

Permit Fact Sheet

General Information

Permit Number:	WI-0067130-01-1* Modification items are highlighted and go into effect January 1, 2025
Permittee Name:	MILWAUKEE REGIONAL MEDICAL CENTER THERMAL SERVICE INC
Address:	8700 W. Watertown Plank Rd
City/State/Zip:	Wauwatosa WI 53226
Discharge Location:	South bank of Menomonee River 2,280 feet upstream of the Harmonee Avenue Bridge at the Menomonee River Parkway intersection. (43.050125°N, 88.017266°W)
Receiving Water:	Menomonee River (WBIC 16000)
StreamFlow (Q _{7,10}):	6.23 cfs
Stream Classification:	Warm Water Sport Fishery (WWSF), non-public water supply

Description of Permit Modification

Milwaukee Regional Medical Center Thermal (MRMC) has collected residual chlorine data during the current permit term at Outfalls 001 and 002 as well as at the outlet of the detention pond, Sample Point 102. Analysis of samples collected at Sample Point 102 was performed with colorimeter equipment that had undergone an approved LOD/LOQ study. The data collected from the detention pond outlet, before the effluent reaches the receiving water, is below the level of detection and the limit of 38 µg/L as a daily maximum and monthly average. Therefore, the permit is being modified to remove the compliance schedule and limits from the permit.

Because the limits have not become effective yet, antidegradation requirements per ch. NR 207, Wis. Adm. Code do not apply. Monitoring for residual chlorine at Outfalls 001 and 002 will continue. Sampling Point 102 (pond outlet) has been added to the modified permit. Sampling Point 101 has been inactivated. For more detailed information, refer to the memo attached titled: Chlorine Effluent Limitations for the Milwaukee Regional Medical Center Thermal Service WPDES Permit No. WI-0067130-01-1, dated October 21, 2024, prepared by DNR Water Resources Engineer, Nicole Krueger.

Facility Description

Milwaukee Regional Medical Center Thermal Service Inc (MRMC-Thermal) provides steam heating and chilled water cooling to the Milwaukee Regional Medical Center (MRMC) member organizations. MRMC customers include Froedtert Health, Medical College of Wisconsin, Children's Wisconsin, Milwaukee County Behavioral Health Division, Versiti Blood Research Institute, and Kathy's House serving three million patients each year. MRMC members serve as the only adult and pediatric Level 1 trauma centers in southeast Wisconsin and provide training of more than 1,000 medical, nursing, and health technical students through Froedtert and the Medical College of Wisconsin academic medical centers.

MRMC-Thermal uses cooling towers to provide cooling water for centrifugal chillers. Source water is raw well water from an onsite private well. The centrifugal chillers provide the cooling water for the MRMC campus. The wastewater is cooling tower effluent from blowdown for chemistry control, filter blowdown, and system draining for maintenance. Chemical additives are used for corrosion protection to protect the equipment and to prevent harmful biological activity. Wastewater is discharged through an existing conveyance to the Menomonee River, and was formerly used and permitted under the non-contact cooling water general permit for WE Energies Milwaukee County Power Plant operations (FID

241027050). Ownership transferred to MRMC-Thermal in 2016 when discharge to the sanitary sewer system commenced. This individual permit is necessary because MRMC-Thermal is recommencing a discharge to waters of the state through the existing outfall.

Substantial Compliance Determination

This recommencing discharge is being covered under a new permit. An inspection of the facility operations has not occurred, and no past data has been reported on which to base compliance. Compliance with effluent limits and all permit terms will be evaluated during the permit term and at permit reissuance.

Fact Sheet Organization

This fact sheet highlights changes in permit conditions that the Department proposes to make when issuing the Milwaukee Regional Medical Center Thermal Service Inc (MRMC Thermal Service Inc) WPDES permit. This fact sheet contains all content required under s. NR 201, Wis. Adm. Code, as applicable. The permit remains in effect until the permit is either revoked and reissued, modified, or reissued. The tables and sections that follow were taken from the permit and are numbered in this fact sheet as they are numbered in the permit. For complete explanations of derived effluent limitations including water quality-based effluent limitations, please refer to the attached technical memoranda: Water Quality-Based Effluent Limits Technical Memorandum dated April 25, 2022.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample 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.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, WasteType/sample Contents and Treatment Description (as applicable)
101		DOWNSTREAM STORM SEWER: INACTIVED Representative grab samples of combined effluent from Outfalls 001 and 002 shall be collected from the storm sewer catch basin downstream of the facility to demonstrate initial dissipation of total residual chlorine present in effluent. (inactivate this sample point)
102		POND OUTLET: Grab samples shall be taken at the retention basin (East of N 87 th Street, Wauwatosa) outlet prior to discharging to the Menomonee River.

