



# WPDES PERMIT

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

**MILWAUKEE REGIONAL MEDICAL CENTER THERMAL SERVICE INC**

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility  
located at  
9250 W Watertown Plank Rd, Wauwatosa, WI  
to

**Menomonee River (Milwaukee River Basin), Milwaukee 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 \_\_\_\_\_  
Bryan Hartsook  
Wastewater Field Supervisor

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

**PERMIT TERM: EFFECTIVE DATE - July 01, 2022**

**EXPIRATION DATE - June 30, 2027**

## TABLE OF CONTENTS

<b>1 IN-PLANT REQUIREMENTS</b>	<b>1</b>
1.1 SAMPLING POINT(S)	1
1.2 MONITORING REQUIREMENTS AND LIMITATIONS	1
1.2.1 <i>Sampling Point 102 - POND OUTLET</i>	1
<b>2 SURFACE WATER REQUIREMENTS</b>	<b>2</b>
2.1 SAMPLING POINT(S)	2
2.2 MONITORING REQUIREMENTS AND EFFLUENT LIMITATIONS	2
2.2.1 <i>Sampling Point (Outfall) 001 - EAST PLANT; 002- WEST PLANT</i>	2
2.2.2 <i>Sampling Point (Outfall) 003 - COMBINED 001 AND 002</i>	6
<b>3 SCHEDULES</b>	<b>7</b>
3.1 EFFLUENT TOTAL RESIDUAL CHLORINE LIMITATIONS	7
3.2 EFFLUENT TEMPERATURE LIMITATIONS	7
<b>4 STANDARD REQUIREMENTS</b>	<b>8</b>
4.1 REPORTING AND MONITORING REQUIREMENTS	8
4.1.1 <i>Monitoring Results</i>	8
4.1.2 <i>Sampling and Testing Procedures</i>	8
4.1.3 <i>Recording of Results</i>	8
4.1.4 <i>Reporting of Monitoring Results</i>	9
4.1.5 <i>Records Retention</i>	9
4.1.6 <i>Other Information</i>	9
4.1.7 <i>Reporting Requirements – Alterations or Additions</i>	9
4.2 SYSTEM OPERATING REQUIREMENTS	10
4.2.1 <i>Noncompliance Reporting</i>	10
4.2.2 <i>Bypass</i>	10
4.2.3 <i>Scheduled Bypass</i>	10
4.2.4 <i>Controlled Diversions</i>	11
4.2.5 <i>Proper Operation and Maintenance</i>	11
4.2.6 <i>Operator Certification</i>	11
4.2.7 <i>Spill Reporting</i>	11
4.2.8 <i>Planned Changes</i>	11
4.2.9 <i>Duty to Halt or Reduce Activity</i>	12
4.3 SURFACE WATER REQUIREMENTS	12
4.3.1 <i>Permittee-Determined Limit of Quantitation Incorporated into this Permit</i>	12
4.3.2 <i>Appropriate Formulas for Effluent Calculations</i>	12
4.3.3 <i>Effluent Temperature Requirements</i>	12
4.3.4 <i>Visible Foam or Floating Solids</i>	13
4.3.5 <i>Surface Water Uses and Criteria</i>	13
4.3.6 <i>Compliance with Phosphorus Limitation</i>	13
4.3.7 <i>Additives</i>	14
<b>5 SUMMARY OF REPORTS DUE</b>	<b>15</b>

# 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)
102	POND OUTLET: Grab samples shall be taken at the retention basin (East of N 87th Street, Wauwatosa) outlet prior to discharging to the Menomonee River.

## 1.2 Monitoring Requirements and Limitations

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

### 1.2.1 Sampling Point 102 - POND OUTLET

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Halogen, Total Residual as Cl <sub>2</sub>		µg/L	Quarterly	Grab	See Halogen, Total Residual as Chlorine section in permit.

#### 1.2.1.1 Halogen, Total Residual as Chlorine

Acceptable test methods for determining Halogens, Total Residual as Cl<sub>2</sub> are the same as those for measuring Chlorine, Total Residual. These methods are listed for Chlorine, Total Residual in chapter NR 219, Table B, Wisconsin Administrative Code. The preferred test methods are the Spectrophotometric, DPD; the Electrode; and the Back Titration with amperometric endpoint. Refer to Standard Requirements Section 4.3.1 for incorporation of the permittee-determined limit of quantitation (LOQ) into the permit.

## 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, WasteType/Sample Contents and Treatment Description (as applicable)
001	EAST PLANT COOLING TOWER SYSTEM: Representative samples collected from East Plant blowdown line consisting of cooling tower blowdown, filter blowdown, and system drains for maintenance. Effluent combines with West Plant system and stormwater and conveyed via storm sewer to Milwaukee County Regional Detention Basin 1 traveling a total distance of 3,635 feet before discharging to the south bank of the Menomonee River. Detention basin outfall located on south bank of Menomonee River 2,280 feet upstream of the Harmonie Avenue Bridge at the Menomonee River Parkway intersection.
002	WEST PLANT COOLING TOWER SYSTEM: Representative samples collected from West Plant blowdown line consisting of cooling tower blowdown, filter blowdown, and system drains for maintenance. Effluent combines with East Plant system and stormwater and conveyed via storm sewer to Milwaukee County Regional Detention Basin 1 traveling a total distance of 3,635 feet before discharging to the south bank of the Menomonee River. Detention basin outfall located on south bank of Menomonee River 2,280 feet upstream of the Harmonie Avenue Bridge at the Menomonee River Parkway intersection.
003	COMBINED 001 AND 002: Monitoring point for reporting the total mass of Total Suspended Solids and Total Phosphorus discharged from Outfalls 001 and 002 to compute compliance with the mass-based limits.

