

Public Noticed Prescott Draft Permit Fact Sheet

General Information

Permit Number:	WI-0022403-11-0	
Permittee Name:	City of Prescott	
Address:	800 Borner St	
City/State/Zip:	Prescott WI 54021	
Discharge Location:	Prescott Wastewater Treatment Facility, 517 Jefferson St., Prescott, WI 54021 East Bank of the Mississippi River, T26N, R20W, Section 15, City of Prescott, Pierce County, WI	
Receiving Water:	the Mississippi River in the Trimbelle River and Isabelle Creek Watershed of the Lower Chippewa River Basin in Pierce County	
StreamFlow (Q _{7,10}):	3332 cfs	
Stream Classification:	Warmwater Sportfish, Nonpublic Water supply	
Discharge Type:	Existing, Continuous	
Design Flow(s)	Annual Average	0.432 MGD
Significant Industrial Loading?	TCLAD Inc, (aka The Henkel Company), a circuit board manufacturer	
Operator at Proper Grade?	Yes	
Approved Pretreatment Program?	N/A	

Facility Description

The Prescott Wastewater Treatment Facility, with an annual average design flow of 0.432 million gallons per day (MGD), treats domestic wastewater from the City of Prescott and industrial wastewater from TCLAD Inc, a circuit board manufacturer, and SV Labs, a manufacturer of various products including detergent, antibacterial products, pesticides, and pharmaceuticals. However, the discharge from SV Labs is only domestic wastewater and not process wastewater. The actual annual average influent flow in 2023 was 0.338 MGD. Preliminary treatment consists of a fine screen and grit removal. Secondary treatment consists of anaerobic mixing, activated sludge aeration with biological phosphorus removal and secondary clarification. Effluent is then disinfected seasonally using ultraviolet (UV) light prior to discharge to the Mississippi River. Sludge is thickened using a belt thickener before it is trucked to the West Central Wisconsin Biosolids Facility (WCWBF) for final processing. No major operational changes occurred during the last permit term. Significant effluent monitoring and/or limit changes proposed for the upcoming permit term are as follows: 1) flow frequency will be changed from continuous to daily for eDMR reporting purposes, 2) the addition of annual monitoring for total nitrogen, nitrite + nitrate nitrogen and total Kjeldahl nitrogen, 3) fecal coliform monitoring and limits were replaced with Escherichia coli (E. coli) monitoring and limits, 4) the conditional reapproval of a multi-discharger variance (MDV) for phosphorus and the inclusion of the associated compliance schedules to comply with s. 283.16, Wis. Stats. requirements for phosphorus, 5) monitoring for PFOS and PFOA every other month has been added in accordance with s. NR 106.98(2)(c), Wis. Adm. Code, and 6) removal of the effluent copper limit and replaced with monthly monitoring in accordance with s. NR 207.12(3)(a), Wis. Adm. Code. Additionally, to quantitate the risk, PFAS sludge sampling has been included in the permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

Substantial Compliance Determination

Enforcement During Last Permit: NON was sent March 3, 2021, this permit term for a Treatment Facility Overflow (TFO), which is the standard policy when a SSO or TFO occurs, and the TFO was addressed. Prescott WWTF (Prescott) had some missing data, exceedances, and report issues that have been addressed. After a desk top review of all discharge monitoring reports, land app reports, compliance schedule, and a compliance inspection on August 17, 2023, this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by Adebowale Adesanwo on 09/30/2023.

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
701	0.338 MGD in 2023	Representative influent samples shall be collected at the pretreatment building after the Parshall flume.
001	0.323 MGD in 2023	Representative effluent samples (other than for E. coli) shall be collected at building #60 prior to the UV disinfection unit. Samples for E. coli shall be collected after disinfection.
002	64 Metric Tons in 2023	As long as sludge is shipped to the West Central Wisconsin Biosolids Facility (WCWBF) for disposal, representative sludge samples shall be monitored annually for List 1 and once in 2025 for PFAS. Sludge samples shall be collected prior to hauling and test results shall be reported on Form 3400-49 "Waste Characteristics Report". Hauled sludge reports shall be submitted on Form 3400-52 "Other Methods of Disposal or Distribution Report" following each year that sludge is hauled. Department notification and approval is required prior to changes to this disposal option.

1 Influent – Monitoring Requirements

Sample Point Number: 701- INFLUENT TO PLANT

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total		mg/L	3/Week	24-Hr Flow Prop Comp	

Changes from Previous Permit:

The sample frequency for flow has been changed from “continuous” to “daily” for eDMR reporting purposes.

Explanation of Limits and Monitoring Requirements

Monitoring of influent flow, BOD5 and total suspended solids is required by s. NR 210.04(2), Wis. Adm. Code, to assess wastewater strengths and volumes and to demonstrate the percent removal requirements in s. NR 210.05, Wis. Adm. Code, and in the Standard Requirements section of the permit.

2 Surface Water - Monitoring and Limitations

Sample Point Number: 001- EFFLUENT to MISSISSIPPI

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD5, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp	
BOD5, Total	Weekly Avg	45 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	30 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Weekly Avg	45 mg/L	3/Week	24-Hr Flow Prop Comp	
pH Field	Daily Max	9.0 su	Daily	Grab	
pH Field	Daily Min	6.0 su	Daily	Grab	
Copper, Total Recoverable		ug/L	Quarterly	24-Hr Flow Prop Comp	
Hardness, Total as CaCO3		mg/L	Quarterly	24-Hr Flow Prop Comp	Sample concurrently with Copper
Chloride		mg/L	Quarterly	24-Hr Flow Prop Comp	
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Limit Effective May - September annually.
E. coli	% Exceedance	10 Percent	Monthly	Calculated	Limit Effective May - September annually. See the E. coli Percent Limit section below. Enter the result in the DMR on the last day of the month.
Phosphorus, Total	Monthly Avg	0.6 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective on 07/01/2028. See the MDV/Phosphorus subsections and phosphorus schedules.
Phosphorus, Total	Monthly Avg	0.8 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective through 06/30/2028. See the MDV/Phosphorus subsections and phosphorus schedules.
Phosphorus, Total		lbs/month	Monthly	Calculated	Report the total monthly phosphorus discharged in lbs/month on the last day of the month on the DMR. See

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					Standard Requirements for 'Appropriate Formulas' to calculate the Total Monthly Discharge in lbs/month.
Phosphorus, Total		lbs/yr	Annual	Calculated	Report the sum of the total monthly discharges (for the months that the MDV is in effect) for the calendar year on the Annual report form.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	See Nitrogen series section below.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	See Nitrogen series section below.
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	See Nitrogen series section below. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.
PFOS		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.
PFOA		ng/L	1/ 2 Months	Grab	Monitoring only. See PFOS/PFOA Minimization Plan Determination of Need schedule.

Changes from Previous Permit

Changes for the upcoming permit term are as follows: 1) flow frequency will be changed from continuous to daily for eDMR reporting purposes, 2) the addition of annual monitoring for total nitrogen, nitrite + nitrate nitrogen and total Kjeldahl nitrogen, 3) fecal coliform monitoring and limits were replaced with Escherichia coli (E. coli) monitoring and limits, 4) the conditional reapproval of a multi-discharger variance (MDV) for phosphorus and the inclusion of the associated compliance schedules to comply with s. 283.16, Wis. Stats. requirements for phosphorus, 5) monitoring for PFOS and PFOA every other month has been added in accordance with s. NR 106.98(2)(c), Wis. Adm. Code, and 6) removal of the effluent copper limit and replaced with monthly monitoring in accordance with s. NR 207.12(3)(a), Wis. Adm. Code.

Explanation of Limits and Monitoring Requirements

The effluent monitoring frequency for all parameters were considered. Monitoring frequencies are based on the size and type of the facility and are established to best characterize effluent quality and variability, to detect events of noncompliance, and to ensure fairness and consistency in permits issued across the state. Requirements in administrative code (NR 108, 205, 210 and 214 Wis. Adm. Code) and Section 283.55, Wis. Stats. were considered, where applicable, when determining the appropriate monitoring frequencies for pollutants that have final effluent limits in effect during this permit term. For more information see the March 22, 2021 version of the Bureau of Water Quality Program Guidance

Document “Monitoring Frequencies for Individual Wastewater Permits”. Using the criteria previously stated, the department has determined the flow frequency will be changed from continuous to daily for eDMR reporting purposes.

MUNICIPAL EFFLUENT LIMITS –In accordance with the federal regulation 40 CFR 122.45(d), and to comply with the expression of limits requirements in ss. NR 106.07 and NR 205.065(7), Wis. Adm. Codes, limits in this permit are to be expressed as weekly average and monthly average limits whenever practicable.

BOD, TSS and pH: Monitoring and limits for BOD, TSS and pH correspond to the requirements in the current permit since the facility has not increased the capacity of the wastewater treatment system since the last permit issuance, nor are increases expected during the term of the proposed permit.

Limits were determined for this existing discharge using chs. NR 102, 104,105, 106, 207, 210, 212 and 217 of the Wisconsin Administrative Code (where applicable). For additional information on any of the limits see the April 15, 2024 memo from Ben Hartenbower to Angela Parkhurst titled “Water Quality-Based Effluent Limitations for the Prescott Wastewater Treatment Facility WPDES Permit No. WI-0022403”.

