Permit Fact Sheet

General Information

Permit Number	WI-0020907-10-0
Permittee Name and Address	VILLAGE OF MOUNT HOPE P O Box 68, Mount Hope, WI 53816
Permitted Facility Name and Address	Mount Hope Wastewater Treatment Facility SOUTH CENTER STREET, MOUNT HOPE, WISCONSIN
Permit Term	January 01, 2027 to December 31, 2031
Discharge Location	Approximately 900 feet north of the WWTP" next to the culvert at the bottom of the hill. NE ¼ of SW ¼ of Section 28, T6N_R4W, Mount Hope Township
Receiving Water	Headwaters of the Little Grant River in Upper Grant River Watershed of Grant - Platte River Basin in Grant County
Stream Flow ($Q_{7,10}$)	0.01 cfs
Stream Classification	Limited Forage Fish (LFF)
Discharge Type	Existing, continuous
Annual Average Design Flow (MGD)	0.04 MGD
Industrial or Commercial Contributors	No significant industrial or commercial contributors
Plant Classification	A1 - Suspended Growth Processes; B - Solids Separation; C - Biological Solids/Sludges; P - Total Phosphorus; SS - Sanitary Sewage Collection System
Approved Pretreatment Program?	N/A

Facility Description

The Village of Mount Hope owns and operates a wastewater treatment facility (WWTF) that treats a combination of domestic and some commercial wastewater with no industrial contributors. Treatment units consist of activated sludge (extended aeration) with final clarification and chemical phosphorus removal. Sludge is stored in an aerated sludge storage tank prior to land spreading on Department approved agricultural fields. The facility is designed to treat an average daily flow of 0.04 MGD and presently receives 0.01 MGD for treatment on an annual average.

Substantial Compliance Determination

Enforcement During Last Permit: There have been violations of the effluent limitations, reporting deadlines, and land application practices. The facility has completed most of the previously required actions as part of the enforcement process.

After a desk top review of all discharge monitoring reports, CMARs, land application reports, compliance schedule items, and a site visit on August 6, 2026, this facility has been found to be in substantial compliance with their current permit.

Compliance determination made by Caitlin O'Connell, Wastewater Engineer, on August 6, 2026.

Sample Point Descriptions

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	0.012 MGD (2020 – 2026)	Influent: 24-Hr flow proportional sampler located in the influent piping at the headworks. Flow meter located in the manhole prior to the plant.
001	N/A	Effluent: 24-Hr flow proportional sampler and grab sample located at the end of the final clarifier, prior to discharge to the headwaters of the Little Grant River.
002	2.4 dry U.S. tons (per application)	Liquid, Class B. Representative sludge samples shall be collected from the aerated sludge storage tank.

Permit Requirements

1 Influent – Monitoring Requirements

1.1 Sample Point Number: 701- INFLUENT

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

1.1.1 Changes from Previous Permit:

Influent limitations and monitoring requirements were evaluated for this permit term and no changes were required in this permit section.

1.1.2 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

2.1 Sample Point Number: 001- EFFLUENT

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
BOD5, Total	Daily Max	30 mg/L	2/Week	24-Hr Flow Prop Comp	
BOD5, Total	Monthly Avg	15 mg/L	2/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Daily Max	30 mg/L	2/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	20 mg/L	2/Week	24-Hr Flow Prop Comp	
pH Field	Daily Min	6.0 su	5/Week	Grab	
pH Field	Daily Max	9.0 su	5/Week	Grab	
Dissolved Oxygen	Daily Min	4.0 mg/L	5/Week	Grab	
Nitrogen, Ammonia Variable Limit		mg/L	2/Week	See Table	Monitoring and limit effective year-round. Using the daily pH result look up the applicable ammonia limit in the pH Dependent Daily Maximum Ammonia Limit table.
Nitrogen, Ammonia (NH3-N) Total	Daily Max - Variable	mg/L	2/Week	24-Hr Flow Prop Comp	Monitoring and limit effective year-round. Enter the daily maximum ammonia result and compare to Nitrogen Ammonia Variable Limit to determine compliance.
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	6.5 mg/L	2/Week	24-Hr Flow Prop Comp	May through September
Nitrogen, Ammonia (NH3-N) Total	Weekly Avg	32 mg/L	2/Week	24-Hr Flow Prop Comp	October through April
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	2.8 mg/L	2/Week	24-Hr Flow Prop Comp	May through September