1 Inplant - Proposed Monitoring and Limitations

Sample Point Number: 102- POND OUTLET

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

Changes from previous Permit

Sample Point 101 has been inactivated and replaced with Sample Point 102.

Explanation of Limits and Monitoring Requirements

The effluent discharged to the Menomonee River from the permittee consists of cooling tower blowdown. The halogens used for microbiological control are maintained between 0.22 and 0.67 mg/L (222-667 ug/L) of free chlorine at sample points 001 and 002. Paired quarterly monitoring of chlorine is included to provide data regarding dissipation of chlorine between outfalls 001/002 & sample point 102 and to ensure chlorine does not persist before discharging to the Menomonee River.

2 Surface Water - Proposed Monitoring and Limitations

Sample Point Number: 001- EAST PLANT; 002- WEST PLANT

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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Suspended Solids, Total		mg/L	Weekly	Grab	
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 ₂	Daily Max	38 ug/L	Daily	Grab	Monitoring only until limit becomes effective per 'Effluent Limitations for Total Residual Chlorine' Schedule. See 'Schedules' Section and 'Halogen, Total Residual as Chlorine' Section.
Halogen, Total Residual as Cl ₂	Monthly Avg	38 ug/L	Daily	Grab	Monitoring only until limit becomes effective per 'Effluent Limitations for Total Residual Chlorine' Schedule. See 'Schedules' Section and 'Halogen, Total Residual as Chlorine' Section.
Halogen, Total Residual as Cl ₂		ug/L	Quarterly	Grab	Monitoring only. See Halogen, Total Residual as Chlorine section in permit.
Nitrogen, Ammonia (NH ₃ -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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					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 ₃		mg/L	Quarterly	Grab	
Chloride		mg/L	Once	Grab	Monitoring only in last full calendar year of permit.
Arsenic, Total Recoverable		ug/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Cadmium, Total Recoverable		ug/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Chromium, Total Recoverable		ug/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Copper, Total Recoverable		ug/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Lead, Total Recoverable		ug/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		ug/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Zinc, Total Recoverable		ug/L	Once	Grab	Monitoring only in last full calendar year of permit. See 'Total Metals Analyses' Section.
Acute WET		TUa	See Listed Qtr(s)	24-Hr Flow Prop Comp	Sample twice during permit term. See 'WET Testing' Section.
Chronic WET		TUc	See Listed Qtr(s)	24-Hr Flow Prop Comp	Sample twice during permit term. See 'WET Testing' Section.

Changes from Previous Permit Requirements

Halogen, Total Residual as Cl2: Removed Daily Max and Monthly average limits. Quarterly monitoring added to permit.

Explanation of Limits and Monitoring Requirements

Monitoring frequencies for all parameters with corresponding effluent limitations were evaluated. Relevant requirements in chs. NR 108, 205, 210, and 214, Wis. Adm. Code, s. 283.55, Wis. Stats along with recommendations in applicable program and pollutant specific guidance were considered when determining appropriate monitoring frequencies. Based on the facility type and size, pollutant and limit type, effluent quality, and variability of data reported, the effluent monitoring frequencies for this permittee are determined to be appropriate and correspond with recommendations provided in the “Monitoring Frequencies for Individual Wastewater Permits” (April 12, 2021) guidance.

Flow Rate

Section NR 108.06(4)(b), Wis. Adm. Code, requires all permittees provide adequate flow measurement and recording equipment to measure the volume of effluent discharged from their facility and to report it to the department at the frequency specified in the permit. Daily flow rate calculations are required in the permit and are necessary for deriving the daily mass of Total Phosphorus and Total Suspended Solids delivered to the receiving water. The majority of flow comes from the East and West Plant cooling system blowdown flow rate and is measured directly by mag meters installed on the blowdown lines. The periodic flow from filter blowdown and system drains for maintenance are calculated by blowdown filter count (a fixed volume is released with every filter blowdown) and the known volumes within system drains. These volumes are added to the observed flow from the blowdown lines to calculate a total daily flow rate in gallons per day (gpd).

