# Public Noticed Downsville Draft Permit Fact Sheet General Information

Permit Number:	WI-0031682-10-0			
Permittee Name:	Downsville Sanitary Dist	rict #1		
Address:	P O Box 37			
City/State/Zip:	Downsville WI 54735			
Discharge Location:	County Highway C, Dow	nsville, WI 54735		
	SE1/4 SW1/4, Section 3	34, T27N R13W, Town of Dunn, Dunn County, WI		
Receiving Water:	the Red Cedar River in the Wilson Creek Watershed of the Lower Chippewa River Basin in Dunn County			
StreamFlow (Q <sub>7,10</sub> ):	437 cfs			
Stream Classification:	Warmwater Sportfish, Non-public Water Supply			
Discharge Type:	Existing, Continuous			
Design Flow(s)	Annual Average	0.0320 MGD		
Significant Industrial Loading?	No			
Operator at Proper Grade?	Facility is currently certified for Basic - A3, P, D, SS, Operator is certified for A3 and D and will be at proper grade with Phosphorus and Sanitary Sewer Collection System certifications to be completed per a compliance schedule due by 9/30/2024.			
Approved Pretreatment Program?	N/A			

# **Facility Description**

Downsville Sanitary District treats domestic wastewater from the unincorporated area of Downsville. The annual average design flow of the facility is 0.0320 million gallons per day (MGD). The actual annual average influent flow from January 2023 – March 2024 was 0.0190 MGD. The current treatment system is a modularized (12 pod) in-ground, fixed media system which is frequently used for small scale developments. Effluent discharged to the Red Cedar River is disinfected by UV light May through September. Sludge is periodically sent to the West Central Wisconsin Biosolids Facility (WCWBF) for additional sludge treatment. Major operations change that occurred during the last permit term includes adding a second alum drip line at the end of the second tank to achieve better mixing and phosphorus removal. Significant effluent limit and monitoring changes proposed for the upcoming permit term are as follows: 1) influent and effluent flow frequencies will be changed from continuous to daily for eDMR reporting purposes and the sample type has been changed from "24-Hr Flow Prop Comp" to "24-Hr Comp" to accurately reflect their sampler type, 2) the addition of effluent 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, and 4) continued 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. 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. A schedule has been added that requires the permittee have an operator certified in the SS Subclass (Sanitary Sewage Collection System) and the P Subclass (Phosphorus).

# **Substantial Compliance Determination**

**Enforcement During Last Permit:** The facility received a notice of noncompliance (NON) in 2019 due to the operator not having proper certification. As a response the operator obtained the correct certifications. (New operator has since started at the facility and also needs to obtain proper certification thus the included compliance schedule). Another NON was sent in 2019 due to Fecal Coliform limit violations. As a result, the facility updated sampling and maintenance procedures and has since remained below the limit. The facility has completed all previously required actions as part of the enforcement process.

After a desktop review of all discharge monitoring reports, CMARs, compliance schedule items, land application reports and a site visit on 11/15/2023, the facility has been found to be in substantial compliance with their current permit.

	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	0.0190 MGD (January 2023 – March 2024)	Representative influent samples shall be collected in the influent manhole prior to the Parshall flume.			
001	0.0138 MGD (January 2023 – March 2024)	Representative effluent samples shall be collected after UV treatment from the effluent wet well and prior to discharge to the Red Cedar River.			
002	6 dry US tons	Representative composite sludge samples shall be collected annually from the sludge storage tank after dewatering, prior to shipment to the West Central Wisconsin Biosolids Facility (WCWBF) and monitored for List 1 and once in 2025 for PFAS. 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 the sludge is hauled.			

## Compliance determination entered by Logan Rubeck, Wastewater Engineer, on 12/20/2023.

# 1 Influent – Monitoring Requirements

## Sample Point Number: 701- INFLUENT

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and	Sample	Sample	Notes
		Units	Frequency	Туре	
Flow Rate		MGD	Daily	Continuous	
BOD5, Total		mg/L	2/Week	24-Hr Comp	
Suspended Solids,		mg/L	2/Week	24-Hr Comp	
Total		_			

# Changes from Previous Permit:

The sample frequency for flow has been changed from "continuous" to "daily" for eDMR reporting purposes, and the sample type has been changed from "24-Hr Flow Prop Comp" to "24-Hr Comp" to accurately reflect their sampler type.

# **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 RED CEDAR RIVER

	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	2/Week	24-Hr Comp		
BOD5, Total	Weekly Avg	45 mg/L	2/Week	24-Hr Comp		
Suspended Solids, Total	Monthly Avg	30 mg/L	2/Week	24-Hr Comp		
Suspended Solids, Total	Weekly Avg	45 mg/L	2/Week	24-Hr Comp		
pH Field	Daily Max	9.0 su	Daily	Grab		
pH Field	Daily Min	6.0 su	Daily	Grab		
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Limit effective May - Sept annually.	
E. coli	% Exceedance	10 Percent	Monthly	Calculated	Limit effective May - Sept 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	1.0 mg/L	2/Week	24-Hr Comp	This is an interim MDV limit effective throughout the permit term. 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 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.	