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Ammonia (NH3-N) Total	Monthly Avg	13 mg/L	2/Week	24-Hr Flow Prop Comp	October through April
E. coli	Geometric Mean - Monthly	126 #/100 ml	Weekly	Grab	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule.
E. coli	% Exceedance	10 Percent	Monthly	Calculated	Limit Effective May through September annually per the Effluent Limitations for E. coli Schedule. See the E. coli Percent Limit section below. Enter the result in the DMR on the last day of the month.
Chloride		mg/L	Monthly	24-Hr Flow Prop Comp	Monitoring only in 2030.
Phosphorus, Total	Monthly Avg	1.0 mg/L	2/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective through December 31, 2028. See the MDV/Phosphorus sections and phosphorus schedules.
Phosphorus, Total	Monthly Avg	0.6 mg/L	2/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective January 1, 2029. See the MDV/Phosphorus sections 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.
Temperature		deg F	3/Week	Grab	See Temperature

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Maximum					compliance schedule. Limit effective starting January 2031.
Nitrogen, Total Kjeldahl		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Annual in rotating quarters. See Nitrogen Series Monitoring section.
Nitrogen, Nitrite + Nitrate Total		mg/L	See Listed Qtr(s)	24-Hr Flow Prop Comp	Annual in rotating quarters. See Nitrogen Series Monitoring section.
Nitrogen, Total		mg/L	See Listed Qtr(s)	Calculated	Annual in rotating quarters. See Nitrogen Series Monitoring section. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.

2.1.1 Changes from Previous Permit

Effluent limitations and monitoring requirements were evaluated for this permit term and the following changes were made from the previous permit. See additional explanation of limits under "Explanation of Limits and Monitoring Requirements" below.

- **pH and DO-** Sampling frequency for these parameters has been increased to the minimum frequency of 5/week.
- **E. coli-** At the end of the compliance schedule, Disinfection requirements and E. coli limits of 126 #/100 ml as a monthly geometric mean that may not be exceeded and 410 #/100 ml as a daily maximum that may not be exceeded more than 10 percent of the time in any calendar month will apply. Monitoring is not required until the limit becomes effective at the end of the compliance schedule.
- **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. An MDV interim limit of 0.6 mg/L has been added that goes into effect per a compliance schedule. The permittee is required 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 $68.40 per pound of phosphorus discharged during the previous year in excess of the target value of 0.2 mg/L.
- **Temperature** – Limits are required year-round with a compliance schedule. Monitoring required upon reissuance. Several options are available for the Mount Hope Wastewater Treatment Facility to explore potential relief from temperature limits.

2.1.2 Explanation of Limits and Monitoring Requirements

Detailed discussions of limits and monitoring requirements can be found in the attached water quality-based effluent limits (WQBEL) memo dated March 25, 2026.

Monitoring Frequencies- The Monitoring Frequencies for Individual Wastewater Permits guidance (April 12, 2021) recommends that standard monitoring frequencies be included in individual wastewater permits based on the size and type of the facility, in order to characterize effluent quality and variability, to detect events of noncompliance, and to ensure consistency in permits issued across the state. Guidance and requirements in administrative code were considered when determining the appropriate monitoring frequencies for pollutants that have final effluent limits in effect during this permit term. The sampling minimum for pH and DO is 5/week for all facilities. After evaluating the treatment system type, size, performance, and incoming waste, the sampling frequency for pH and DO were established at the minimum of 5x/week. All other sampling frequencies were retained.

Expression of Limits- In accordance with the federal regulation 40 CFR 122.45(d) and s. NR 205.065, Wis. Adm. Code, limits in this permit are to be expressed as weekly average and monthly average limits whenever practicable.

Disinfection & 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.

Section NR 102.04(5)(a), Wis. Adm. Code, states that all surface waters shall be suitable for recreational use and meet the E. coli criteria established to protect this use. Section NR 102.04(5)(b), Wis. Adm. Code, states that exceptions to the disinfection requirement can be made if the department determines, in accordance with the procedures specified in s. NR 210.06(3), Wis. Adm. Code, that disinfection is not required to meet water quality criteria. As part of the reissuance process, the requirements for disinfection were reviewed under s. NR 210.06(3), Wis. Adm. Code.