### 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 - EAST PLANT; 002- WEST PLANT

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Calculated	
BOD <sub>5</sub> , Total		mg/L	Quarterly	Grab	Monitoring only in last full calendar year of permit.
Suspended Solids, Total		mg/L	Weekly	Grab	

<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>
Suspended Solids, Total		lbs/day	Weekly	Calculated	Report daily mass discharged as the concentration multiplied by the daily flow in MGD by the conversion factor of 8.34. See 'Total Maximum Daily Load (TMDL) Limitations' Section.
pH Field	Daily Max	9.0 su	Daily	Grab	
pH Field	Daily Min	6.0 su	Daily	Grab	
Halogen, Total Residual as Cl <sub>2</sub>		µg/L	Quarterly	Grab	Monitoring only. See Halogen, Total Residual as Chlorine section in permit.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total		mg/L	Monthly	Grab	Monitoring only in last full calendar year of permit.
Phosphorus, Total		mg/L	Weekly	Grab	
Phosphorus, Total		lbs/day	Weekly	Calculated	Report daily mass discharged as the concentration multiplied by the daily flow in MGD by the conversion factor of 8.34. See 'Total Maximum Daily Load (TMDL) Limitations' Section.
Temperature Maximum	Daily Max	120 deg F	Daily	Continuous	Monitoring only until effluent limit becomes effective per 'Effluent Limitations for Temperature' Schedule. See 'Schedules' Section.
Hardness, Total as CaCO <sub>3</sub>		mg/L	Quarterly	Grab	
Chloride		mg/L	Once	Grab	Monitoring only in last full calendar year of permit.
Arsenic, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Cadmium, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Chromium, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Copper, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Lead, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Mercury, Total Recoverable		ng/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Nickel, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Zinc, Total Recoverable		µg/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	Sample twice during permit term. See 'WET Testing' Section.
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	Sample twice during permit term. See 'WET Testing' Section.

### 2.2.1.1 Total Metals Analyses

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

### 2.2.1.2 Halogen, Total Residual as Chlorine

Acceptable test methods for determining Halogens, Total Residual as Cl<sub>2</sub> are the same as those for measuring Chlorine, Total Residual. These methods are listed for Chlorine, Total Residual in chapter NR 219, Table B, Wisconsin Administrative Code. The preferred test methods are the Spectrophotometric, DPD; the Electrode; and the Back Titration with amperometric endpoint. Refer to Standard Requirements Section 4.3.1 for incorporation of the permittee-determined limit of quantitation (LOQ) into the permit.

### 2.2.1.3 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. 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.

#### 2.2.1.4 Effluent Temperature Limitations

The effluent limitations for “Temperature, Maximum” become effective as specified in the Schedules section. After completion of at least one year of temperature data collection the permittee may request that the Department make a determination of the need for limits under s. NR 106.56, Wis. Adm. Code. Within 60 days of such request the Department will make that determination. If the Department determines that effluent limitations are unnecessary based on the procedures in NR 106.56, the Department shall notify the permittee that the limitations are unnecessary pursuant to NR106.56. A permit modification will be required to remove the temperature limits and schedule from this permit. If, after reviewing the data, the Department determines that effluent limitations for “Temperature, Maximum” are necessary based on the procedures in NR 106.56, the requirement to meet the effluent limitations according to the Schedules section will not be removed nor will the monitoring frequency be reduced. Permittees may then wish to pursue a re-evaluation of the limits based on NR 106 – ‘Subchapters V and VI Effluent Limitations for Temperature’ or NR 102.26 – Site Specific Ambient Temperature. If the re-calculation of limits results in revisions to the temperature limits, a permit modification will be required to include the revised limits in the permit.

#### 2.2.1.5 Additives

The permittee shall report the dosage rate of all additives used on a monthly basis in the General Remarks section of the Discharge Monitoring Report form, including ChemTreat CL41 (microbiocide) and ChemTreat CL5682 (corrosion inhibitor). This does not include additives used in the closed loop system with no potential to be present in the effluent. Use of ChemTreat CL2150 (microbiocide) is not approved. The additives may be changed during the term of the permit following procedures in the ‘Additives’ subsection of the Standard Requirements.

#### 2.2.1.6 Whole Effluent Toxicity (WET) Testing

**Primary Control Water:** Grab sample collected from Menomonee River.

**Instream Waste Concentration (IWC):** 10%

**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, 2023 and July – September, 2025

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 2027.