	Monitoring Requirements and Limitations				
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Comp	Annual in rotating quarters. See Nitrogen Series Monitoring section below.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Comp	Annual in rotating quarters. See Nitrogen Series Monitoring section below.
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	Annual in rotating quarters. See Nitrogen Series Monitoring section below. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.

## **Changes from Previous Permit**

Monitoring changes proposed for the upcoming permit term are as follows: 1) effluent flow frequency changed from continuous to daily for eDMR reporting purposes and the sample type has been changed from "24-Hr Flow Prop Comp" to "24-Hr Comp" to accurately reflect their sampler type, 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, and 4) continued 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.

**Phosphorus MDV** - The permittee has applied for a multi-discharger variance (MDV) for phosphorus for this permit term and the application has been approved by the Department. Per s. 283.16(6)(am), an MDV interim limit of 1 mg/L has been continued this permit term after the permittee submitted a statement that achieving anything lower than 1.0 mg/L would require a major facility upgrade (tertiary filtration). The permittee continues to be required to optimize for phosphorus removal and to report the total amount of phosphorus discharged in lbs/month and lbs/year. By March 1 of each year the permittee shall make a payment(s) to participating county(s) of \$64.75 per pound of phosphorus discharged during the previous year in excess of the target value of 0.2 mg/L.

## **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.

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 25, 2024 memo from Ben Hartenbower to Angela Parkhurst titled "Water Quality-Based Effluent Limitations for the Downsville Sanitary District Wastewater Treatment Facility WPDES Permit No. WI-0031682".

**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.

**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 no chloride effluent limits or monitoring are required.

**Mercury**– The permit application did not require monitoring for mercury because the Downsville Sanitary District 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 2019 to 2023 was 0.11 mg/kg, with a maximum reported concentration of 0.20 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 Downsville 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 (Qs:Qe >20:1), the lowest calculated limitation is  $120^{\circ}$  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. Therefore, temperature limits and monitoring are not required.

**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 1.0 mg/L carries over from the current permit and per s. 283.16(6)(am), has been continued throughout this permit term after the permittee submitted a statement that achieving anything lower than 1.0 mg/L would require a major facility upgrade (such as tertiary filtration). The permittee was reapproved for the MDV on January 23, 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:

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

**PFOS and PFOA-** NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. Pursuant to s. NR 106.98(3)(b), 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, the department has determined the permittee does not need to sample for PFOS or PFOA as part of this permit reissuance. The department may re-evaluate the need for sampling at the next permit reissuance if new information becomes available that suggests PFOS or PFOA may be present in the discharge.

**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 <a href="http://dnr.wi.gov/topic/wastewater/wet.html">http://dnr.wi.gov/topic/wastewater/wet.html</a>). 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	В	Liquid	n/a	n/a	Hauled	6
Is addition	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? N/A					
Is a priority pollutant scan required? N/A 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 TO WCWBF

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

	Monitoring Requirements and Limitations				
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					Permit Sections for more information.
PFAS Dry Wt			Once	Composite	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 Operator Certification

Required Action	Due Date
Operator Certification- SS Subclass: Per s. NR 114.53 Wis. Adm. Code, the permittee shall have an operator in charge certified in the SS Subclass (Sanitary Sewage Collection System) by the due date. Within 30 days of receiving certification, the permittee shall notify the department in writing of the certified operator's name and certification number with the SS Subclass certification.	09/30/2024
Operator Certification- P Subclass: Per s. NR 114.53 Wis. Adm. Code, the permittee shall have an operator in charge certified in the P Subclass (Phosphorus) by the due date. Within 30 days of receiving certification, the permittee shall notify the department in writing of the certified operator's name and certification number with the P Subclass certification.	09/30/2024

# 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
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.	03/01/2025
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.	
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**

## **Operator Certification**

Per s. NR 114.53 Wis. Adm. Code, Downsville must have an operator in charge that holds all certifications at the proper level.

## **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. **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).

# **Special Reporting Requirements**

None

# Attachments:

Water Quality Based Effluent Limits: April 25, 2024 memo from Ben Hartenbower to Angela Parkhurst titled "Water Quality-Based Effluent Limitations for the Downsville Sanitary District Wastewater Treatment Facility WPDES Permit No. WI-0031682"

MDV checklist and conditional approval dated 01/23/2024.

# **Expiration Date:**

June 30, 2029

# Justification Of Any Waivers From Permit Application Requirements $_{\ensuremath{N/A}}$

Prepared By: Angela Parkhurst Wastewater Specialist

Date: May 8, 2024

Notice of reissuance will be published in the Dunn County News, PO Box 40, Menomonie, WI, 54751-0040.