It was determined that the permittee is required to disinfect during the following months: May – September. See WQBEL for further explanation.

Total Residual Chlorine – If the wastewater treatment facility decides to use chlorination for disinfection, effluent limitations would be recommended to ensure proper operation of the dechlorination system and would become effective April 30, 2031 with the E. coli limitations. See the WQBEL for limits and more information.

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 0.225 mg/L as a monthly average and 0.075 mg/L as a six-month average and were to become effective as scheduled unless a variance was granted. For this permit term, the permittee has 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 until February 5, 2027. 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 interim effluent limit for total phosphorus is 0.6 mg/L as an average monthly limit.

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. 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 (agricultural and urban) phosphorus control strategies at the watershed level.

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)**

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	Fecal Coliform	Aerobic SOUR Test	Land Application	2.4

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.

3.1 Sample Point Number: 002- SLUDGE

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	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
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	
Nitrogen, Total Kjeldahl		Percent	Annual	Composite	
Nitrogen, Ammonium (NH4-N) Total		Percent	Annual	Composite	
Phosphorus, Total		Percent	Annual	Composite	
Phosphorus, Water Extractable		% of Tot P	Annual	Composite	
Potassium, Total Recoverable		Percent	Annual	Composite	
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	Once in 2028.
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	Once in 2028.
PFOA + PFOS		ug/kg	Annual	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

3.1.1 Changes from Previous Permit:

Sludge limitations and monitoring requirements were evaluated for this permit term and no changes were required in this permit section.

PFAS –Monitoring is required annually pursuant to s. NR 204.06(2)(b)9., Wis. Adm. Code.

3.1.2 Explanation of Limits and Monitoring Requirements

Requirements for disposal, including 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), Wis. Adm. Code. Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7), Wis. Adm Code for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07(3)(k), Wis. Adm. Code.

PFAS- The presence and fate of PFAS in municipal and industrial sludges is an emerging public health concern. EPA has developed a draft risk assessment to determine future land application rates and released this risk assessment in January of

2025. The department is evaluating this new information. Until a decision is made, the "Interim Strategy for Land Application of Biosolids and Industrial Sludges Containing PFAS" should be followed

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 this WPDES permit pursuant to ss. NR 214.18(5)(b) and NR 204.06(2)(b)9., Wis. Adm. Code.

4 Schedules

4.1 Facility Plan

Required Action	Due Date
Progress Report: The permittee shall submit a progress report on development and submittal of a facility plan.	09/30/2027
Submit Facility Plan: The permittee shall submit a facility plan, pursuant to s. NR 110.09, Wis. Adm. Code, to the Department addressing the unused two-cell wastewater lagoon. The plan shall also address influent and effluent flow-proportional composite sampling and effluent flow monitoring, pursuant to s. NR 110.09, Wis. Adm. Code. Pursuant to s. NR 110.09(2)(r), Wis. Adm. Code, a facility plan which recommends the abandonment of a wastewater treatment system shall include an abandonment plan outlining the proposed method of abandonment and shall provide for the removal and proper recycling, treatment, or disposal of any accumulated solid matter, solid or liquid wastes, or wastes in combination with soil. The abandonment plan shall also address relandscaping necessary to prevent accumulation of standing water or runoff.	04/30/2028
Final Plans and Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Stats., specifying treatment plant upgrades and a schedule for completing construction of the upgrades by the complete construction date specified below.	03/31/2029
Treatment Plant Upgrade: The permittee shall initiate bidding, procurement, and/or construction of the project. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats., prior to initiating activities defined as construction under ch. NR 108, Wis. Adm. Code. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.	09/30/2029
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.	09/30/2030
Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades and shall inform the Department of the substantial completion.	03/31/2031

4.1.1 Explanation of Schedule

To comply with ch. NR 110, Wis. Adm. Code, this compliance schedule requires the permittee evaluate use of the existing two-cell lagoon for either rehabilitation or abandonment. To comply with s. 210.04(4), Wis. Adm. Code, this compliance schedule also requires the use of 24-hour flow proportional composite samplers for monitoring influent and effluent wastewater quality. To comply with ss. NR 108.06(4)(b), Wis. Adm. Code, and NR 205.07(1)(r)2., Wis. Adm. Code, this compliance schedule requires the permittee to also evaluate the need for effluent flow monitoring.