Ammonia- Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code. Subchapter IV of ch. NR 106 establishes the procedure for calculating water quality based effluent limitations (WQBELs) for ammonia. The effluent concentrations from the facility’s discharge are below the calculated WQBELs for ammonia, therefore no effluent limits or monitoring are needed.

Chloride: Acute and chronic chloride toxicity criteria for the protection of aquatic life are included in Tables 1 and 5 of ch. NR 105, Wis. Adm. Code. Subchapter VII of ch. NR 106 establishes the procedure for calculating water quality based effluent limitations (WQBELs) for chloride. Based on a comparison of effluent chloride concentration data and calculated effluent limitations, it has been determined that chloride effluent limits are not required, however monthly monitoring is required in 2027 so that adequate chloride effluent data is available for calculating limits for the next permit reissuance.

Copper-Considering available effluent data from the current permit term (July 2019 to January 2024), the 4-day P₉₉ concentration is 58.5 µg/L and the 1-day P₉₉ concentration is 97.8 µg/L, with a maximum concentration of 80 µg/L. These effluent concentrations are below the calculated WQBELs for copper, therefore no effluent limits are needed. The removal of the daily maximum, weekly and monthly average copper limits will not increase the concentration, level, or loading of copper to the Mississippi River. Therefore, antidegradation would not be applicable. To be consistent with antibacksliding requirements, the current limits may be removed in accordance with s. NR 207.12(3)(a), Wis. Adm. Code. To ensure that representative sample results are available at the next permit issuance, copper and hardness monitoring are required to continue.

Mercury-The permit application did not require monitoring for mercury because the Prescott Wastewater Treatment Facility is categorized as a minor facility as defined in s. NR 200.02(8), Wis. Adm. Code. In accordance with s. NR 106.145(3)(a)3., Wis. Adm. Code, a minor municipal discharger shall monitor, and report results of influent and effluent mercury monitoring once every three months if, there are two or more exceedances in the last five years of the high-quality sludge mercury concentration of 17 mg/kg specified in s. NR 204.07(5). A review of the past five years of sludge characteristics data reveals that all the sample results are within expected analytical ranges and well below the 17 mg/kg level. The average concentration in the sludge from 2020 to 2023 was 0.79 mg/kg, with a maximum reported concentration of 1.50 mg/kg. Therefore, no mercury monitoring is required.

E. Coli- Revisions to bacteria surface water quality criteria to protect recreational uses and accompanying E. coli WPDES permit implementation procedures became effective May 1, 2020. The new rule requires that WPDES permits for facilities with required disinfection include monitoring for E. coli while facilities are disinfecting during the recreation period, and establish effluent limitations for E. coli established in s. NR 210.06 (2), Wis. Adm Code. The administrative code rule changes included the following actions: revised the bacteria water quality criteria from fecal coliform to E. coli

to protect recreation in ch. NR 102, Wis. Adm. Code.; removed fecal coliform criteria for certain individual waters from ch. NR 104, Wis. Adm. Code.; revised permit requirements for publicly and privately owned sewage treatment works in ch. NR 210, Wis. Adm. Code.; and, updated approved analytical methods for bacteria in ch. NR 219, Wis. Adm. Code.

E. coli monitoring is required at the same frequency that fecal coliform monitoring is required in the current permit. Because the Prescott Wastewater Treatment Facility permit requires weekly monitoring, the 410 counts/100 mL limit will effectively function as a daily maximum limit unless the facility performs additional monitoring. Any additional monitoring beyond what is required by the permit must also be reported on the DMR as required in the standard requirements section of the permit.

These limits are required during May through September. There are no changes to the required disinfection season.

Thermal- 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.

Due to the amount of upstream flow available for dilution in the limit calculation ($Q_s:Q_e >20:1$), the lowest calculated limitation is 120° F (s. NR 106.55(6)(a), Wis. Adm. Code). For treatment systems of domestic waste, there is no reasonable potential for the discharge to exceed this limit.

Phosphorus: Phosphorus rules became effective December 1, 2010 per NR 217, Wis. Adm. Code, that required the permittee to comply with water quality based effluent limits (WQBELs) for total phosphorous. The final phosphorus WQBELs are 0.300 mg/L (monthly average) and 0.100 mg/L (6-month average) and were to become effective as scheduled unless a variance was granted. For this permit term, the permittee has re-applied for the Multi-Discharger Variance (MDV) for phosphorus as provided for in s. 283.16, Wis. Stats., and approved by USEPA on February 6, 2017 for a 10-year duration. The permittee qualifies for the MDV because it is an existing source and a major facility upgrade is needed to comply with the applicable phosphorus WQBELs, thereby creating a financial burden. The monthly average interim effluent limit for total phosphorus of 0.8 mg/L carries over from the current permit and will lower to 0.6 mg/L per the associated compliance schedule. The permittee was reapproved for the MDV on April 12, 2024.

Conditions of the MDV require the permittee to optimize phosphorus removal throughout the proposed permit term, comply with interim limits and make annual payments to participating county(s) by March 1 of each year based on the pounds of phosphorus discharged during the previous year in excess of the specified target value. A reopener clause is included in the permit to address the current MDV's expiration date, as a permit action may be required to update or remove variance provisions if the MDV is altered or unavailable after February 6, 2027.

The "price per pound" value is \$50.00 adjusted for CPI annually during the first quarter as defined by s. 283.16(8)(a)2, Wis. Stats and takes effect for reissued permits with effective dates starting April 1. This may differ from the "price per pound" that is public noticed; however, the "price per pound" is set upon reissuance and is applicable for the entire permit term. The participating county(s) uses these payments to implement non-point source phosphorus control strategies at the watershed level.

Total Nitrogen Monitoring (NO₂+NO₃, TKN and Total N)- The Department has included effluent monitoring for Total Nitrogen in the permit through the authority under §§ 283.55(1)(e), Wis. Stats., which allows the department to require the permittee to submit information necessary to identify the type and quantity of any pollutants discharged from the point source, and through s. NR 200.065(1)(h), Wis. Adm. Code, which allows for this monitoring to be collected during the permit term. More information on the justification to include total nitrogen monitoring in wastewater permits can be found in the "Guidance for Total Nitrogen Monitoring in Wastewater Permits" dated October 1, 2019. Annual tests are scheduled in the following rotating quarters:

- July -September 2024
- October – December 2025
- April – June 2026
- July – September 2027
- October - December 2028

NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. At the first reissuance of a WPDES permit after August 1, 2022, the new rule requires WPDES permits for municipal dischargers with an average flow rate less than 1 MGD, to be evaluated on a case-by-case basis to determine if monitoring is required pursuant to s. NR 106.98(2)(c), Wis. Adm. Code. The department evaluated the need for PFOS and PFOA monitoring taking into consideration the presence of potential PFOS or PFOA industrial wastes, remediation sites and other potential sources of PFOS or PFOA. Based on information available at the time the proposed permit was drafted, PFOS/PFOA monitoring is required because of the nondomestic contributions. Therefore, monitoring once every two months is included. The initial determination of the need for sampling shall be conducted for up to two years in order to determine if the permitted discharge has the reasonable potential to cause or contribute to an exceedance of the PFOS or PFOA standards under s. NR 102.04(8)(d)1, Wis. Adm. Code.

Whole Effluent Toxicity- Whole effluent toxicity (WET) testing requirements and limits (if applicable) are determined in accordance with ss. NR 106.08 and NR 106.09 Wis. Adm. Code, as revised August 2016. (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>). Using this guidance, no WET tests are required.

3 Land Application - Monitoring and Limitations

Municipal Sludge Description						
Sample Point	Sludge Class (A or B)	Sludge Type (Liquid or Cake)	Pathogen Reduction Method	Vector Attraction Method	Reuse Option	Amount Reused/Disposed (Dry Tons/Year)
002	B	Liquid	N/A	N/A	Hauled	64
Does sludge management demonstrate compliance? Yes						
Is additional sludge storage required? No						
Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? No						
If yes, special monitoring and recycling conditions will be included in the permit to track any potential problems in landapplying sludge from this facility						
Is a priority pollutant scan required? No						
Priority pollutant scans are required once every 10 years at facilities with design flows between 5 MGD and 40 MGD, and once every 5 years if design flow is greater than 40 MGD.						

Sample Point Number: 002- SLUDGE HAULED to the WCWBF

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Annual	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Arsenic Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Annual	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Annual	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Annual	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Annual	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Annual	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Annual	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Annual	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Annual	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Annual	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Annual	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Annual	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Annual	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Annual	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Annual	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Annual	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Annual	Composite	
PFOA + PFOS		ug/kg	Once	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Once	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

Changes from Previous Permit:

PFAS – Once monitoring is included in the permit pursuant s. NR 204.06(2)(b)9., Wis. Adm. Code.

Explanation of Limits and Monitoring Requirements

Requirements for land application of municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements.

PFAS- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA is currently developing a risk assessment to determine future land application rates and expects to release this risk assessment by the end of 2024. In the interim, the department has developed the “Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS”.

Collecting sludge data on PFAS concentrations from a wide range of wastewater treatment facilities will help protect public health from exposure to elevated levels of PFAS and determine the department’s implementation of EPA’s recommendations. To quantitate this risk, PFAS sampling has been included in the proposed WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

4 Schedules

4.1 Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L)

This compliance schedule requires the permittee to achieve compliance with the specified MDV interim effluent limit in accordance with s. 283.16(6), Wis. Stats., by the due date.