BOD5, Total

Limitations for BOD5, Total must be evaluated to prevent a lowering of dissolved oxygen levels in the receiving water below water quality standards as specified in ss. NR 102.04(4)(a) and (b), Wis. Adm. Code. The dissolved oxygen standard for the receiving water to be demonstrated at all times is no less than 5.0 mg/L. In this case, the surface water standard is unlikely due to available assimilative capacity in stream. The permit includes quarterly monitoring for the last

full calendar year of the permit is included to reevaluate the need for a limit and continued monitoring in the next permit term.

Suspended Solids, Total

Weekly grab samples for Total Suspended Solids from Outfalls 001 and 002 will be collected and results reported separately. Computed compliance with the TMDL mass-based limits is required under Outfall 003 and described further in the next section.

pH Field

Daily grab measurements for pH and daily maximum and minimum limits are required in the permit to meet receiving water quality standards under ss. NR 102.04(4)(c), Wis. Adm. Code. MRMC-Thermal uses one pH adjustment chemical in the open cooling tower condenser loops and another pH adjustment chemical in the closed chiller evaporator loop. The chiller evaporator closed loop blows down once a day at 400 gallons to the East Plant cooling tower system.

Total Residual Halogens (Halogen, Total Residual as Cl2)

~~Sodium hypochlorite and sodium bromide are added to the facility to create a bromine halogen for disinfecting the cooling towers. Daily monitoring and effluent limits are necessary to assure proper removal of residual halogens before discharge. Specifically, a daily maximum limit of 38 ug/L is included in the permit. Revisions to chs. NR 106 and 205, Wis. Adm. Code align Wisconsin's water quality based effluent limits with 40 CFR 122.45(d), which requires WPDES permits for industrial discharges contain daily maximum and monthly average limitations, whenever practicable and necessary to protect water quality. MRMC Thermal is an industrial discharger and a therefore monthly average limit of 38 ug/L is included in addition to the daily maximum limit. The limit is effective immediately as s. NR 106.117(1)(c), Wis. Adm. Code, only allows for a schedule when necessary to attain compliance with limitations promulgated less than 3 years before the recommencement of the discharge.~~

Refer to the Chlorine Effluent Limitations Memo prepared by Nicole Krueger dated October 21, 2024, for explanation on removal of total residual Halogen limits.

Nitrogen, Ammonia (NH3-N) Total

Water quality standards for ammonia nitrogen in ch. NR 105, Wis. Adm. Code, includes criteria based on both acute and chronic toxicity to aquatic life. Daily maximum limits are based on acute toxicity which, for Ammonia Nitrogen, are a function of effluent pH and the receiving water classification. A daily maximum limit of 46 mg/L was derived from the average pH of six raw well water samples collected. The permit includes monthly monitoring in the last full calendar year of the permit to determine if this limit is needed in the next reissuance.

Phosphorus, Total

Weekly grab samples for Total Phosphorus from Outfalls 001 and 002 will be collected and results reported separately. Computed compliance with the TMDL mass-based limits is required under Outfall 003 and described further in the next section.

Thermal (Temperature Maximum)

Requirements for Temperature are included in NR 102 Subchapter II Water Quality Standards for Temperature and NR 106 Subchapter V Effluent Limitations for Temperature. Thermal discharges must meet the Public Health criterion of 120 degrees F and the Fish & Aquatic Life criteria which are established to protect aquatic communities from lethal and sub-lethal thermal effects. Since the maximum annual average flow is 20 times less than the 7-Q10 flow of the receiving water, the effluent limit is set equal to 120°F expressed as a daily maximum and goes into effect January 1, 2025 per the schedule.

Hardness, Total as CaCO3

Monthly Hardness monitoring during the last full calendar year of the permit is included because of the relationship between hardness and daily maximum limits based on acute toxicity criteria. This data will be used for the next reissuance.

Chloride

Monitoring once during the permit term is recommended to determine if limits are needed because there is not currently representative data available. This is consistent with permit application monitoring requirements per s. NR 200.065 Wis. Adm. Code for a secondary industry.