DATE:	April 25, 2024	1
DITL.	1 pm 20, 202	•

TO: Angela Parkhurst– WCR/Eau Claire

- FROM: Benjamin Hartenbower WCR/Eau Claire
- SUBJECT: Water Quality-Based Effluent Limitations for the Downsville Sanitary District Wastewater Treatment Facility WPDES Permit No. WI-0031682

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 Downsville Sanitary District Wastewater Treatment Facility in Dunn County. This municipal wastewater treatment facility (WWTF) discharges to the Red Cedar River, located in the Wilson 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:

	Daily	Daily	Weekly	Monthly	Six-Month	
Parameter	Maximum	Minimum	Average	Average	Average	Footnotes
Flow Rate						1,2
BOD <sub>5</sub>			45 mg/L	30 mg/L		1
TSS			45 mg/L	30 mg/L		1
pН	9.0 s.u.	6.0 s.u.				1
E. coli				126#/100 mL		3
				geometric mean		
Phosphorus						4
HAC Interim Limit				1.0 mg/L		
Final WQBEL				0.300 mg/L	0.100 mg/L	
TKN, Nitrate+Nitrite,						5
and Total Nitrogen						

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. Under the phosphorus MDV, the highest attainable condition (HAC) limit is 1.0 mg/L. 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.
- 5. 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 (NO<sub>3</sub>), nitrite (NO<sub>2</sub>), 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

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Date: 04/25/2024

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## Water Quality-Based Effluent Limitations for the Downsville Sanitary District Wastewater Treatment Facility WPDES Permit No. WI-0031682

Prepared by: Benjamin P. Hartenbower

#### PART 1 – BACKGROUND INFORMATION

#### **Facility Description:**

The Downsville Sanitary District treats domestic wastewater from the unincorporated area of Downsville. Treatment consists of a modularized (12 pod) in-ground, recirculating media filter. Starting in February 2018, phosphorus removal is accomplished through addition of Alum both prior to and after primary clarification. Sludge is periodically sent to the West Central Wisconsin Biosolids Facility (WCWBF) for treatment. Discharge is to the Red Cedar River after UV disinfection. Outfall 001 is located just below DNR rest area on Red Cedar Trail, North side of Red Cedar River, 500 ft East of State Highway 25.

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.

	Daily	Daily	Weekly	Monthly	Six-Month	
Parameter	Maximum	Minimum	Average	Average	Average	Footnotes
Flow Rate						1,2
BOD <sub>5</sub>			45 mg/L	30 mg/L		1
TSS			45 mg/L	30 mg/L		1
рН	9.0 s.u.	6.0 s.u.				1
Fecal Coliform						3
May-September			656#/100 mL	400#/100 mL		
			geometric mean	geometric mean		
Phosphorus						4
Interim				1.7 mg/L		
HAC Interim Limit				1.0 mg/L		
Final WQBEL				0.300 mg/L	0.100 mg/L	

Footnotes:

- 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. Additional limits to comply with the expression of limits requirements are included in bold.
- 4. Under the phosphorus MDV, a highest attainable condition (HAC) limit of 1.0 mg/L was effective July 1, 2023.

## **Receiving Water Information**

- Name: Red Cedar River
- Waterbody Identification Code (WBIC): 2063500
- 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: Low flow values are from USGS for Station 05369000 at Menomonie, in the Red Cedar River.

 $7-Q_{10} = 437$  cfs (cubic feet per second)

 $7-Q_2 = 617 \text{ cfs}$ 

Harmonic Mean Flow = 883 cfs using a drainage area of 1770.0 mi<sup>2</sup>.

- Hardness = 84 mg/L as CaCO<sub>3</sub>. This value represents the geometric mean of 61 samples collected in Red Cedar River from 04/13/1989 to 09/05/1996.
- % 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: Chloride data is from the Red Cedar River. Metals data from the Chippewa River at Durand is used for this evaluation because there is no data available for the Red Cedar River and the the Chippewa River is within the same ecological landscape so ambient water quality characteristics are expected to be similar. 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 Red Cedar 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 Red Cedar River is listed as impaired for PCBs and Total Phosphorus.

## **Effluent Information:**

- Design Flow Rates(s): Annual Average = 0.032 MGD (Million Gallons per Day) For reference, the actual average flow from July 2019 to February 2024 was 0.014 MGD.
- Hardness = 190 mg/L as CaCO<sub>3</sub>. This value represents the geometric mean of 4 effluent samples collected from 10/05/2023 to 10/19/2023.
- 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
- Additives: Aluminum Sulfate
- 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, Chloride, and hardness. The permit-required monitoring for Phosphorus from July 2019 to February 2024 is used in this evaluation.