4.2 Disinfection and Effluent Limitations for E. coli

The permittee shall install disinfection treatment and comply with surface water limitations for E. coli as specified. No later than 14 days following each compliance date, the permittee shall notify the Department in writing of its compliance or noncompliance. If a submittal is required, a timely submittal fulfills the notification requirement.

Required Action	Due Date
Progress Report: The permittee shall submit a progress report on development and submittal of a facility plan for upgrades to meet disinfection requirements and *E. coli* limits.	09/30/2027
Submit Facility Plan: The permittee shall submit a Facility Plan per s. NR 110.09, Wis. Adm. Code for meeting disinfection requirements and complying with *E. coli* surface water limitations. The permittee may submit an abbreviated facility plan if the Department determines that the modifications are minor.	04/30/2028
Final Plans and Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to ch. NR 108, Wis. Adm. Code, specifying treatment plant upgrades that must be constructed to meet disinfection requirements per s. NR 210.06(1), Wis. Adm Code, achieve compliance with final *E. coli* limitations, and a schedule for completing construction of the upgrades by the complete construction date specified below.	03/31/2029
Treatment Plant Upgrade to Meet Limitations: The permittee shall initiate bidding, procurement, and/or construction of the project. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41. Stats., prior to initiating activities defined as construction under ch. NR 108, Wis. Adm. Code. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications.	09/30/2029
Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.	09/30/2030
Complete Construction: The permittee shall complete construction of wastewater treatment system upgrades.	03/31/2031
Achieve Compliance: The permittee shall achieve compliance with final *E. coli* limitations.	04/30/2031

4.2.1 Explanation of Schedule

A compliance schedule is included in the permit to provide time for the permittee to submit plans and specs and install disinfection treatment for meeting effluent E. coli water quality-based effluent limits and disinfection requirements pursuant s. NR 210.06, Wis. Adm. Code.

4.3 Phosphorus Schedule - Optimization and Compliance Planning

The permittee is required to optimize performance and undertake compliance planning to control phosphorus discharges per the following schedule.

Required Action	Due Date
Optimization and Compliance Alternatives: The permittee shall implement a phosphorus discharge optimization plan to control phosphorus discharges to the greatest extent practicable. Submit a progress report that summarizes the approach to phosphorus removal at the facility, the resulting	01/31/2028

concentration and mass loading for the last 12-month period, and any changes that were or are needed to optimize removal of phosphorus by the due date. The permittee shall also evaluate alternative phosphorus compliance options such as water quality trading and adaptive management. The progress report submitted on the date due shall also detail any outreach activities undertaken to evaluate these options, any communications with credit generators, brokers/clearinghouse, and any potential water quality trading or adaptive management projects that may lead to compliance with phosphorus WQBELs. Financial alternatives evaluation: If the permittee intends to seek a renewed variance at the end of this permit term, the permittee may complete a financial evaluation to support ongoing variance eligibility. The report must evaluate financial mechanisms that have the potential to make compliance with phosphorus WQBELs economically feasible. Include an assessment of the feasibility and financial outcomes of the following opportunities: variable rate structures, grants through USDA or other sources, and DNR's Clean Water Fund Program. The assessment of the DNR's Clean Water Fund program should take into account subsidized interest rate loans, principal forgiveness, and other options as outlined in EPA's March 2024 Financial Capabilities Assessment Guidance, Appendix C.	
Progress Report #2: Submit a progress report per the above for the prior calendar year.	01/31/2029
Progress Report #3: Submit a progress report per the above for the prior calendar year.	01/31/2030
Progress Report #4: Submit a progress report per the above for the prior calendar year.	01/31/2031
Final MDV Optimization and Compliance Alternatives Report: Submit a progress report per the above for the prior calendar year. If water quality trading or adaptive management will be used to comply with phosphorus limitations during the next permit term, submit a draft water quality trading plan, adaptive management plan, or executed clearinghouse credit purchase agreement. The financial alternatives evaluation as described above must be submitted by the date due if the facility chooses to seek renewal of the variance.	07/01/2031

4.3.1 Explanation of Schedule

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.

4.4 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 ($68.40 per pound) or $640,000, whichever is less. See the payment calculation steps in the Surface Water section. The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year	03/01/2027

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 0.02 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.	03/01/2028
Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2029
Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2030
Annual Verification of Payment #5: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2031
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.	