Required Action	Due Date
Report on Effluent Discharges: Submit a report on effluent discharges of phosphorus with conclusions regarding compliance.	06/30/2025
Action Plan: Submit an action plan for complying with the specified interim effluent limit. If construction is required, include plans and specifications with the submittal.	06/30/2026
Initiate Actions: Initiate actions identified in the plan.	06/30/2027
Complete Actions: Complete actions identified in the plan and achieve compliance with the specified interim effluent limit.	06/30/2028

4.2 Phosphorus Schedule - Continued Optimization

The permittee is required to optimize performance to control phosphorus discharges per the following schedule.

Required Action	Due Date
Optimization: The permittee shall continue to implement the optimization plan as previously approved to optimize performance to control phosphorus discharges. Submit a progress report on optimizing removal of phosphorus by the Due Date.	06/30/2025
Progress Report #2: Submit a progress report on optimizing removal of phosphorus.	06/30/2026
Progress Report #3: Submit a progress report on optimizing removal of phosphorus.	06/30/2027
Progress Report #4: Submit a progress report on optimizing removal of phosphorus.	06/30/2028
Progress Report #5: Submit a progress report on optimizing removal of phosphorus.	06/30/2029

4.3 Phosphorus Payment per Pound to County

The permittee is required to make annual payments for phosphorus reductions to the participating county or counties in accordance with s. 283.16(8), Wis. Stats, and the following schedule. The price per pound will be set at the time of permit reissuance and will apply for the duration of the permit.

Required Action	Due Date
<p>Annual Verification of Phosphorus Payment to County: The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: [(lbs of phosphorus discharged minus the permittee's target value) times (\$64.75 per pound)] or \$640,000, whichever is less. See the payment calculation steps in the Surface Water section.</p> <p>The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year indicating total amount remitted to the participating counties to verify that the correct payment was made. The first payment verification form is due by the specified Due Date.</p>	03/01/2025

Note: The applicable Target Value is 0.2 mg/L as defined by s. 283.16(1)(h), Wis. Stats. The "per pound" value is \$50.00 adjusted for CPI.	
Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2026
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2027
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2028
Annual Verification of Payment #5: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2029
Continued Coverage: If the permittee intends to seek a renewed variance, an application for the MDV (Multi Discharger Variance) shall be submitted as part of the application for permit reissuance in accordance with s. 283.16(4)(b), Wis. Stats.	
Annual Verification of Payment After Permit Expiration: In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.	

Explanation of Schedules

Continued Optimization

Per s. 283.16(6)(a), Wis. Stats. the Department may include a requirement that the permittee optimize the performance of a point source in controlling phosphorus discharges, which may be necessary to achieve compliance with multi-discharger variance interim limits. This compliance schedule requires the permittee to continue to implement the optimization plan that was approved during the previous permit term.

Interim Limit (0.6 mg/L)

Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. The schedule above provides the permittee with two years to comply with the 0.6 mg/L limit.

County Payment

Subsection 283.16(6)(b), Wis. Stats., requires permittees that have received approval for the multi-discharger variance (MDV) to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the "Payment to Counties" watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payment(s) to participating county(s) that are calculated based on the amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal \$64.75 per pound. This schedule requires the permittee to submit Form 3200-151 to the Department indicating the total amount remitted to the participating county(s).

PFOS/PFOA Minimization Plan Determination of Need

As stated above, NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. S. NR 106.98, Wis. Adm. Code, specifies steps to generate data in order to determine the need for reducing PFOS and PFOA in the discharge. Data generated per the effluent monitoring requirements will be used to

determine the need for developing a PFOS/PFOA minimization plan. As part of the schedule, the permittee is required to submit two annual Reports on Effluent Discharge.

If the Department determines that a minimization plan is needed, the permit will be modified or revoked/reissued to include additional requirements.

Special Reporting Requirements

None

Other Comments:

None

Attachments:

Water Quality Based Effluent Limits: April 15, 2024 memo from Ben Hartenbower to Angela Parkhurst titled “Water Quality-Based Effluent Limitations for the Prescott Wastewater Treatment Facility WPDES Permit No. WI-0022403”

MDV checklist and conditional approval dated 4/12/2024.

Expiration Date:

June 30, 2029

Justification Of Any Waivers From Permit Application Requirements

N/A

Prepared By: Angela Parkhurst Wastewater Specialist

Date: May 8, 2024

Notice of Reissuance will be published in the Prescott Journal, PO Box 157, Prescott, WI 54021-0157.

DATE: April 15, 2024

TO: Angela Parkhurst– WCR/Eau Claire

FROM: Benjamin Hartenbower – WCR/Eau Claire

SUBJECT: Water Quality-Based Effluent Limitations for the Prescott Wastewater Treatment Facility
WPDES Permit No. WI-0022403

This is in response to your request for an evaluation of the need for water quality-based effluent limitations (WQBELs) using chapters NR 102, 104, 105, 106, 207, 210, 212, and 217 of the Wisconsin Administrative Code (where applicable), for the discharge from the Prescott Wastewater Treatment Facility in Pierce County. This municipal wastewater treatment facility (WWTF) discharges to the Mississippi River, located in the Trimbelle River and Isabelle Creek Watershed in the Lower Chippewa River Basin. The evaluation of the permit recommendations is discussed in more detail in the attached report.

Based on our review, the following recommendations are made on a chemical-specific basis at Outfall 001:

Parameter	Daily Maximum	Daily Minimum	Weekly Average	Monthly Average	Six-Month Average	Footnotes
Flow Rate						1,2
BOD ₅			45 mg/L	30 mg/L		1
TSS			45 mg/L	30 mg/L		1
pH	9.0 s.u.	6.0 s.u.				1
<i>E. coli</i>				126#/100 mL geometric mean		3
Copper						2
Hardness						4
Chloride						1,2
PFOS and PFOA						5
Phosphorus Interim HAC Interim Limit Final WQBEL				0.80 mg/L 0.60 mg/L 0.300 mg/L	0.100 mg/L	6
TKN, Nitrate+Nitrite, and Total Nitrogen						7

Footnotes:

1. No changes from the current permit.
2. Monitoring only.
3. Bacteria limits apply during the disinfection season of May-September. Additional limit: No more than 10 percent of *E. coli* bacteria samples collected in any calendar month may exceed 410 count/100 mL.
4. Hardness monitoring is recommended because of the relationship between hardness and daily maximum limits based on acute toxicity criteria.
5. Monitoring once every two months is required in accordance with s. NR 106.98(2), Wis. Adm. Code.
6. Under the phosphorus MDV, a level currently achievable (LCA) interim limit of 0.8 mg/L should be effective upon permit reissuance. A compliance schedule may be included in the permit until the highest attainable condition (HAC) limit of 0.6 mg/L can be met. The final WQBELs remain

at 0.3 mg/L as a monthly average and 0.1 mg/L as a six-month average, as well as a respective mass limit.

7. As recommended in the Department's October 1, 2019 Guidance for Total Nitrogen Monitoring in Wastewater Permits, annual total nitrogen monitoring is recommended for all minor municipal permittees. Total Nitrogen is the sum of nitrate (NO₃), nitrite (NO₂), and total kjeldahl nitrogen (TKN) (all expressed as N).

Please consult the attached report for details regarding the above recommendations. If there are any questions or comments, please contact Benjamin Hartenbower at (715) 225-4705 or Benjamin.Hartenbower@wisconsin.gov or Diane Figiel at Diane.Figiel@wisconsin.gov.

Attachments (2) – Narrative & Map

PREPARED BY:



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Date: 04/15/2024

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**Water Quality-Based Effluent Limitations for
the Prescott Wastewater Treatment Facility
WPDES Permit No. WI-0022403**

Prepared by: Benjamin P. Hartenbower

PART 1 – BACKGROUND INFORMATION

Facility Description:

The Prescott Wastewater Treatment Facility treats domestic wastewater from the City of Prescott and industrial wastewater from one nondomestic contributor. Preliminary treatment consists of bar and fine screens and grit removal. Secondary treatment consists of anaerobic mixing, activated sludge aeration with biological phosphorus removal and secondary clarification. Effluent is then disinfected using ultraviolet (UV) light prior to discharge to the Mississippi River. Sludge is thickened using a belt thickener before it is trucked to the West Central Wisconsin Biosolids Facility (WCWBF) for final processing.

Attachment #2 is a map of the area showing the approximate location of Outfall 001.

Existing Permit Limitations

The current permit, expiring on June 30, 2024, includes the following effluent limitations and monitoring requirements.

Parameter	Daily Maximum	Daily Minimum	Weekly Average	Monthly Average	Six-Month Average	Footnotes
Flow Rate						1,2
BOD ₅			45 mg/L	30 mg/L		1
TSS			45 mg/L	30 mg/L		1
pH	9.0 s.u.	6.0 s.u.				1
Fecal Coliform May-September			656#/100 mL geometric mean	400#/100 mL geometric mean		
Copper	99 µg/L, 0.44 lbs/day		99 µg/L	99 µg/L		
Hardness						2
Chloride						2
Phosphorus Interim HAC Interim Limit				1.3 mg/L 0.8 mg/L		3

Footnotes:

1. These limitations are not being evaluated as part of this review. Because the water quality criteria (WQC), reference effluent flow rates, and receiving water characteristics have not changed, limitations for these water quality characteristics do not need to be re-evaluated at this time.
2. Monitoring only.
3. Under the phosphorus MDV, a highest attainable condition (HAC) limit of 0.8 mg/L was effective June 30, 2023.