Sample	Chloride	Sample	Copper
Date	mg/L	Date	μg/L
10/05/2023	111	10/05/2023	5
10/11/2023	149	10/11/2023	5
10/16/2023	142	10/16/2023	4
10/19/2023	128	10/19/2023	7
		10/23/2023	3
		10/26/2023	6
		10/30/2023	7
		11/02/2023	6
		11/06/2023	5
		11/09/2023	6
		11/15/2023	5
mean	132.5	1-day P99	8.8
		4-day P99	7

Chemical S	pecific Effluent Data	at Outfall 001
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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 February 2024 for all parameters with limits in the current permit to meet the requirements of s. NR 201.03(6):

I arameter Averages with Linnts					
	Average Measurement				
BOD5	10 mg/L*				
TSS	13 mg/L*				
pH	6.82 s.u.				
Fecal Coliform	303#/100 mL				
Phosphorus	0.727 mg/L				

#### **Parameter Averages with Limits**

\*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 99<sup>th</sup> percentile (or P<sub>99</sub>) 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-Q<sub>10</sub>

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  $1-Q_{10}$  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.

Limitation = 
$$(WQC) (Qs + (1-f) Qe) - (Qs - f Qe) (Cs)$$
  
Qe

Where:

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

- $Qs = average minimum 1-day flow which occurs once in 10 years (1-day Q_{10})$ 
  - if the 1-day  $Q_{10}$  flow data is not available = 80% of the average minimum 7-day flow which occurs once in 10 years (7-day  $Q_{10}$ ).

Qe = 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
- Cs = 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  $1-Q_{10}$  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 Downsville Sanitary District 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 ( $\mu$ g/L), except for hardness and chloride (mg/L).

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

RECEIVING WATER FLOW = 350 cfs, (1-Q<sub>10</sub> (estimated as 80% of 7-Q<sub>10</sub>)), as specified in s. NR 106.06 (3) (bm), Wis. Adm. Code.

(5) (011), W13. Ad	REF.		MEAN	MAX.	1/5 OF	MEAN		1-day
	HARD.	ATC	BACK-	EFFL.	EFFL.	EFFL.	1-day	MAX.
SUBSTANCE	mg/L		GRD.	LIMIT**	LIMIT	CONC.	P99	CONC.
Arsenic		339.8		679.6	135.9	<1.0		
Cadmium	190	21.49	0.010	43	8.6	<2		
Chromium (+3)	190	3046.39	0.500	6092.8	1218.6	<3		
Copper	190	28.39	1.210	56.8			8.8	7
Lead	190	198.51	0.338	397	79.4	<1		
Nickel	190	806.53		1613.1	322.6	<8		
Zinc	190	210.74	1.143	421.5	84.3	25		
Chloride		757	10.000	1514	303	133		149

\* \* The  $2 \times ATC$  method of limit calculation yields a more restrictive limit than consideration of ambient concentrations and 1-Q<sub>10</sub> 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 = 109 cfs ( $\frac{1}{4}$  of the 7-Q<sub>10</sub>), 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 P99
Arsenic		152.2		335982.8	67196.6	<1.0	- //
Cadmium	84	2.16	0.010	4746.2	949.2	<2	
Chromium (+3)	84	114.99	0.500	252738.2	50547.6	<3	
Copper	84	8.95	1.210	17087.3			6.9
Lead	84	23.78	0.338	51748.8	10349.8	<1	
Nickel	84	45.22		99823.5	19964.7	<8	
Zinc	84	103.8	1.143	226617.4	45323.5	25	
Chloride		395	10.000	849901	169980	133	

## 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 = 221 cfs (<sup>1</sup>/<sub>4</sub> of Harmonic Mean), as specified in s. NR 106.06 (4), Wis. Adm. Code.

		MEAN	MO'LY	1/5 OF	MEAN
	HTC	BACK-	AVE.	EFFL.	EFFL.
SUBSTANCE		GRD.	LIMIT	LIMIT	CONC.
Cadmium	370	0.010	1649944	329989	<2
Chromium (+3)	3818000	0.500	1.703E+10	3.405E+09	<3
Lead	140	0.338	622813	124562.6	<1
Nickel	43000		191755425	38351085	<8

#### Monthly Average Limits based on Human Cancer Criteria (HCC)

RECEIVING WATER FLOW = 221 cfs (<sup>1</sup>/<sub>4</sub> of Harmonic Mean), as specified in s. NR 106.06 (4), Wis. Adm. Code.

0040					
		MEAN	MO'LY	1/5 OF	MEAN
	HCC	BACK-	AVE.	EFFL.	EFFL.
SUBSTANCE		GRD.	LIMIT	LIMIT	CONC.
Arsenic	13.3		59310.4	11862.1	<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.

#### PFOS and PFOA

The need for PFOS and PFOA monitoring is evaluated in accordance with s. NR 106.98, Wis. Adm. Code. PFOS and PFOA were not detected in the water supply. Based on the annual design flow and lack of nondomestic contributions, it is unlikely that the effluent will contain PFOS or PFOA. **Therefore, monitoring is not recommended.** If information becomes available that indicates PFOS or PFOA may be present in the effluent, the monitoring requirements may change.