4.4.1 Explanation of Schedule

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 $68.40 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).

4.5 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.	01/01/2028
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.	04/01/2028
Initiate Actions: Initiate actions identified in the plan.	07/01/2028
Complete Actions: Complete actions identified in the plan and achieve compliance with the specified interim effluent limit.	01/01/2029

4.5.1 Explanation of Schedule

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 two years to comply with that limit.

4.6 Temperature Limits and Dissipative Cooling Evaluation

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

Required Action	Due Date
Report on Effluent Discharges: Submit a report on effluent temperature with conclusions regarding compliance. Informational Note: Refer to the Surface Water subsections regarding 'Determination of Need for Effluent Limits' and 'Dissipative Cooling Demonstration - Weekly Average Limits' concerning requests for a Department determination on the need for limits and follow-up procedures for demonstration of dissipative cooling per NR 106.59, as well as re-evaluation of the limits pursuant to NR 106 Subchapters V & VI or NR 102.26, Wis. Adm. Code.	01/01/2028
Action Plan: Submit an action plan for complying with all effluent temperature limits that remain following the Department's review for necessity.	06/01/2028
Construction Plans: Submit construction plans (if construction is required for complying with effluent temperature limits) and include plans and specifications with the submittal.	06/01/2029
Initiate Actions: Initiate actions identified in the plan.	06/01/2030
Complete Actions: Complete actions necessary to achieve compliance with effluent temperature limits.	01/01/2031

4.6.1 Explanation of Schedule

The schedule is intended to provide time for the facility to be in compliance with the temperature limits or provide an alternate study.

4.7 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan Submittal: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with ch. NR 204, Wis. Adm. Code, by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify monitoring procedures; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; and 10) include any other pertinent information. Once approved, all landspreading activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes.	01/01/2028

4.7.1 Explanation of Schedule

An up-to-date Land Application Management Plan is required that documents how the permittee will manage the land application of biosolids consistent with ch. NR 204, Wis. Adm. Code

Other Comments

None

Attachments

Water Quality Based Effluent Limits dated 3/25/2025

MDV Approval Letter dated 9/24/26

MDV Checklist dated 9/24/26

Justification Of Any Waivers From Permit Application Requirements

No waivers requested or granted as part of this permit reissuance

Prepared By: Jennifer Jerich, Wastewater Specialist

Date: 10/30/2026

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: March 25, 2025

TO: Jennifer Jerich – Horicon/SCR

FROM: Zainah Masri – WY/3

SUBJECT: Water Quality-Based Effluent Limitations for the Mount Hope Wastewater Treatment Facility
WPDES Permit No. WI-0020907-10-0

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 Mount Hope Wastewater Treatment Facility in Grant County. This municipal wastewater treatment facility (WWTF) discharges to the Headwaters of Little Grant River, located in the Upper Grant River Watershed (GP06) in the Grant-Platte 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	30 mg/L			15 mg/L		1,3
TSS	30 mg/L			20 mg/L		1,3
pH	9.0 s.u.	6.0 s.u.				1,3
Dissolved Oxygen		4.0 mg/L				1,3
Ammonia Nitrogen May – September October – April	Variable Variable		6.5 mg/L **32 mg/L**	2.8 mg/L **13 mg/L**		4,5
Bacteria						
Final Limit *E. coli*				126 #/100 mL geometric mean		6
Residual Chlorine	22 µg/L		**7.8 µg/L**	**7.8 µg/L**		5,7
Chloride						8
Phosphorus						
LCA Interim Limit				1.0 mg/L		9
HAC Interim Limit				0.8 mg/L		
Final WQBEL				0.225 mg/L	0.075 mg/L	
Temperature						10
TKN, Nitrate+Nitrite, and Total Nitrogen						11
Acute WET						12,13,14

Footnotes:

1. No changes from the current permit.

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2. Monitoring only.
3. These limits are based on the Limited Forage Fish (LFF) community of the immediate receiving water as described in s. NR 104.02(3)(a), Wis. Adm. Code.
4. The variable daily maximum ammonia nitrogen limit table corresponding to various effluent pH values may be included in the permit in place of the single limit. These limits apply year-round.