Receiving Water Information

- Name: The Mississippi River
- Waterbody Identification Code (WBIC): 721000
- Classification used in accordance with chs. NR 102 and 104, Wis. Adm. Code: Warm Water Sport Fish (WWSF) community, non-public water supply.
Low flows used in accordance with chs. NR 106 and 217, Wis. Adm. Code: USGS for Station 05344500 at the Mississippi River in Prescott, WI
 - 7-Q₁₀ = 3332 cfs (cubic feet per second)
 - 7-Q₂ = 5949 cfs
 - Harmonic Mean Flow = 12267 cfs using a drainage area of 44800 mi².
- Hardness = 166 mg/L as CaCO₃. This value represents the geometric mean of 102 samples collected in Mississippi River from 01/19/1977 to 12/05/1990.
- % of low flow used to calculate limits in accordance with s. NR 106.06(4)(c)5., Wis. Adm. Code: 25%
- Source of background concentration data: Metals and chloride data from the the Mississippi River is used for this evaluation. The numerical values are shown in the tables below. If no data is available, the background concentration is assumed to be negligible and a value of zero is used in the computations. Background data for calculating effluent limitations for ammonia nitrogen are described later.
- Multiple dischargers: There are several other dischargers to the Mississippi River however they are not in the immediate vicinity and the mixing zones do not overlap. Therefore, the other dischargers do not impact this evaluation.
- Impaired water status: The Mississippi River is listed as impaired for PCBs, Total Phosphorus, and Mercury.

Effluent Information:

- Design Flow Rates(s):
 - Annual Average = 0.432 MGD (Million Gallons per Day)
 - Peak daily = 0.533 MGDFor reference, the actual average flow from July 2019 to January 2024 was 0.300 MGD.
- Hardness = 373 mg/L as CaCO₃. This value represents the geometric mean of 18 effluent samples collected from 07/22/2019 to 11/28/2023.
- Acute dilution factor used in accordance with s. NR 106.06 (3) (c), Wis. Adm. Code: Not applicable – this facility does not have an approved Zone of Initial Dilution (ZID).
- Water Source: Domestic wastewater with water supply from wells and nondomestic contribution from TCLAD Inc. (Henkel Company).
- Additives: Lanthanum Chloride (No-Phos)
- Effluent characterization: This facility is categorized as a minor municipality, so the permit application required effluent sample analyses for a limited number of common pollutants, as specified in s. NR 200.065, Table 1, Wis. Adm. Code, primarily metal substances plus Ammonia. The permit-required monitoring for Copper, Chloride, Hardness, and Phosphorus from July 2019 to January 2024 is used in this evaluation.

Chemical Specific Effluent Data at Outfall 001

	Copper µg/L	Chloride mg/L
1-day P ₉₉	97.816	508
4-day P ₉₉	58.533	462
30-day P ₉₉	38.728	435
Mean	29.749	420
Std	19.009	35
Sample size	54	18
Range	0.018 - 80	360 - 470

Effluent data for substances for which a single sample was analyzed is shown in the tables in Part 2 below, in the column titled “MEAN EFFL. CONC.”.

The following table presents the average concentrations and loadings at Outfall 001 from July 2019 to January 2024 for all parameters with limits in the current permit to meet the requirements of s. NR 201.03(6):

Parameter Averages with Limits

	Average Measurement	Average Mass Discharged
BOD ₅	15 mg/L*	
TSS	8 mg/L*	
pH	7.26 s.u.	
Fecal Coliform	72#/100 mL	
Copper	29.749 ug/L	0.0741 lbs/day
Phosphorus	0.775 mg/L	

*Results below the level of detection (LOD) were included as zeroes in calculation of average.

**PART 2 – WATER QUALITY-BASED Effluent Limitations
for Toxic Substances – EXCEPT AMMONIA NITROGEN**

Permit limits for toxic substances are required whenever any of the following occur:

1. The maximum effluent concentration exceeds the calculated limit (s. NR 106.05(3), Wis. Adm. Code)
2. If 11 or more detected results are available in the effluent, the upper 99th percentile (or P₉₉) value exceeds the comparable calculated limit (s. NR 106.05(4), Wis. Adm. Code)
3. If fewer than 11 detected results are available, the mean effluent concentration exceeds 1/5 of the calculated limit (s. NR 106.05(6), Wis. Adm. Code)

Acute Limits based on 1-Q₁₀

Daily maximum effluent limitations for toxic substances are based on the acute toxicity criteria (ATC), listed in ch. NR 105, Wis. Adm. Code. Previously daily maximum limits for toxic substances were calculated as two times the ATC. However, changes to ch. NR 106, Wis. Code, (September 1, 2016) require the Department to calculate acute limitations using the same mass balance equation as used for other limits along with the 1-Q₁₀ receiving water low flow to determine if more restrictive effluent limitations are needed to protect the receiving stream from discharges which may cause or contribute to an exceedance of the acute water quality standards. The mass balance equation is provided below.

$$\text{Limitation} = \frac{(\text{WQC}) (Q_s + (1-f) Q_e) - (Q_s - f Q_e) (C_s)}{Q_e}$$

Where:

WQC = Acute toxicity criterion or secondary acute value according to ch. NR 105, Wis. Adm. Code.

Q_s = average minimum 1-day flow which occurs once in 10 years (1-day Q₁₀)
 if the 1-day Q₁₀ flow data is not available = 80% of the average minimum 7-day flow which occurs once in 10 years (7-day Q₁₀).

Q_e = Effluent flow (in units of volume per unit time) as specified in s. NR 106.06(4)(d), Wis. Adm. Code.

f = Fraction of the effluent flow that is withdrawn from the receiving water, and

C_s = Background concentration of the substance (in units of mass per unit volume) as specified in s. NR 106.06(4)(e), Wis. Adm. Code.

If the receiving water is effluent dominated under low stream flow conditions, the 1-Q₁₀ method of limit calculation produces the most stringent daily maximum limitations and should be used while making reasonable potential determinations. This is not the case for the City of Prescott Wastewater Treatment Facility and the limits are set based on two times the acute toxicity criteria.

The following tables list the calculated WQBELs for this discharge along with the results of effluent sampling. All concentrations are expressed in terms of micrograms per Liter (µg/L), except for hardness and chloride (mg/L).

Daily Maximum Limits based on Acute Toxicity Criteria (ATC)

RECEIVING WATER FLOW = 2666 cfs, (1-Q₁₀ (estimated as 80% of 7-Q₁₀)), as specified in s. NR 106.06 (3) (bm), Wis. Adm. Code.

SUBSTANCE	REF. HARD.* mg/L	ATC	MEAN BACK-GRD.	MAX. EFFL. LIMIT**	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.	1-day P ₉₉	1-day MAX. CONC.
Arsenic		339.8		679.6	135.9	<1.0		
Cadmium	373	46.71	0.037	93.4	18.7	<2		
Chromium (+3)	301	4445.84	0.730	8891.7	1778.3	<3		
Copper	373	53.78	1.962	107.6			97.8	80
Lead	356	364.66	0.791	729.3	145.9	<1		
Nickel	268	1080.28		2160.6	432.1	9		
Zinc	333	344.68	5.220	689.4	137.9	39		
Chloride		757	16.9	1514			508	470

Attachment #1

* The indicated hardness may differ from the effluent hardness because the effluent hardness exceeded the maximum range in ch. NR 105, Wis. Adm. Code, over which the acute criteria are applicable. In that case, the maximum of the range is used to calculate the criterion.

** The 2 × ATC method of limit calculation yields a more restrictive limit than consideration of ambient concentrations and 1-Q₁₀ flow rates per the changes to s. NR 106.07(3), Wis. Adm. Code, effective 09/01/2016.

Weekly Average Limits based on Chronic Toxicity Criteria (CTC)

RECEIVING WATER FLOW = 833 cfs (¼ of the 7-Q₁₀), as specified in s. NR 106.06 (4) (c), Wis. Adm. Code

SUBSTANCE	REF. HARD. mg/L	CTC	MEAN BACK-GRD.	WEEKLY AVE. LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.	4-day P ₉₉
Arsenic		152.2		189827.2	37965.4	<1.0	
Cadmium	166	3.66	0.037	4518.7	903.7	<2	
Chromium (+3)	166	199.89	0.730	248397.5	49679.5	<3	
Copper	166	15.95	1.962	17448.1			58.5
Lead	166	45.65	0.791	55949.9	11190.0	<1	
Nickel	166	80.06		99852.6	19970.5	9	
Zinc	166	187.32	5.220	227124.3	45424.9	39	
Chloride		395	16.9	471592			462

Monthly Average Limits based on Wildlife Criteria (WC)

The effluent characterization did not include any effluent sampling results for substances for which Wildlife Criteria exist.

Monthly Average Limits based on Human Threshold Criteria (HTC)

RECEIVING WATER FLOW = 3067 cfs (¼ of Harmonic Mean), as specified in s. NR 106.06 (4), Wis. Adm. Code.