<u>Mercury</u> – The permit application did not require monitoring for mercury because the Downsville Sanitary District 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 2019 to 2023 was 0.11 mg/kg, with a maximum reported concentration of 0.20 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 Downsville Sanitary District 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.

ATC in mg/L =  $[A \div (1 + 10^{(7.204 - pH)})] + [B \div (1 + 10^{(pH - 7.204)})]$ 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 1705 sample results were reported from July 2019 to February 2024. The maximum reported value was 7.30 s.u. (Standard pH Units). The effluent pH was 7.20 s.u. or less 99% of the time. The 1-day P<sub>99</sub>, calculated in accordance with s. NR 106.05(5), Wis. Adm. Code, is 7.25 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 7.24 s.u. Therefore, a value of 7.30 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 7.3 s.u. into the equation above yields an ATC = 26.21 mg/L.

Page 6 of 14 Downsville Sanitary District Wastewater Treatment Facility

## 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- $Q_{10}$  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-Q<sub>10</sub> (estimated as 80 % of 7-Q<sub>10</sub>) and the 2×ATC approach are shown below.

	Ammonia Nitrogen			
	Limit mg/L			
2×ATC	52.43			
$1-Q_{10}$	184624			

## Daily Maximum Ammonia Nitrogen Determination

The 2×ATC method yields the most stringent limits for the Downsville Sanitary District 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.

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

Daily Maximum Ammonia Nitrogen Limits – WWSF

#### 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.

 $\begin{array}{l} \text{CTC} = \text{E} \times \{[0.0676 \div (1 + 10^{(7.688 - \text{pH})})] + [2.912 \div (1 + 10^{(\text{pH} - 7.688)})]\} \times \text{C} \\ \text{Where:} \\ \text{pH} = \text{the pH (s.u.) of the <u>receiving water,} \\ \text{E} = 0.854, \\ \text{C} = \text{the minimum of } 2.85 \text{ or } 1.45 \times 10^{(0.028 \times (25 - \text{T}))} - (\text{Early Life Stages Present), or} \\ \text{C} = 1.45 \times 10^{(0.028 \times (25 - \text{T}))} - (\text{Early Life Stages Present), or} \\ \text{T} = \text{the temperature (°C) of the receiving water - (Early Life Stages Present), or} \\ \text{T} = \text{the maximum of the actual temperature (°C) and 7 - (Early Life Stages Absent)} \end{array}$ </u>

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-Q<sub>10</sub> (4-Q3, if available) to derive weekly average limitations. And the 30-day criteria are used with the 30-Q<sub>5</sub> (estimated as 85% of the 7-Q<sub>2</sub> if the 30-Q<sub>5</sub> 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  $\geq$  16 °C, 25% of the flow is used if the Temperature  $\geq$  11 °C but < 16 °C.

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 Red Cedar River. These values are shown in the table below, with the resulting criteria and effluent limitations.

		April & May	June- September	October- March
Effluent Flow	Qe (MGD)	0.032	0.032	0.032
	7-Q10 (cfs)	437	437	437
	$7-Q_2$ (cfs)	617	617	617
	Ammonia (mg/L)	0.07	0.04	0.08
Background	Temperature (°C)	14.4	20.6	10.0
Information	pH (s.u.)	8.24	8.46	7.89
	% of Flow used	50	100	25
	Reference Weekly Flow (cfs)	218.500	437.000	109.250
	Reference Monthly Flow (cfs)	262.225	524.450	131.113
	4-day Chronic			
	Early Life Stages Present	4.21	1.96	7.06
Cuitoria ma/I	Early Life Stages Absent	4.23	1.96	9.45
Criteria mg/L	30-day Chronic			
	Early Life Stages Present	1.68	0.78	2.82
	Early Life Stages Absent	1.69	0.78	3.78
	Weekly Average			
	Early Life Stages Present	18284	16933	15407
Effluent	Early Life Stages Absent	18374	16933	20677
Limitations	Monthly Average			
mg/L	Early Life Stages Present	8555	7874	7268
	Early Life Stages Absent	8597	7874	9798

Weekly and Monthly Ammonia Nitrogen Limits – WWSF

#### **Effluent Data**

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

	Ammonia Nitrogen mg/L
10/05/2023	2.1
10/11/2023	4.2
10/16/2023	4.7
10/19/2023	2.6

## Ammonia Nitrogen Effluent Data

#### **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 Downsville Sanitary District 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 Downsville Sanitary District 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 26 counts/100 mL. Effluent data never exceeded 410 counts/100 mL. The maximum reported value was 87 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.

#### Attachment #1 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 Downsville Sanitary District Wastewater Treatment Facility does not currently have an existing technology-based limit, the need for this limit in the reissued permit is evaluated. The data demonstrates that the annual monthly average phosphorus loading is less than 150 lbs/month, which is the threshold for municipalities in accordance to s. NR 217.04(1)(a)1, Wis. Adm. Code, and therefore a technology-based limit is not required.