Effluent pH s.u.	**Limit mg/L**	**Effluent pH s.u.**	**Limit mg/L**	**Effluent pH s.u.**	**Limit mg/L**
$6.0 \leq pH \leq 6.1$	61	$7.0 < pH \leq 7.1$	37	$8.0 < pH \leq 8.1$	7.8
$6.1 < pH \leq 6.2$	60	$7.1 < pH \leq 7.2$	33	$8.1 < pH \leq 8.2$	6.5
$6.2 < pH \leq 6.3$	59	$7.2 < pH \leq 7.3$	30	$8.2 < pH \leq 8.3$	5.3
$6.3 < pH \leq 6.4$	57	$7.3 < pH \leq 7.4$	26	$8.3 < pH \leq 8.4$	4.4
$6.4 < pH \leq 6.5$	55	$7.4 < pH \leq 7.5$	22	$8.4 < pH \leq 8.5$	3.6
$6.5 < pH \leq 6.6$	53	$7.5 < pH \leq 7.6$	19	$8.5 < pH \leq 8.6$	3.0
$6.6 < pH \leq 6.7$	50	$7.6 < pH \leq 7.7$	16	$8.6 < pH \leq 8.7$	2.5
$6.7 < pH \leq 6.8$	47	$7.7 < pH \leq 7.8$	14	$8.7 < pH \leq 8.8$	2.1
$6.8 < pH \leq 6.9$	44	$7.8 < pH \leq 7.9$	11	$8.8 < pH \leq 8.9$	1.8
$6.9 < pH \leq 7.0$	41	$7.9 < pH \leq 8.0$	9.5	$8.9 < pH \leq 9.0$	1.5

5. Additional limits to comply with the expression of limits requirements in ss. NR 106.07 and NR 205.065(7), Wis. Adm. Codes, are included in bold. Additional limits are not needed for BOD and TSS because these limits are specifically listed in ch. NR 104.
6. Bacteria limits apply during the disinfection season of May through September. Additional final limit: No more than 10 percent of *E. coli* bacteria samples collected in any calendar month may exceed 410 count/100 mL.
7. Chlorine limits would be required if Mount Hope Wastewater Treatment Facility decides to use chlorination for disinfection. The calculated weekly average effluent limitation of 7.8 µg/L would also be included in the permit because it is more restrictive than the daily maximum limit.
8. Monitoring at a frequency to ensure that 11 samples are available at the next permit issuance.
9. Under the phosphorus MDV, a level currently achievable (LCA) interim limit of 1.0 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 0.8 mg/L can be met. The final WQBELs remain at 0.225 mg/L as a monthly average and 0.075 mg/L as a six-month average,
10. Limits are required year round as shown in the table below. A compliance schedule may be included to meet the limits at the end of the permit term.

Month	Calculated Effluent Limit	
	Weekly Average Effluent Limitation (°F)	Daily Maximum Effluent Limitation (°F)
JAN	**54**	**-**
FEB	**54**	**-**
MAR	**57**	**-**
APR	**63**	**-**
MAY	**70**	**-**
JUN	**77**	**-**
JUL	**81**	**-**

Month	Calculated Effluent Limit	
	Weekly Average Effluent Limitation (°F)	Daily Maximum Effluent Limitation (°F)
AUG	**79**	**-**
SEP	**73**	**85**
OCT	**63**	**-**
NOV	**54**	**-**
DEC	**54**	**-**

11. 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. Sections 283.37(5) and 283.55(1)(e), Wis. Stats, and ss. NR 200.065(1)(g) and NR 200.065(1)(h), Wis. Adm. Codes, provide the authority to request this monitoring during the permit term. Total Nitrogen is the sum of nitrate (NO_3), nitrite (NO_2), and total Kjeldahl nitrogen (TKN) (all expressed as N).
12. After consideration of the guidance provided in the Department's *WET Program Guidance Document* (2022) and other information described above, 2 acute WET tests throughout the permit term are recommended in the reissued permit. Sampling WET concurrently with any chemical-specific toxic substances is recommended. According to the *State of Wisconsin Aquatic Life Toxicity Testing Methods Manual* (s. NR 219.04, Table A, Wis. Adm. Code), a synthetic (standard) laboratory water may be used as the dilution water and primary control in acute WET tests.
13. Sampling WET concurrently with any chemical-specific toxic substances is recommended.
14. If a satisfactory phosphorus chemical SOP is established and implemented at the facility prior to permit reissuance, then no WET testing would be required.