SUBSTANCE	HTC	MEAN BACK-GRD.	MO'LY AVE. LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.
Cadmium	370	0.037	1697781	339556	<2
Chromium (+3)	3818000	0.730	1.752E+10	3.504E+09	<3
Lead	140	0.791	638838.8	127767.8	<1
Nickel	43000		197329441	39465888	9

Monthly Average Limits based on Human Cancer Criteria (HCC)

RECEIVING WATER FLOW = 3067 cfs (¼ of Harmonic Mean), as specified in s. NR 106.06 (4), Wis. Adm. Code.

SUBSTANCE	HCC	MEAN BACK-GRD.	MO'LY AVE. LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.
Arsenic	13.3		61034.5	12206.9	<1.0

In addition to evaluating the need for limits for each individual substance for which HCC exist, s. NR 106.06(8), Wis. Adm. Code, requires the evaluation of the cumulative cancer risk. Because no effluent limits are needed based on HCC, determination of the cumulative cancer risk is not needed per s. NR 106.06(8), Wis. Adm. Code.

Conclusions and Recommendations: Based on a comparison of the effluent data and calculated effluent limitations, limits are not required for toxic substances.

Copper – Considering available effluent data from the current permit term (July 2019 to January 2024), the 4-day P₉₉ concentration is 58.5 µg/L and the 1-day P₉₉ concentration is 97.8 µg/L, with a maximum concentration of 80 µg/L.

These effluent concentrations are below the calculated WQBELs for copper, therefore no effluent limits are needed. The removal of the daily maximum, weekly and monthly average copper limits will not increase the concentration, level, or loading of copper to the Mississippi River. Therefore, antidegradation would not be applicable. To be consistent with antibacksliding requirements, the current limits may be removed in accordance with s. NR 207.12(3)(a), Wis. Adm. Code. To ensure that representative sample results are available at the next permit issuance, **copper and hardness monitoring are recommended to continue.**

PFOS and PFOA

The need for PFOS and PFOA monitoring is evaluated in accordance with s. NR 106.98, Wis. Adm. Code. Monitoring of the water supply produced a PFOS result of 3 ng/L and a PFOA result of 9.4 ng/L. The PFOS result is greater than one fifth of the criterion for the substance. Based on the nondomestic contribution and known levels of PFOS/PFOA in the source water, **PFOS and PFOA monitoring is recommended once every two months.**

Mercury – The permit application did not require monitoring for mercury because the Prescott Wastewater Treatment Facility is categorized as a minor facility as defined in s. NR 200.02(8), Wis. Adm. Code. In accordance with s. NR 106.145(3)(a)3., Wis. Adm. Code, a minor municipal discharger shall monitor, and report results of influent and effluent mercury monitoring once every three months if, there are two or more exceedances in the last five years of the high-quality sludge mercury concentration of 17 mg/kg specified in s. NR 204.07(5). A review of the past five years of sludge characteristics data reveals that all the sample results are within expected analytical ranges and well below the 17 mg/kg level. The average concentration in the sludge from 2020 to 2023 was 0.79 mg/kg, with a maximum reported concentration of 1.50 mg/kg. **Therefore, no mercury monitoring is recommended at Outfall 001.**

**PART 3 – WATER QUALITY-BASED Effluent Limitations
for AMMONIA NITROGEN**

The State of Wisconsin promulgated revised water quality standards for ammonia nitrogen in ch. NR 105, Wis. Adm. Code, effective March 1, 2004 which includes criteria based on both acute and chronic toxicity to aquatic life. Given the fact that the Prescott Wastewater Treatment Facility does not currently have ammonia nitrogen limits, the need for limits is evaluated at this time.

Daily Maximum Limits based on Acute Toxicity Criteria (ATC):

Daily maximum limitations are based on acute toxicity criteria in ch. NR 105, Wis. Adm. Code, which are a function of the effluent pH and the receiving water classification. The acute toxicity criterion (ATC) for ammonia is calculated using the following equation.

$$\text{ATC in mg/L} = [A \div (1 + 10^{(7.204 - \text{pH})})] + [B \div (1 + 10^{(\text{pH} - 7.204)})]$$

Where:

A = 0.411 and B = 58.4 for a Warm Water Sport fishery, and
 pH (s.u.) = that characteristic of the effluent.

The effluent pH data was examined as part of this evaluation. A total of 1676 sample results were reported from July 2019 to January 2024. The maximum reported value was 7.82 s.u. (Standard pH Units). The effluent pH was 7.55 s.u. or less 99% of the time. The 1-day P₉₉, calculated in accordance with s. NR 106.05(5), Wis. Adm. Code, is 7.67 s.u. The mean plus the standard deviation multiplied by a factor of 2.33, an estimate of the upper ninety ninth percentile for a normally distributed dataset, is 7.66 s.u. Therefore, a value of 7.82 s.u. is believed to represent the maximum reasonably expected pH, and therefore most appropriate for determining daily maximum limitations for ammonia nitrogen. Substituting a value of 7.82 s.u. into the equation above yields an ATC = 11.71 mg/L.

Daily Maximum Ammonia Nitrogen Effluent Limitations Calculation Method

In accordance with s. NR 106.32(2), Wis. Adm. Code daily maximum ammonia limitations are calculated using the 1-Q₁₀ receiving water low flow if it is determined that the previous method of acute ammonia limit calculation (2×ATC) is not sufficiently protective of the fish and aquatic life. The more restrictive calculated limits shall apply.

The calculated daily maximum ammonia nitrogen effluent limits using the mass balance approach with the 1-Q₁₀ (estimated as 80 % of 7-Q₁₀) and the 2×ATC approach are shown below.

Daily Maximum Ammonia Nitrogen Determination

	Ammonia Nitrogen Limit mg/L
2×ATC	23.43
1-Q ₁₀	46446

The 2×ATC method yields the most stringent limits for the Prescott Wastewater Treatment Facility.

Presented below is a table of daily maximum limitations corresponding to various effluent pH values. Use of this table is not necessarily recommended in the permit, but it is presented herein for informational purposes.

Daily Maximum Ammonia Nitrogen Limits – WWSF

Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L
6.0 ≤ pH ≤ 6.1	108	7.0 < pH ≤ 7.1	66	8.0 < pH ≤ 8.1	14
6.1 < pH ≤ 6.2	106	7.1 < pH ≤ 7.2	59	8.1 < pH ≤ 8.2	11
6.2 < pH ≤ 6.3	104	7.2 < pH ≤ 7.3	52	8.2 < pH ≤ 8.3	9.4
6.3 < pH ≤ 6.4	101	7.3 < pH ≤ 7.4	46	8.3 < pH ≤ 8.4	7.8
6.4 < pH ≤ 6.5	98	7.4 < pH ≤ 7.5	40	8.4 < pH ≤ 8.5	6.4
6.5 < pH ≤ 6.6	94	7.5 < pH ≤ 7.6	34	8.5 < pH ≤ 8.6	5.3
6.6 < pH ≤ 6.7	89	7.6 < pH ≤ 7.7	29	8.6 < pH ≤ 8.7	4.4
6.7 < pH ≤ 6.8	84	7.7 < pH ≤ 7.8	24	8.7 < pH ≤ 8.8	3.7
6.8 < pH ≤ 6.9	78	7.8 < pH ≤ 7.9	20	8.8 < pH ≤ 8.9	3.1
6.9 < pH ≤ 7.0	72	7.9 < pH ≤ 8.0	17	8.9 < pH ≤ 9.0	2.6

Weekly and Monthly Average Limits based on Chronic Toxicity Criteria (CTC)

The ammonia limit calculation also warrants evaluation of weekly and monthly average limits based on chronic toxicity criteria for ammonia, since those limits relate to the assimilative capacity of the receiving water.

Weekly average and monthly average limits for ammonia nitrogen are based on chronic toxicity criteria in ch. NR 105, Wis. Adm. Code.

The 30-day chronic toxicity criterion (CTC) for ammonia in waters classified as Warm Water Sport Fish Community is calculated by the following equation, according to subchapter IV of NR 106, Wis. Adm. Code.

$$CTC = E \times \{ [0.0676 \div (1 + 10^{(7.688 - pH)})] + [2.912 \div (1 + 10^{(pH - 7.688)})] \} \times C$$

Where:

pH = the pH (s.u.) of the receiving water,

E = 0.854,

C = the minimum of 2.85 or $1.45 \times 10^{(0.028 \times (25 - T))}$ – (Early Life Stages Present), or

C = $1.45 \times 10^{(0.028 \times (25 - T))}$ – (Early Life Stages Absent), and

T = the temperature (°C) of the receiving water – (Early Life Stages Present), or

T = the maximum of the actual temperature (°C) and 7 – (Early Life Stages Absent)

The 4-day criterion is equal to the 30-day criterion multiplied by 2.5. The 4-day criteria are used in a mass-balance equation with the 7-Q₁₀ (4-Q₃, if available) to derive weekly average limitations. And the 30-day criteria are used with the 30-Q₅ (estimated as 85% of the 7-Q₂ if the 30-Q₅ is not available) to derive monthly average limitations. The stream flow value is further adjusted to temperature; 100% of the flow is used if the Temperature ≥ 16 °C, 25% of the flow is used if the Temperature < 11 °C, and 50% of the flow is used if the Temperature ≥ 11 °C but < 16 °C.