Annual Average Mass Total Thosphol us Loading			
Month	Monthly Avg. mg/L	Total Flow MG/month	Total Phosphorus lb./mo.
Mar 2023	0.86	0.46	3.30
Apr 2023	0.98	0.55	4.46
May 2023	2.25	0.46	8.65
Jun 2023	3.52	0.45	13.12
Jul 2023	0.50	0.41	1.72
Aug 2023	0.63	0.39	2.07
Sep 2023	0.33	0.38	1.06
Oct 2023	0.50	0.43	1.81
Nov 2023	0.73	0.38	2.30
Dec 2023	0.49	0.41	1.64
Jan 2024	0.50	0.42	1.77
Feb 2024	0.39	0.39	1.25
		Average =	3.60

#### Annual Average Mass Total Phosphorus Loading

 $\begin{array}{l} \mbox{Total P (lbs/month) = Monthly average (mg/L) \times total flow (MG/month) \times 8.34 (lbs/gallon) \\ \mbox{Where total flow is the sum of the actual (not design) flow (in MGD) for that month } \end{array}$ 

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 Red Cedar 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.

Limitation = [(WQC)(Qs+(1-f) Qe) - (Qs-f Qe) (Cs)]/Qe

Where:

$$\begin{split} WQC &= 0.100 \text{ mg/L for the Red Cedar River.} \\ Qs &= 100\% \text{ of the } 7\text{-}Q_2 \text{ of } 617 \text{ cfs} \\ Cs &= \text{background concentration of phosphorus in the receiving water pursuant to s. NR} \\ 217.13(2)(d), Wis. Adm. Code \\ Qe &= \text{effluent flow rate} = 0.032 \text{ MGD} = 0.050 \text{ cfs} \\ f &= \text{the fraction of effluent withdrawn from the receiving water} = 0 \end{split}$$

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:

SWIMS ID	173208
	Monitoring station at Red
Station Name	Cedar River at
	Menomonie Hydro
Waterbody	Red Cedar River
Sample Count	68
First Sample	05/05/2014
Last Sample	10/17/2023
Mean	0.116 mg/L
Median	0.102 mg/L

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 Red Cedar 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 of phosphorus to phosphorus impaired waters.

```
Attachment #1
```

## **Effluent Data**

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

	Phosphorus mg/L
1-day P <sub>99</sub>	3.54
4-day P <sub>99</sub>	1.94
30-day P <sub>99</sub>	1.09
Mean	0.73
Std	0.72
Sample size	483
Range	0.036 - 7.44

## **Reasonable Potential Determination**

Since the 30-day P<sub>99</sub> 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  $0.100 \text{ mg/L} \times 8.34 \times 0.032 \text{ MGD} = 0.027 \text{ lbs/day}$  expressed as a six-month average.

## Multi-Discharge Variance Interim Limit

With the permit application, the Downsville Sanitary District has re-applied for the phosphorus multidischarger 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 2<sup>nd</sup> permit under MDV approval, pursuant to s. 283.16 (6)(am), Wis. Stats., is 1.0 mg/L as a monthly average.

## PART 6 – WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR THERMAL

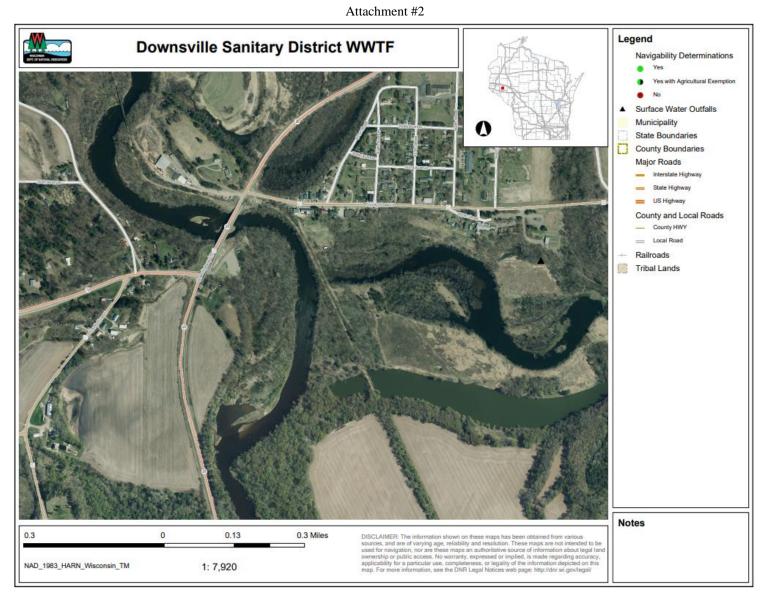
Surface water quality standards for temperature took effect on October 1, 2010. These regulations are detailed in chs. NR 102 (Subchapter II – Water Quality Standards for Temperature) and NR 106 (Subchapter V – Effluent Limitations for Temperature) of the Wisconsin Administrative Code. Daily maximum 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 (Qs:Qe >20:1), the lowest calculated limitation is  $120^{\circ}$  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. **Therefore, temperature limits and monitoring are not recommended.** 