Please consult the attached report for details regarding the above recommendations. If there are any questions or comments, please contact Zainah Masri at Zainah.Masri@wisconsin.gov or Diane Figiel at Diane.Figiel@wisconsin.gov.

Attachments (4) – Narrative, Thermal Table, Ammonia Nitrogen Calculations & Map

PREPARED BY: Zainah Masri, Water Resources Engineer Zainah Masri

APPROVED BY: Diane Figiel Date: 03/25/2026
Diane Figiel, PE,
Water Resources Engineer

E-cc: Caitlin O'Connell , Wastewater Engineer – Dodgeville/SCR
Lisa Creegan, Regional Wastewater Supervisor – Fitchburg/SCR
Diane Figiel, Water Resources Engineer – WY/3
Nate Willis, Environmental Engineering Manager – WY/3
Kari Fleming, Natural Resources Program Manager– WY/3

Attachment #1

Water Quality-Based Effluent Limitations for
Mount Hope Wastewater Treatment Facility

WPDES Permit No. WI-0020907-10-0

Prepared by: Zainah Masri – WY/3

PART 1 – BACKGROUND INFORMATION

Facility Description
The WWTP is a single-train, conventional activated sludge wastewater treatment facility. The original WWTP was constructed in 1970 and was upgraded to a mechanical system in 1987. A chemical phosphorus removal system using alum was completed in 2024. The WWTP consists of an aeration basin and final clarification. Treated effluent is discharged to the headwaters of the Little Grant River, which is part of the Upper Grant River watershed and Grant
Platte River Basin.

Attachment #4 is a map of the area showing the approximate location of Outfall 001.

Existing Permit Limitations
The current permit, expiring on March 31, 2026 includes the following effluent limitations and monitoring requirements.

Parameter	Daily Maximum	Daily Minimum	Weekly Average	Monthly Average	Six-Month Average	Footnotes
BOD_5	30 mg/L			15 mg/L		1,2
TSS	30 mg/L			20 mg/L		1,2
pH	9.0 s.u.	6.0 s.u.				1
Dissolved Oxygen		4.0 mg/L				1,2
Ammonia Nitrogen May – September October – April	 Variable Variable		 6.5 mg/L **32 mg/L**	 2.8 mg/L **13 mg/L**		3,4
Chloride						5
Phosphorus LCA Interim Limit HAC Interim Limit Final WQBEL				 6.1 mg/L 1.0 mg/L 0.225 mg/L	 0.075 mg/L	6
Temperature						5
TKN, Nitrate+Nitrite, and Total Nitrogen						7

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. These limits are based on the Limited Forage Fish (LFF) community of the immediate receiving water as described in s. NR 104.02(3)(a), Wis. Adm. Code.
3. Additional limits to comply with the expression of limits requirements in ss. NR 106.07 and NR 205.065(7), Wis. Adm. Codes, are included in bold.
4. The variable daily maximum ammonia nitrogen limit table corresponding to various effluent pH values may be included in the permit in place of the single limit. These limits apply year-round.

Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L
$6.0 \leq pH \leq 6.1$	61	$7.0 < pH \leq 7.1$	37	$8.0 < pH \leq 8.1$	7.8
$6.1 < pH \leq 6.2$	60	$7.1 < pH \leq 7.2$	33	$8.1 < pH \leq 8.2$	6.5
$6.2 < pH \leq 6.3$	59	$7.2 < pH \leq 7.3$	30	$8.2 < pH \leq 8.3$	5.3
$6.3 < pH \leq 6.4$	57	$7.3 < pH \leq 7.4$	26	$8.3 < pH \leq 8.4$	4.4
$6.4 < pH \leq 6.5$	55	$7.4 < pH \leq 7.5$	22	$8.4 < pH \leq 8.5$	3.6
$6.5 < pH \leq 6.6$	53	$7.5 < pH \leq 7.6$	19	$8.5 < pH \leq 8.6$	3.0
$6.6 < pH \leq 6.7$	50	$7.6 < pH \leq 7.7$	16	$8.6 < pH \leq 8.7$	2.5
$6.7 < pH \leq 6.8$	47	$7.7 < pH \leq 7.8$	14	$8.7 < pH \leq 8.8$	2.1
$6.8 < pH \leq 6.9$	44	$7.8 < pH \leq 7.9$	11	$8.8 < pH \leq 8.9$	1.8
$6.9 < pH \leq 7.0$	41	$7.9 < pH \leq 8.0$	9.5	$8.9 < pH \leq 9.0$	1.5