Section NR 106.32 (3), Wis. Adm. Code, provides a mechanism for less stringent weekly average and monthly average effluent limitations when early life stages (ELS) of critical organisms are absent from the receiving water. This applies only when the water temperature is less than 14.5 °C, during the winter and spring months. Based on a review of the DNR Fisheries database, burbot, an early spawning species, are believed to be present in Mississippi River. So “ELS Absent” criteria apply from October through December, and “ELS Present” criteria will apply from January through September for a WWSF classification.

The “default” basin assumed values are used for temperature and background ammonia concentrations, because minimum ambient data is available. The values for pH are based on data collected from the Mississippi River. These values are shown in the table below, with the resulting criteria and effluent limitations.

Weekly and Monthly Ammonia Nitrogen Limits – WWSF

		April & May	June-September	October-March
Effluent Flow	Qe (MGD)	0.432	0.432	0.432
Background Information	7-Q ₁₀ (cfs)	3332	3332	3332
	7-Q ₂ (cfs)	5949	5949	5949
	Ammonia (mg/L)	0.07	0.04	0.08
	Temperature (°C)	14.4	20.6	10.0
	pH (s.u.)	7.99	8.07	7.91
	% of Flow used	50	100	25
	Reference Weekly Flow (cfs)	1666	3332	833
	Reference Monthly Flow (cfs)	2528	5057	1264
Criteria mg/L	4-day Chronic			
	Early Life Stages Present	6.13	3.71	6.89
	Early Life Stages Absent	6.16	3.71	9.23
	30-day Chronic			
	Early Life Stages Present	2.45	1.48	2.76
	Early Life Stages Absent	2.46	1.48	3.69
Effluent Limitations mg/L	Weekly Average			
	Early Life Stages Present			
	Early Life Stages Absent	15184	18274	11408
	Monthly Average			
	Early Life Stages Present			
	Early Life Stages Absent	9057	10911	6833

Effluent Data

Four samples for ammonia nitrogen were taken from October to November 2023, and their results were as follows:

Ammonia Nitrogen Effluent Data

	Ammonia Nitrogen mg/L
10/17/2023	0.4
10/24/2023	<0.1
11/06/2023	3.4
11/09/2023	2.3

Conclusions and Recommendations:

These effluent concentrations are below the calculated WQBELs for ammonia, therefore no effluent limits or monitoring are needed.

**PART 4 – WATER QUALITY-BASED Effluent Limitations
for BACTERIA**

On May 1, 2020, revisions to chs. NR 102 and NR 210, Wis. Adm. Codes, became effective which replace fecal coliform limits with new *Escherichia coli* (*E. coli*) limits for protection of recreational uses. Section NR 210.06(2)(a)1, Wis. Adm. Code, includes two limits which must be included in permits for facilities which are required to disinfect:

1. The geometric mean of *E. coli* bacteria in effluent samples collected in any calendar month may not exceed 126 counts/100 mL.
2. No more than 10 percent of *E. coli* bacteria samples collected in any calendar month may exceed 410 counts/100 mL.

E. coli monitoring is recommended at the same frequency that fecal coliform monitoring is required in the current permit. Because the Prescott Wastewater Treatment Facility permit requires weekly monitoring, the 410 counts/100 mL limit will effectively function as a daily maximum limit unless the facility performs additional monitoring. Any additional monitoring beyond what is required by the permit must also be reported on the DMR as required in the standard requirements section of the permit.

These limits are required during May through September. No changes are recommended to the required disinfection season.

Effluent Data

The Prescott Wastewater Treatment Facility has monitored effluent *E. coli* from June 2023 to September 2023 and a total of 16 results are available. A geometric mean of 126 counts/100 mL was never exceeded, with a maximum monthly geometric mean of 27 counts/100 mL. Effluent data never exceeded 410 counts/100 mL. The maximum reported value was 160 counts/100 mL. Based on this effluent data it appears that the facility can meet new *E. coli* limits and a compliance schedule is not needed in the reissued permit.

PART 5 – PHOSPHORUS

Technology-Based Effluent Limit

Subchapter II of Chapter NR 217, Wis. Adm. Code, requires municipal wastewater treatment facilities that discharge greater than 150 pounds of Total Phosphorus per month to comply with a monthly average limit of 1.0 mg/L, or an approved alternative concentration limit.

Because the current phosphorus limit at the Prescott Wastewater Treatment Facility is more restrictive than the technology-based limit, the need for this limit in the reissued permit is not evaluated. In addition, the need for a WQBEL for phosphorus must be considered.

Water Quality-Based Effluent Limits (WQBEL)

Revisions to administrative rules regulating phosphorus took effect on December 1, 2010. These rule revisions include additions to s. NR 102.06, Wis. Adm. Code, which establish phosphorus standards for surface waters. Subchapter III of NR 217, Wis. Adm. Code, establishes procedures for determining WQBELs for phosphorus, based on the applicable standards in ch. NR 102, Wis. Adm. Code.

Section NR 102.06(3)(a), Wis. Adm. Code, specifically names river segments for which a phosphorus criterion of 0.100 mg/L applies. For other stream segments that are not specified in s. NR 102.06(3)(a), Wis. Adm. Code, s. NR 102.06(3)(b), Wis. Adm. Code, specifies a phosphorus criterion of 0.075 mg/L. The phosphorus criterion of 0.100 mg/L applies for the Mississippi River.

The conservation of mass equation is described in s. NR 217.13(2)(a), Wis. Adm. Code, for phosphorus WQBELs and includes variables of water quality criterion (WQC), receiving water flow rate (Qs), effluent flow rate (Qe), and upstream phosphorus concentrations (Cs) provided below.

$$\text{Limitation} = [(WQC)(Q_s + (1-f) Q_e) - (Q_s - f Q_e) (C_s)] / Q_e$$

Where:

WQC = 0.100 mg/L for the Mississippi River.

Qs = 100% of the 7-Q₂ of 5949 cfs

Cs = background concentration of phosphorus in the receiving water pursuant to s. NR 217.13(2)(d), Wis. Adm. Code

Qe = effluent flow rate = 0.432 MGD = 0.668 cfs

f = the fraction of effluent withdrawn from the receiving water = 0

Section NR 217.13(2)(d), Wis. Adm. Code, specifies that the background phosphorus concentration used in the limit calculation formula shall be calculated using the procedures specified in s. NR 102.07(1)(b) to (c), Wis. Adm. Code. The median shall be calculated with at least one year of data using samples collected once per month during the period of May through October. All representative data from the most recent 5 years shall be used, but data from the most recent 10 years may be used if representative of current conditions.

The following data were considered in estimating the background phosphorus concentration:

Station Name	LD9	M701.1D	M752.9M	M764.3A	M786.2C
Waterbody	Mississippi River	Mississippi River	Mississippi River	Mississippi River	Mississippi River
Sample Count	60	105	105	105	105
First Sample	05/16/2008	05/13/2008	05/16/2008	05/16/2008	05/16/2008
Last Sample	10/04/2017	10/05/2017	10/04/2017	10/04/2017	10/04/2017
Mean	0.140 mg/L	0.130 mg/L	0.129 mg/L	0.130 mg/L	0.131 mg/L
Median	0.140 mg/L	0.126 mg/L	0.119 mg/L	0.122 mg/L	0.125 mg/L
Lab Analysis	WI State Lab of Hygiene	USGS	USGS	USGS	USGS

Substituting a background concentration above criteria into the limit calculation equation above would result in a calculated limit that is less than the applicable criterion of 0.100 mg/L. However, s. NR 217.13(7), Wis. Adm. Code, specifies that “if the water quality-based effluent limitation calculated pursuant to the procedures in this section is less than the phosphorus criterion specified in s. NR 102.06, Wis. Adm. Code, for the water body, the effluent limit shall be set equal to the criterion.”

The impaired water listing of the Mississippi River also points towards the notion that effluent phosphorus limits equal to the water quality criterion are needed to prevent the discharge from contributing to further impairment of the receiving water. The Guidance for Implementing Wisconsin’s Phosphorus Water Quality Standards for Point Source Discharges (2020) suggests setting effluent limits equal to the criterion in the absence of an EPA approved total maximum daily load for discharges to phosphorus impaired waters.

Effluent Data

The following table summarizes effluent total phosphorus monitoring data from July 2019 to January 2024.

	Phosphorus mg/L
1-day P ₉₉	6.28
4-day P ₉₉	3.54
30-day P ₉₉	1.58
Mean	0.78
Std	1.43
Sample size	717
Range	0.066 - 16

Reasonable Potential Determination

Since the 30-day P₉₉ of reported effluent total phosphorus data is greater than the calculated WQBEL, the discharge has reasonable potential to cause or contribute to an exceedance of the water quality criterion. Therefore, a WQBEL is required.

Limit Expression

According to s. NR 217.14 (2), Wis. Adm. Code, because the calculated WQBEL is less than or equal to 0.3 mg/L, the effluent limit of 0.100 mg/L may be expressed as a six-month average. If a concentration limitation expressed as a six-month average is included in the permit, a monthly average concentration limitation of 0.300 mg/L, equal to three times the WQBEL calculated under s. NR 217.13, Wis. Adm. Code shall also be included in the permit. The six-month average should be averaged during the months of May – October and November – April.

Mass Limits

Because the discharge is to a surface water that is to or upstream of a phosphorus impaired water, a mass limit is also required, pursuant to s. NR 217.14(1)(a), Wis. Adm. Code. This final mass limit shall be 0.100 mg/L × 8.34 × 0.432 MGD = 0.36 lbs/day expressed as a six-month average.