#### 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)*.

• Chronic testing is usually not recommended where the ratio of the 7-Q<sub>10</sub> to the effluent flow exceeds 100:1 and acute testing is not typically recommended if the ratio exceeds 1000:1. For the Downsville Sanitary District Wastewater Treatment Facility, that ratio is approximately 8826:1. With this amount of dilution, there is believed to be little potential for acute or chronic toxicity effects in the Red Cedar River associated with the discharge from the Downsville Sanitary District Wastewater Treatment Facility, so the need for acute and chronic WET testing will not be considered further



Page 14 of 14 Downsville Sanitary District Wastewater Treatment Facility

**Tony Evers, Governor** Adam N. Payne, Secretary Telephone 608-266-2621 FAX 608-267-3579 TTY Access via relay - 711



1/23/2024

Mark Smith, Commission President PO Box 37 Downsville, WI 54735

> Subject: Conditional approval of a multi-discharger phosphorus variance Receiving Stream: Red Cedar River in Dunn County Permittee: Downsville Sanitary District #1, WPDES WI-0031682

Dear Mr. Smith:

In accordance with s. 283.16 of the Wisconsin Statutes, you have requested coverage under Wisconsin's multidischarger phosphorus variance for the Downsville Sanitary District in an application dated 1/3/2024. 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.

Sincerelv.

Matt Claucherty, MDV Point Source Coordinator Bureau of Water Quality

Mitchell Kreutzer, Downsville Sanitary District e-cc Logan Rubeck, WDNR Angie Parkhurst, WDNR Tim Elkins, EPA Region 5 Micah Bennett, EPA Region 5



## Multi-Discharger Variance Application Evaluation Checklist

Form 3200-145 (R 5/16)

Page 1 of 4

**Notice:** This checklist is meant to be a tool to help Department of Natural Resources (DNR) staff review municipal and industrial multidischarger 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				
Downsville Sa	nitary District #1			
WPDES Permit Number			County	
<b>WI-</b> 0 + 0	3   1   6   8   2		Dunn	
	t source apply for the appropriate time?	<ul> <li>Yes</li> <li>No. STOP- facility not eligible at this time.</li> </ul>		See Questions 1-3.
2. This operat	ion is (check one):	<ul> <li>New or relocated outfall. STOP- facility not eligible.</li> <li>Existing outfall</li> </ul>		See Questions 5-6.
3. Is the point MDV eligibl	source is located in an e area?	<ul> <li>Yes</li> <li>No. STOP- facility not eligible.</li> </ul>		Apply County information to Appendix H. Additional information provided in Q7 on municipal form & Q7-8 on industrial form.
	lary indicator score for counties) the discharge ::	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 fa to comply w	acility upgrade required /ith phosphorus limits?	Yes     No. STOP- facility no	t eligible.	See Q8 on municipal form/Q9 on industrial form.
6. List the mor limits canno the permit t	nths where phosphorus ot be achieved during erm:	<ul> <li>➢ All</li> <li>➢ Jan</li> <li>➢ Apr</li> <li>➢ Feb</li> <li>➢ May</li> <li>➢ Mar</li> <li>➢ Jun</li> </ul>	<ul> <li>☐ Jul</li> <li>☐ Oct</li> <li>☐ Aug</li> <li>☐ Nov</li> <li>☐ Sep</li> <li>☐ Dec</li> </ul>	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 ac	hievable?		•
Outfall Number( 001	s) Conc. (mg/L) 1.27	Method for calculation: <ul> <li>30-day P99</li> <li>Other, specify:</li> </ul>	Does this concur with application? Yes No, why not: Application used more recent data subset	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 mg/L as a monthly average, pursuant to s. 283.16(6)(a)2. Wis. Stats.

Target Value = 0.2 mg/L

A schedule may be warranted to address issues that have caused higher phosphorus discharges in the past Provide Rationale:

The past three years' effluent phosphorus data (1/1/2021 - 12/31/2023, n=308) yield a 30-day P99 value of 1.27 mg/

L. This value is influenced by periods of high phosphorus discharge, though recent months have averaged near 0.6 mg/L. A relaxed interim limit may be applied, if justified in accordance with s. 283.16(6)(am), Wis. Stats.

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.

## Multi-Discharger Variance Application Evaluation Checklist

Form 3200-145 (R 5/16)

Page 2 of 4

9.	<i>For Industries Only-</i> Where does the phosphorus in the effluent come from? (check all that apply)	<ul> <li>Process</li> <li>Additive Usage</li> <li>Water supply</li> <li>Can intake credits be given or can the facility use an alternative water supply?</li> <li>Not feasible</li> <li>Possibly, but further analysis needed</li> <li>Not evaluated at this time</li> </ul>	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.
10.	Has this facility optimized?	<ul> <li>Yes</li> <li>In progress</li> <li>No</li> </ul>	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.
11.	Has a facility plan/compliance alternative plan been completed for the facility?	Yes     In progress     No	See Q15 on municipal form & Q17 on industrial form.
12.	What is the projected cost for complying with phosphorus? Source:	\$ 888,000.00 20-year net present value from MDV application "Downsville WWTP Upgrade Engineered Estimate"	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.

