requirements, a week is defined as a calendar week, which begins on Sunday and ends on Saturday. The calendar week shall be used as the basis for reporting monitoring data on discharge monitoring reports.

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

5.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code, and completed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sampling shall be performed in accordance with procedures contained in s. NR 140.16, Wis. Adm. Code, and the WDNR publications, Groundwater Sampling Desk Reference (PUBL-DG-037-96) and Groundwater Sampling Field Manual (PUBL-DG-038-96). The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation and/or groundwater standard. If the required level cannot be met by any of the methods available in ch. NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

5.1.3 Sample Types

The permittee shall use the following definitions from s. NR 218.04, Wis. Adm. Code as prescribed in the WPDES permit for the appropriate method and manner of obtaining samples:

24-hour Composite Sample: A combination of individual samples taken at intervals of not more than one hour such that the volumes of each of the individual samples and of the combination are proportional to the volumes of flow during each interval and during the 24-hour period respectively.

- **24-hour Flow Proportional Composite Sample:** A combination of individual grab samples taken over a 24-hr period, where the individual grab samples are of equal volume and taken at intervals after a specified volume of discharge has occurred.
- **24-hour Time Proportional Composite Sample:** A combination of individual grab samples taken over a 24-hr period, where the individual grab samples are of equal volume and taken at consistent intervals not exceeding 15 minutes.

Composite Sample: A combination of individual samples of equal volume taken at approximately equal intervals not exceeding one hour over a specified period of time.

- **3-hr Composite Sample:** A combination of three (3) individual grab samples of equal volume taken at one-hour intervals.

Continuous Sample: A composite of successive individual samples of equal volume taken automatically at equal intervals not exceeding 15 minutes. Where the term is used in connection with monitoring temperature or pH it means continuous in-line recording or monitoring at intervals of not more than 15 minutes.

Continuous sample is synonymous with in-line measurements and may apply to flow, temperature, pH, and dissolved oxygen measurements only. The in-line instrument takes automatic readings at intervals of not more than 15 minutes during a 24-hour period.

Grab Sample: A single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a 2-minute period. Where the term is used in connection with monitoring temperature or pH it means a single measurement.

5.1.4 Recording of Results

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

- The date, exact place, method and time of sampling or measurements;
- The individual who performed the sampling or measurements;
- The date the analysis was performed;
- The individual who performed the analysis;
- The analytical techniques or methods used; and
- The results of the analysis.

5.1.5 Reporting of Monitoring Results

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating fees under ch. NR 101, Wis. Adm. Code, a reporting limit of 2.0 mg/L for BOD₅ and 2.5 mg/L Total Suspended Solids shall be considered to be limits of quantitation.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for

results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as “0” (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, “0” would be reported for any day during the month that no discharge occurred.

5.1.6 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

5.1.7 Other Information

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

5.1.8 Reporting Requirements – Alterations or Additions

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

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

5.2 System Operating Requirements

5.2.1 Noncompliance Reporting

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

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

A written report describing the noncompliance shall also be submitted to the Department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to

submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

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

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. **The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.**

5.2.2 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

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

5.2.3 Scheduled Bypass

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

5.2.4 Controlled Diversions

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

- Effluent from the wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;

- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in wastewater treatment facility records and such records shall be available to the department on request.

5.2.5 Proper Operation and Maintenance

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

5.2.6 Operator Certification

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

5.2.7 Planned Changes

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

5.2.8 Duty to Halt or Reduce Activity

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

5.3 Surface Water Requirements

5.3.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

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

5.3.2 Appropriate Formulas for Effluent Calculations

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

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

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

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

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

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

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

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

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

5.3.3 Effluent Temperature Requirements

Weekly Average Temperature – If temperature limits are included in this permit, Weekly Average Temperature shall be calculated as the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

Cold Shock Standard – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock pursuant to Wis. Adm. Code, s. NR 102.28. ‘Cold Shock’ means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

Rate of Temperature Change Standard – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state pursuant to Wis. Adm. Code, s. NR 102.29.

5.3.4 Visible Foam or Floating Solids

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

5.3.5 Surface Water Uses and Criteria

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

- Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.

- Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

5.3.6 Compliance with Phosphorus Limitation

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

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

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

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

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

5.3.7 Whole Effluent Toxicity (WET) Monitoring Requirements

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

5.3.8 Whole Effluent Toxicity (WET) Identification and Reduction

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

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including the following actions:
 - a) Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
 - b) Identify the compound(s) causing toxicity. Conduct toxicity screening tests on the effluent at a minimum of once per month for six months to determine if toxicity recurs. Screening tests are WET tests using fewer effluent concentrations conducted on the most sensitive species. If any of the screening tests contain toxicity, conduct a toxicity identification evaluation (TIE) to determine the

cause. TIE methods are available from USEPA “Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003) and “Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I” (EPA/600/6-91/005F).

- c) Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
- d) Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;
- If no actions have been taken, the reason for not taking action.

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

6 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Updated Stormwater Pollution Prevention Plan (SWPPP) -Management Plan	September 30, 2027	14
Outfall 001 - Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus -Operational Evaluation Report	September 30, 2027	14
Outfall 001 - Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus -Facility Plan	September 30, 2028	14
Outfall 001 - Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus -Final Plans and Specifications	March 30, 2029	14
Outfall 001 - Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus -Construction Progress Report	September 30, 2029	15
Outfall 001 - Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus -Complete Construction	September 30, 2030	15
Outfall 001 - Copper and Arsenic Pollutant Minimization Program -Plan Development	March 31, 2027	15
Outfall 001 - Copper and Arsenic Pollutant Minimization Program -Status Report	September 30, 2027	15
Outfall 001 - Copper and Arsenic Pollutant Minimization Program -Annual Status Report	September 30, 2028	15
Outfall 001 - Copper and Arsenic Pollutant Minimization Program -Annual Status Report	September 30, 2029	15
Outfall 001 - Copper and Arsenic Pollutant Minimization Program -Achieve Compliance	September 30, 2030	15
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	16

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to: Northern Region - Spooner, 810 W. Maple St, Spooner, WI 54801-1255.