Multi-Discharge Variance Interim Limit

With the permit application, the City of Prescott has re-applied for the phosphorus multi-discharger variance (MDV). Conditions of the phosphorus MDV require the facility to comply with an interim phosphorus limit in lieu of meeting the final WQBEL. The recommended interim limit during the 2nd permit under MDV approval, pursuant to s. 283.16 (6)(a), Wis. Stats., is 0.60 mg/L as a monthly average. A compliance schedule may be appropriate to meet this interim limit but compliance with 0.60 mg/L shall be no later than the end of the reissued permit. The previous interim limit of 0.80 mg/L should not be exceeded during the compliance schedule.

PART 6 – WATER QUALITY-BASED Effluent Limitations for THERMAL

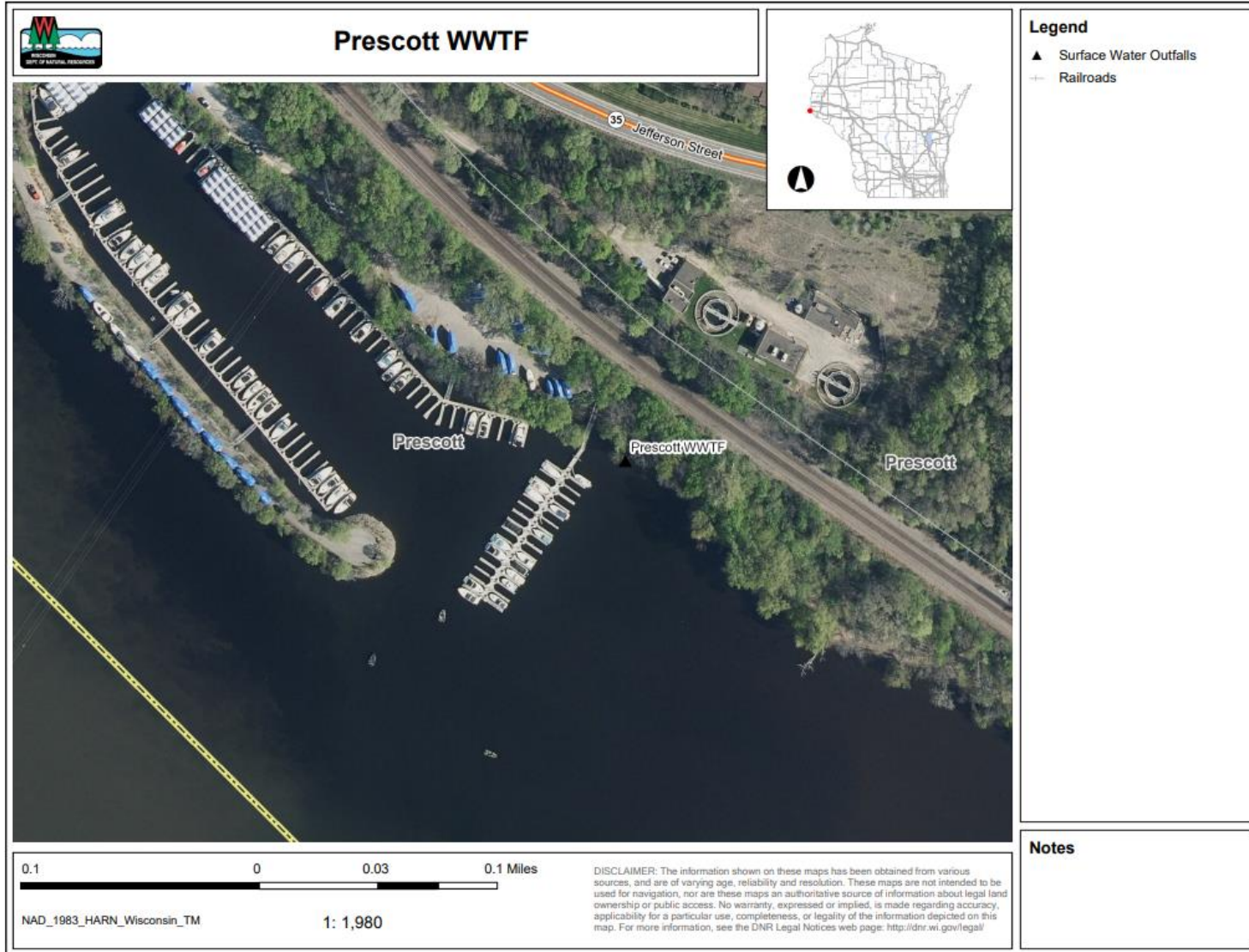
Surface water quality standards for temperature took effect on October 1, 2010. These regulations are detailed in chs. NR 102 (Subchapter II – Water Quality Standards for Temperature) and NR 106 (Subchapter V – Effluent Limitations for Temperature) of the Wisconsin Administrative Code. Daily maximum and weekly average temperature criteria are available for the 12 different months of the year depending on the receiving water classification.

Due to the amount of upstream flow available for dilution in the limit calculation ($Q_s:Q_e >20:1$), the lowest calculated limitation is 120° F (s. NR 106.55(6)(a), Wis. Adm. Code). For treatment systems of domestic waste, there is no reasonable potential for the discharge to exceed this limit.

PART 7 – WHOLE EFFLUENT TOXICITY (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 below 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. WET monitoring frequency and toxicity reduction evaluation (TRE) recommendations were made using the best professional judgment of staff familiar with the discharge after consideration of the guidance in the *Whole Effluent Toxicity (WET) Program Guidance Document (2022)*.

- Acute tests predict the concentration that causes lethality of aquatic organisms during a 48 to 96-hour exposure. To assure that a discharge is not acutely toxic to organisms in the receiving water, WET tests must produce a statistically valid LC50 (Lethal Concentration to 50% of the test organisms) greater than 100% effluent, according to s. NR 106.09(2)(b), Wis. Adm Code.
- Chronic testing is usually not recommended where the ratio of the 7-Q₁₀ to the effluent flow exceeds 100:1 and acute testing is not typically recommended if the ratio exceeds 1000:1. For the Prescott Wastewater Treatment Facility, that ratio is approximately 4985:1. With this amount of dilution, there is believed to be little potential for acute or chronic toxicity effects in the Mississippi River associated with the discharge from the Prescott Wastewater Treatment Facility, so the need for acute and chronic WET testing will not be considered further.





4/12/2024

Robert Daugherty, Mayor
800 Borner Street N
Prescott, WI 54021

Subject: Conditional approval of a multi-discharger phosphorus variance
Receiving Stream: Mississippi River in Pierce County
Permittee: City of Prescott, WPDES WI-0022403

Dear Mr. Daugherty:

In accordance with s. 283.16 of the Wisconsin Statutes, you have requested coverage under Wisconsin's multi-discharger phosphorus variance for the Prescott Wastewater Treatment Facility in an application dated 2/5/2024. Wisconsin's multi-discharger phosphorus variance was approved by EPA on February 6, 2017. Coverage under the multi-discharger phosphorus variance may only be granted to an existing source that demonstrates a major facility upgrade is necessary to achieve phosphorus compliance and the upgrade will result in economic hardship as defined in the federally approved variance. The water quality criterion for which you are seeking a variance is contained in s. NR 102.06, Wis. Adm. Code.

After review of the application materials, the Department is tentatively approving coverage under the phosphorus multi discharger variance because the applicant has demonstrated that a major facility upgrade would be required to comply with the phosphorus water quality based effluent limitation, and the applicant meets the economic hardship eligibility criteria delineated in the federally approved variance. In addition, the permitted facility has agreed to comply with the interim limitations that will be included in the WPDES permit, and has agreed to reduce the amount of phosphorus entering surface waters by making payments to the counties pursuant to s. 283.16(6)(b)1., Wis. Stats.

Public comment on this decision will be solicited at the time of permit reissuance after which a final decision will be made. The Department appreciates your attention and interest in Wisconsin's multi-discharger phosphorus variance. Should you have further questions regarding this matter, please contact me at (608) 400-5596 or by email at matthew.claucherty@wisconsin.gov

Sincerely,

Matt Clacherty, MDV Point Source Coordinator
Bureau of Water Quality

e-cc Matthew Holman, City of Prescott
 Dennis Eaton, City of Prescott
 Adebowale Adesanwo, WDNR
 Angela Parkhust, WDNR
 Tim Elkins, EPA Region 5
 Micah Bennett, EPA Region 5

Notice: This checklist is meant to be a tool to help Department of Natural Resources (DNR) staff review municipal and industrial multi-discharger variance (MDV) applications (Forms 3200-149 and 3200-150). Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31-19.39, Wis. Stats.).