#### Comments on planning efforts:

Downsville Sanitary District installed chemical phosphorus removal during the prior permit term. Various issues regarding operation of that system, and receipt of high strength waste have caused treatment challenges in the recent past. The alternatives analysis used for the prior permit term (per Gary Sweeney's 2019 email) is generally still valid given financial limitations.

13. Are adaptive management and water quality trading viable?	<ul> <li>Perhaps. Additional analysis required.</li> <li>No</li> </ul>	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.
14. Has the point source met the appropriate primary screener?	<ul> <li>Yes</li> <li>No. STOP- facility not eligible.</li> </ul>	See Q4 of this form in addition to the "eligibility" guidance in Section 2.01 of the MDV Implementation Guidance.

Comments on economic demonstration:

Compliance costs of \$625,000 (capital) and \$13,000 (O&M) are provided with the MDV application. The Department finds these acceptably conservative given facility size and recent increases in construction costs. A zero-interest loan would result in annual payments of \$31,250. With O&M costs, the total annual cost increase due to compliance would be \$44,250. The residential portion of this cost is \$34,957.50. Divided amongst 76 customer households, the per-user rate increase would average \$459.97 annually. Current sewer user rates are \$882.40 and future user rates would be \$1,342.37 on an average annual basis. This value is 1.81% of Downsville CDP's \$74,000 median household income. In Dunn County with a secondary indicator score of 4, sewer rates at 1% of MHI meet the primary screener. The applicant meets the primary screener.

Form 3200-145 (R 5/16)

Page 3 of 4

15. V	Vhat watershed	option was	s selected?
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- County project option. Complete Section 5.
- O Binding, written agreement with the DNR to construct a project or implement a watershed plan. Complete Section 4.

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

ion 4. Watershed Plan Review	
MDV Plan Number:	
Note: This is for tracking purposes. Contact Statewide Phosphorus Implementation Coordinator for the plan number.	
Did the point source complete Form 3200-148?	<ul><li>○ Yes</li><li>○ No</li></ul>
s the project area in the same HUC 8 watershed as the point of discharge?	<ul> <li>Yes</li> <li>No. STOP- Watershed plan must be updated.</li> </ul>
What is the annual offset required?	
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.	
Does the plan ensure that the annual load is offset annually?	◯ Yes
	○ No. STOP- Watershed plan must be updated.
Are projects occurring on land owned/operated by a CAFO or within a permitted	MS4 boundary?
<ul> <li>Yes. Work with appropriate DNR staff to ensure projects are not working</li> <li>No.</li> </ul>	g towards other permit compliance.
Are other funding sources being used as part of the MDV watershed project?	
<ul> <li>Yes. Work with appropriate DNR staff to ensure that funding sources ca</li> <li>No.</li> </ul>	n be appropriately used in the plan area.
Do you have any concerns about the watershed project?	Yes. STOP- Watershed plan must be updated.
Note: Coordinate with other DNR staff as appropriate.	○ No.
ments:	1
	MDV Plan Number:         Vote: This is for tracking purposes. Contact Statewide Phosphorus mplementation Coordinator for the plan number.         Did the point source complete Form 3200-148?         St the project area in the same HUC 8 watershed as the point of discharge?         What is the annual offset required?         See Section 2.03 of the MDV implementation guidance. If this value is different from he offset target provided in form 3200-148, the watershed plan should be amended.         Does the plan ensure that the annual load is offset annually?         Are projects occurring on land owned/operated by a CAFO or within a permitted Orse. Work with appropriate DNR staff to ensure projects are not working No.         Are other funding sources being used as part of the MDV watershed project?         Yes. Work with appropriate DNR staff to ensure that funding sources care No.         Do you have any concerns about the watershed project?         Yes: Coordinate with other DNR staff as appropriate.

## Section 5. Payment to the County(ies)

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

See "Payment Calculator" document at <u>\\central\water\WQWT\_PROJECTS\WY\_CW\_Phosphorus\MDV</u>.

#### Section 6. Determination

Based on the available information, the MDV application is:

Approved

- Request for more information
- O Denied

\$ 64.75

#### Multi-Discharger Variance Application Evaluation Checklist Form 3200-145 (R 5/16) Page 4 of 4

Additional Justification (if needed):

Note that variance request schedule on the MDV application selected #1 and #3. #3 does not apply. #1 is valid.

Certification	
Preparer Name	Title
Matt Claucherty	Water Resources Management Specialist
Signature of Preparer Sign Clear	Date 1/23/2024

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...