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

- **Chronic:** April – June, 2023 and July – September, 2025

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 – September 2027.

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

**Reporting:** The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 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. The TU<sub>a</sub> shall be calculated as follows:  $TU_a = 100 \div LC50$ . A chronic toxicity

test shall be considered positive if the Toxic Unit - Chronic (TU<sub>c</sub>) is greater than 10 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).

### 2.2.2 Sampling Point (Outfall) 003 - COMBINED 001 AND 002

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Suspended Solids, Total	Monthly Avg	22 lbs/day	Weekly	Calculated	Limit effective immediately and calculated as the monthly average of daily sum of mass reported for Outfalls 001 and 002.
Phosphorus, Total	Monthly Avg	0.44 lbs/day	Weekly	Calculated	Limit effective immediately and calculated as the monthly average of daily sum of mass reported for Outfalls 001 and 002.

#### 2.2.2.1 Total Maximum Daily Load (TMDL) Limitations

**Approved TMDL:** The Milwaukee River Basin TMDL Waste Load Allocations (WLA) for Total Phosphorus, Total Suspended Solids, and bacteria was approved by the U.S. Environmental Protection Agency on March 9, 2018. The approved TMDL WLA limits for Total Phosphorus are 84.3 lbs/year and for Total Suspended Solids are: 4,201 lbs/year. The monthly average limits are 0.44 lbs/day for Total Phosphorus and 22 lbs/day for Total Suspended Solids. Compute compliance by averaging the sum of daily mass reported for Outfalls 001 and 002.



### 3 Schedules

#### 3.1 Effluent Total Residual Chlorine Limitations

Required Action	Due Date
<b>Report on Effluent Discharges:</b> Submit a report on effluent total residual chlorine with conclusions regarding compliance.	03/31/2023
<b>Report on Effluent Limitations &amp; Request to Reevaluate Effluent Limits:</b> Submit a report on effluent total residual chlorine with conclusions regarding compliance. After completion of at least one year of outfall and downstream total residual chlorine data collection the permittee may request that the Department make a determination of the need for limits under s. NR 106.56, Wis. Adm. Code.	03/31/2024
<del><b>Achieve Compliance:</b> Complete actions necessary to achieve compliance with effluent total residual chlorine limits.</del>	12/31/2024

#### 3.2 Effluent Temperature Limitations

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

Required Action	Due Date
<b>Report on Effluent Discharges:</b> Submit a report on effluent temperature with conclusions regarding compliance.	03/31/2023
<b>Report on Effluent Discharges &amp; Request to Reevaluate Effluent Limits:</b> Submit a report on effluent temperature with conclusions regarding compliance. After completion of at least one year of temperature data collection the permittee may request that the Department make a determination of the need for limits under s. NR 106.56, Wis. Adm. Code.	03/31/2024
<b>Achieve Compliance:</b> Complete actions necessary to achieve compliance with effluent temperature limits.	12/31/2024

## 4 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).

### 4.1 Reporting and Monitoring Requirements

#### 4.1.1 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.

#### 4.1.2 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.

#### 4.1.3 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.

#### 4.1.4 Reporting of Monitoring Results

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD<sub>5</sub> 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.

#### 4.1.5 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.

#### 4.1.6 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.

#### 4.1.7 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.

## 4.2 System Operating Requirements

### 4.2.1 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.**

### 4.2.2 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.

### 4.2.3 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.

#### **4.2.4 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.

#### **4.2.5 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.

#### **4.2.6 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).

#### **4.2.7 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.

#### **4.2.8 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.

#### 4.2.9 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.

### 4.3 Surface Water Requirements

#### 4.3.1 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.

#### 4.3.2 Appropriate Formulas for Effluent Calculations

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

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

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

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

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

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

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

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

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

#### 4.3.3 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.

#### **4.3.4 Visible Foam or Floating Solids**

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

#### **4.3.5 Surface Water Uses and Criteria**

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

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

#### **4.3.6 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.

#### **4.3.7 Additives**

In the event that the permittee wishes to commence use of a water treatment additive, or increase the usage of the additives greater than indicated in the permit application, the permittee must get a written approval from the Department prior to initiating such changes. This written approval shall provide authority to utilize the additives at the specific rates until the permit can be either reissued or modified in accordance with s. 283.53, Stats. Restrictions on the use of the additives may be included in the authorization letter.



## 5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Effluent Total Residual Chlorine Limitations -Report on Effluent Discharges	March 31, 2023	7
Effluent Total Residual Chlorine Limitations -Report on Effluent Limitations & Request to Reevaluate Effluent Limits	March 31, 2024	7
Effluent Total Residual Chlorine Limitations -Achieve Compliance	December 31, 2024	7
Effluent Temperature Limitations -Report on Effluent Discharges	March 31, 2023	7
Effluent Temperature Limitations -Report on Effluent Discharges & Request to Reevaluate Effluent Limits	March 31, 2024	7
Effluent Temperature Limitations -Achieve Compliance	December 31, 2024	7
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	8

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:  
 Southeast Region, 1027 W. Saint Paul Avenue, Milwaukee, WI 53233