Metals Analysis (Arsenic, cadmium, chloride, chromium, copper, lead, mercury, nickel, and zinc)

Monitoring once during the permit term is recommended to determine if limits are needed because there is not currently representative data available. This is consistent with permit application monitoring requirements per s. NR 200.065 Wis. Adm. Code for a secondary industry.

Acute and Chronic WET

WET testing is used to measure, predict, and control the discharge of toxic materials that may be harmful to aquatic life. In WET tests, organisms are exposed to a series of effluent concentrations for a given time and effects are recorded. Decisions related to the selection of representative data and the need for WET limits were made according to ss. NR 106.08 and 106.09, Wis. Adm. Code. and through assessing a series of performance, effluent, and receiving water criteria consistent with department’s WET Program Guidance Document. Based on this assessment two acute and two chronic WET tests are included in the permit. (See the current version of the Whole Effluent Toxicity Program Guidance Document and checklist and WET information, guidance and test methods at <http://dnr.wi.gov/topic/wastewater/wet.html>)

Categorical Limits

There are no categorical limits for this facility.

Sample Point Number: 003- COMBINED 001 AND 002

Monitoring Requirements and 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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					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.

Explanation of Limits and Monitoring Requirements

Suspended Solids, Total

The Milwaukee River Basin TMDL was approved by the EPA on March 9, 2018. The TMDL is an integrated watershed management planning approach that sets Waste Load Allocations (WLAs) for all permitted point sources and Load Allocations (LAs) for all contributing nonpoint sources to impaired waterbodies as required through Section 303(d) of the Clean Water Act. A calculated mass-based effluent limit of 22 lbs/day expressed as a monthly average was determined assuming an effluent baseline concentration of 12 mg/L and the maximum annual average flow of 0.115 MGD. The permit requires weekly grab sampling and reporting of the effluent concentration to demonstrate compliance with the calculated monthly average mass-based limit.

Phosphorus, Total

The Milwaukee River Basin TMDL was approved by the EPA on March 9, 2018. The TMDL is an integrated watershed management planning approach that sets Waste Load Allocations (WLAs) for all permitted point sources and Load Allocations (LAs) for all contributing nonpoint sources to impaired waterbodies as required through Section 303(d) of the Clean Water Act. A calculated mass-based effluent limit of 0.44 lbs/day expressed as a monthly average was determined assuming an effluent baseline concentration of 0.24 mg/L and the maximum annual average flow of 0.115 MGD. As the cooling water is anticipated to cycle three times before blowdown, the effluent baseline concentration assumed for calculating the mass-based limit is three times the average of samples collected from the raw well water in February 2021. The allocated mass is subtracted from the available TMDL reserve capacity in the receiving water and upstream segments. MRMC-Thermal submitted a demonstration of need for this purpose which considered required antidegradation factors under s. NR 207, Wis. Adm. Code, such as an evaluation of conservation and recycling measures and support for social and economic growth.

3 Compliance Schedules

3.1 Effluent Total Residual Chlorine Limitations

Required Action	Due Date
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Report on Effluent Discharges: Submit a report on effluent total residual chlorine with conclusions regarding compliance.	03/31/2023
Report on Effluent Limitations & Request to Reevaluate Effluent Limits: 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
Achieve Compliance: Complete actions necessary to achieve compliance with effluent total residual chlorine limits.	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
Report on Effluent Discharges: Submit a report on effluent temperature with conclusions regarding compliance.	03/31/2023
Report on Effluent Discharges & Request to Reevaluate Effluent Limits: 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
Achieve Compliance: Complete actions necessary to achieve compliance with effluent temperature limits.	12/31/2024

Explanation of Compliance Schedules

There is no temperature data for the discharge. A schedule to evaluate temperature data is included in the permit with the final limit going into effect on January 1, 2025. This allows for two complete seasons of data collection where cooling tower use and discharge temperatures are expected to be the warmest. MRMC-Thermal may submit a request to the department to reevaluate the need for temperature limits after at least one year of data is collected per the schedule.