Permittee Name				
City of Prescott				
WPDES Permit Number			County	
WI- 0 0 2 2 4 0 3			Pierce	
1. Did the point source apply for the MDV at the appropriate time?	<input checked="" type="radio"/> Yes <input type="radio"/> No. <i>STOP- facility not eligible at this time.</i>		See Questions 1-3.	
2. This operation is (check one):	<input type="radio"/> New or relocated outfall. <i>STOP- facility not eligible.</i> <input checked="" type="radio"/> Existing outfall		See Questions 5-6.	
3. Is the point source is located in an MDV eligible area?	<input checked="" type="radio"/> Yes <input type="radio"/> No. <i>STOP- facility not eligible.</i>		Apply County information to Appendix H. Additional information provided in Q7 on municipal form & Q7-8 on industrial form.	
4. The secondary indicator score for the county (counties) the discharge is located is:	_____ 4		See Appendices A-F. If the score is less than 2, stop; the facility is not eligible. See Q23 on municipal form & Q28 on industrial form.	
5. Is a major facility upgrade required to comply with phosphorus limits?	<input checked="" type="radio"/> Yes <input type="radio"/> No. <i>STOP- facility not eligible.</i>		See Q8 on municipal form/Q9 on industrial form.	
6. List the months where phosphorus limits cannot be achieved during the permit term:	<input checked="" type="checkbox"/> All <input checked="" type="checkbox"/> Jan <input checked="" type="checkbox"/> Apr <input checked="" type="checkbox"/> Jul <input checked="" type="checkbox"/> Oct <input checked="" type="checkbox"/> Feb <input checked="" type="checkbox"/> May <input checked="" type="checkbox"/> Aug <input checked="" type="checkbox"/> Nov <input checked="" type="checkbox"/> Mar <input checked="" type="checkbox"/> Jun <input checked="" type="checkbox"/> Sep <input checked="" type="checkbox"/> Dec		Consider checking with limit calculator. If this does not match information in application, the application should be updated prior to approval.	
7. What is the current effluent level achievable?				
Outfall Number(s)	Conc. (mg/L)	Method for calculation:	Does this concur with application?	
001	1.60	<input checked="" type="radio"/> 30-day P99 <input type="radio"/> Other, specify: _____	<input type="radio"/> Yes <input checked="" type="radio"/> No, why not: Application used 2023 data only	DNR staff should verify the effluent concentration value(s) provided. See Q11 on municipal form & Q12 on industrial form.

8. What is the appropriate interim limitation(s) for the permit term?
 0.6 mg/L as a monthly average, pursuant to s. 283.16(6)(a)2., Wis. Stats.
 Target value = 0.2 mg/L

Provide Rationale:

Effluent data from the past three years (2/1/21 - 1/30/24, n=468) yields a 30-day P99 value of 1.6 mg/L. This value is higher than the current or future interim limits under the MDV. Most monthly averages in the dataset fall between 0.3 and 0.5 mg/L. Phosphorus treatment appears to work poorly on occasion, however, resulting in monthly averages above 1.0 mg/L. A schedule may be needed in the the upcoming permit to allow time to address the cause of upsets prior to 0.6 mg/L becoming effective.

Note: See description in Section 2.02 of the MDV implementation guidance. Interim limitations should reflect the "highest attainable condition" for the permittee in question pursuant to s. 283.16(7), Wis. Stat.

<p>9. <i>For Industries Only</i>- Where does the phosphorus in the effluent come from? (check all that apply)</p>	<p><input type="checkbox"/> Process <input type="checkbox"/> Additive Usage <input type="checkbox"/> Water supply</p> <p><i>Can intake credits be given or can the facility use an alternative water supply?</i></p> <p><input type="radio"/> Not feasible <input type="radio"/> Possibly, but further analysis needed <input type="radio"/> Not evaluated at this time</p>	<p><i>See Q14-15 & 19 on industrial form. If the answer is "possibly" or "not evaluated", the schedule section of the MDV permit should contain a requirement to perform this analysis.</i></p>
<p>10. Has this facility optimized?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> In progress <input type="radio"/> No</p>	<p><i>See Q14 on municipal form & Q16 & 20 on industrial form. Facility must optimize and operate at an optimize treatment level (s. 283.16(6)(a), Wis. Stat.)If no will need compliance schedule.</i></p>
<p>11. Has a facility plan/compliance alternative plan been completed for the facility?</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> In progress <input type="radio"/> No</p>	<p><i>See Q15 on municipal form & Q17 on industrial form.</i></p>
<p>12. What is the projected cost for complying with phosphorus?</p> <p>Source:</p>	<p>\$ <u>7,687,311.17</u></p> <p>2019 site-specific cost estimate updated via inflation factor</p>	<p><i>Facility must submit site-specific compliance costs. If cost projections are used from EIA, the permittee must certify that these costs are reasonable for the facility in question. See "projected compliance costs" in Section 2.02 of the MDV Implementation Guidance for details.</i></p>

Comments on planning efforts:

The City of Prescott completed a preliminary compliance alternatives plan in 2016. A letter from consultant Cedar Corporation was submitted in 2019 outlining MDV eligibility factors and providing a site-specific cost estimate for reactive sand filtration, touted as the lowest-cost option for meeting phosphorus WQBELs. Trading and adaptive management were evaluated and ruled out due to time constraints and magnitude of offset, respectively. During the current permit term, Prescott optimized phosphorus treatment by adding in-situ phosphorus monitoring to aid in chemical feed management. An updated financial evaluation was provided with the MDV application.

<p>13. Are adaptive management and water quality trading viable?</p>	<p><input type="radio"/> Yes <input checked="" type="radio"/> Perhaps. Additional analysis required. <input type="radio"/> No</p>	<p><i>See Q18-21 on municipal form & Q22-25 on industrial form. If additional analyses required, the applicant may need to complete this analysis during the MDV permit term.</i></p>
<p>14. Has the point source met the appropriate primary screener?</p>	<p><input checked="" type="radio"/> Yes <input type="radio"/> No. <i>STOP- facility not eligible.</i></p>	<p><i>See Q4 of this form in addition to the "eligibility" guidance in Section 2.01 of the MDV Implementation Guidance.</i></p>

Comments on economic demonstration:

Capital costs used in the 2019 MDV application were \$5,831,600 (capital) and (\$50,000 O&M increase). Costs were updated based on inflation/index. The updated capital cost is \$7,687,311.17, which represents a 31.8% increase over 2019 costs. The ENR construction cost index rose 33% over the same time period, which supports this cost adjustment. O&M increases remain at \$50,000 annually. When applying a 20-year, 2.1% CWFPP loan to capital costs, annual payments are \$471,047. Including O&M, cost increases total to \$521,047. The residential share is 95%, or \$494,994.65. This cost, divided amongst 1843 users results in a per-user increase of \$268.58 Annually. Current user rates are \$580.30, and future user rates would total at \$848.88. This value is 1.22% of Prescott's \$69,346 MHI. In Pierce county with a secondary indicator score of 4, a 1% primary screener value applies. Prescott meets the primary screener.

15. What watershed option was selected?

- County project option. *Complete Section 5.*
- Binding, written agreement with the DNR to construct a project or implement a watershed plan. *Complete Section 4.*
- Binding, written agreement with another person that is approved by the DNR to construct a project or implement a watershed plan. *Complete Section 4.*

Section 4. Watershed Plan Review

<p>16. MDV Plan Number:</p> <p><i>Note: This is for tracking purposes. Contact Statewide Phosphorus Implementation Coordinator for the plan number.</i></p>	<p>_____</p>
<p>17. Did the point source complete Form 3200-148?</p>	<p><input type="radio"/> Yes <input type="radio"/> No</p>
<p>18. Is the project area in the same HUC 8 watershed as the point of discharge?</p>	<p><input type="radio"/> Yes <input type="radio"/> No. <i>STOP- Watershed plan must be updated.</i></p>
<p>19. What is the annual offset required?</p> <p><i>See Section 2.03 of the MDV implementation guidance. If this value is different from the offset target provided in form 3200-148, the watershed plan should be amended.</i></p>	<p>_____</p>
<p>20. Does the plan ensure that the annual load is offset annually?</p>	<p><input type="radio"/> Yes <input type="radio"/> No. <i>STOP- Watershed plan must be updated.</i></p>
<p>21. Are projects occurring on land owned/operated by a CAFO or within a permitted MS4 boundary?</p> <p><input type="radio"/> Yes. <i>Work with appropriate DNR staff to ensure projects are not working towards other permit compliance.</i></p> <p><input type="radio"/> No.</p>	
<p>22. Are other funding sources being used as part of the MDV watershed project?</p> <p><input type="radio"/> Yes. <i>Work with appropriate DNR staff to ensure that funding sources can be appropriately used in the plan area.</i></p> <p><input type="radio"/> No.</p>	
<p>23. Do you have any concerns about the watershed project?</p> <p><i>Note: Coordinate with other DNR staff as appropriate.</i></p>	<p><input type="radio"/> Yes. <i>STOP- Watershed plan must be updated.</i></p> <p><input type="radio"/> No.</p>

Comments:

Section 5. Payment to the County(ies)

24. At this time, the appropriate per pound payment is: \$ 64.75

See "Payment Calculator" document at
http://central/water/WQWT_PROJECTS\WY_CW_Phosphorus\MDV.

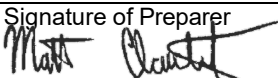
Section 6. Determination

Based on the available information, the MDV application is:

- Approved
- Request for more information
- Denied

Additional Justification (if needed):

Certification

Preparer Name	Title
Matt Claucherty	Water Resources Management Specialist
Signature of Preparer	Date
 <input type="button" value="Sign"/> <input type="button" value="Clear"/>	4/12/2024

A copy of this completed checklist should be saved in SWAMP, and a notification of the decision should be sent to the Phosphorus Implementation Coordinator.

[Submit to Coordinator...](#)