~~There is no total residual chlorine data for the discharge once it has entered the storm sewer system downstream and prior to the receiving water. Rather than immediately installing dichlorination treatment at the facility, the schedule allows additional time to collect samples downstream to demonstrate dissipation of chlorine from the discharge prior to entering the receiving water. The facility may request a reevaluation on the need for a total residual chlorine limit based on the results of the study. If treatment is needed, then the schedule allows time to design, submit plans and specs for review and approval, and install treatment. A permit modification would be needed to remove the chlorine limit and effective date from the permit prior to January 1, 2025.~~

Special Reporting Requirements

Additives with potential to be present in the discharge and approved for use are ChemTreat CL41 (microbiocide) and ChemTreat CL5682 (corrosion inhibitor). The usage of these additives is required to be reported on the monthly Discharge Monitoring Report forms. The additives ChemTreat 6034 (pH adjustment and corrosion inhibitor) and ChemTreat CL3000 are also approved for use, and will be present in the discharge as those chemicals are introduced from the closed loop chiller system in a once-daily blowdown into the East Cooling Tower sump. The additive ChemTreat

CL2150 (microbiocide) is not approved for use as the dosage rate results in an estimated maximum concentration of 100 mg/L. This exceeds the potential use restriction limit of 1.1 mg/L based on toxicity data provided.

Attachments:

~~Water Quality Based Effluent Limits Technical Memorandum dated April 25, 2022 prepared by DNR Water Resources Engineer, Nicole Krueger~~

~~MRMC Thermal WPDES Permit Needs Analysis (Demonstration of Need) dated May 9, 2022~~

~~Facility Map~~

Chlorine Effluent Limitations for the Milwaukee Regional Medical Center Thermal Service WPDES Permit No. WI-0067130-01-1, dated October 21, 2024, prepared by Nicole Krueger

Proposed Expiration Date

June 30, 2027

Justification Of Any Waivers From Permit Application Requirements

None requested.

Prepared By:

Bryan Hartsook, P.E. Wastewater Field Supervisor

Date: June 30, 2022

Modified By:

Melanie Burns, Wastewater Specialist

Date: October 24, 2024

CORRESPONDENCE/MEMORANDUM

DATE: 10/21/2024

TO: Melanie Burns – SER

FROM: Nicole Krueger – SER *Nicole Krueger*

SUBJECT: Chlorine Effluent Limitations for the Milwaukee Regional Medical Center Thermal Service WPDES Permit No. WI-0067130-01-1

This is in response to your request for an evaluation of the need for chlorine limits for the discharge from Milwaukee Regional Medical Center (MRMC) Thermal Service in Milwaukee County.

The current permit contains the following chlorine limits becoming effective on 12/31/2024 for Outfalls 001 and 002:

Parameter	Daily Max	Monthly Average
Chlorine	38 µg/L	38 µg/L

MRMC has collected residual chlorine data during the current permit term at Outfalls 001 and 002 as well as at the outlet of the detention pond (see attached map), Sample Point 102 (not currently in the permit). Analysis of samples collected at Sample Point 102 was performed with colorimeter equipment that had undergone an approved LOD/LOQ study. The following table summarizes the data collected during the current permit term:

Effluent Chlorine Data

Sample Date	Sample Point 102 µg/L
05/21/2024	<30
05/23/2024	<30
05/28/2024	<20
05/30/2024	<30
06/04/2024	<20
06/06/2024	<20
06/10/2024	<30
06/14/2024	<30
06/18/2024	<30
06/21/2024	<20
06/26/2024	<30
07/01/2024	<20

	Outfall 001 µg/L	Outfall 002 µg/L
1-day P ₉₉	1892	2454
4-day P ₉₉	1084	1380
30-day P ₉₉	672	827
Mean	491	588
Std	376	491
Sample size	92	296

	Outfall 001 µg/L	Outfall 002 µg/L
Range	20 – 2030	50 – 7360

The data collected from the detention pond outlet, before the effluent reaches the receiving water, is below the level of detection and the limit of 38 µg/L as a daily maximum and monthly average. **Therefore, the compliance schedule and limits are recommended to be removed from the permit.**

Because the limits have not become effective yet, antidegradation requirements per ch. NR 207, Wis. Adm. Code do not apply.

Monitoring at Outfalls 001 and 002 is recommended to continue and Sampling Point 102 (pond outlet) is recommended to be included in the permit.

PREPARED BY: Nicole Krueger, Water Resources Engineer – SER

E-cc: Jacob Susteren-Wedesky, Wastewater Engineer – SER
Bryan Hartsook, Regional Wastewater Supervisor – SER

Attachment: Map showing Sample Point 102 location

Sample Point 102 Location