5. Monitoring only
6. The current permit has a phosphorus MDV. A compliance schedule is in the current permit to meet the final WQBEL by March 31, 2025.
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. Sections 283.37(5) and 283.55(1)(e), Wis. Stats, and ss. NR 200.065(1)(g) and NR 200.065(1)(h), Wis. Adm. Codes, provide the authority to request this monitoring during the permit term. Total Nitrogen is the sum of nitrate (NO_3), nitrite (NO_2), and total Kjeldahl nitrogen (TKN) (all expressed as N).

Receiving Water Information

- Name: Little Grant River
- Waterbody Identification Code (WBIC): 963100
- Classification used in accordance with chs. NR 102 and 104, Wis. Adm. Code: Limited Forage Fish as listed in ch. NR 104, Wis. Adm. Code. About 5 miles downstream the Little Grant River classification switches to default warmwater sport fish (WWSF).
- Low flows used in accordance with chs. NR 106 and 217, Wis. Adm. Code: The following 7-Q_{10} and 7-Q_2 values are from USGS for Station where Outfall 001 is located.

  7-Q_{10} = 0.01 cubic feet per second (cfs)

  7-Q_2 = 0.02 cfs

  Harmonic Mean Flow = 0.063 cfs using a flow estimate of 0.28 cfs from SWDV.

  The Harmonic Mean has been estimated based on average flow and the 7-Q_{10} using an equation from U.S. EPA's *Technical Support Document for Water Quality-Based Toxics Control* (March 1991, EPA/505/2-90-001, pgs. 88-89).

- Hardness = 357 mg/L as $CaCO_3$. Effluent hardness is used in place of receiving water because there is no receiving water flow upstream of the discharge.
  - % 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 data from Rountree Branch (Station 223271) is used for this evaluation because there is no data available for the Little Grant River. Rountree 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.
- Multiple dischargers: None
- Impaired water status: The nearest downstream impaired water is the Mississippi River (for PCBs and mercury) more than 30 miles downstream.

Effluent Information

- Design flow rate:
  Annual average = 0.04 million gallons per day (MGD)

  For reference, the actual average flow from December 2020 to October 2025 was 0.01 MGD. *Please note that the actual average flow rate is the influent flow rate from Outfall 701.*

- Hardness = 357 mg/L as $CaCO_3$. This value represents the geomean from the permit application from October 2025.
- 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 supply: Municipality waterworks and private wells.
- Additives: Mount Hope Wastewater Treatment Facility has included one additive in the permit application that has the potential to be present in Outfall 001. This additive is listed below:
  - Aluminum Sulfate (Alum) – Phosphorus Removal
  - An additive review is not necessary for any additives where either the toxicity is well documented and understood, can be controlled by a WQBEL, or are not believed to be present in the discharge. This is the case upon initial review of the listed additives, and the facility is not requesting increased dosages or use frequencies. Therefore, an additive review is not needed at this time.
- 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, hardness and phosphorus.
- Effluent data for substances for which a single sample was analyzed is shown in the tables in Part 2, in the column titled "MEAN EFFL. CONC.". Otherwise, substances with multiple effluent data are shown in the tables below or in their respective parts in this evaluation. There were not 11 copper results reported in the permit application so data from the previous application was included to have sufficient data to calculate P_{99}s. There haven't been significant changes to the treatment plant so this data is considered to be representative of current effluent quality.

Attachment #1

Copper Effluent Data

Sample Date	Copper (µg/L)	Sample Date	Copper (µg/L)	Sample Date	Copper (µg/L)
06/16/2020	15	07/04/2020	14	10/27/2025	16
06/19/2020	14	07/07/2020	14	10/31/2025	8.2
06/22/2020	14	07/10/2020	12	11/4/2025	8.5
06/25/2020	15	07/13/2020	12	11/8/2025	7.8
06/28/2020	17	07/16/2020	14	11/12/2025	8.9
07/01/2020	11	10/23/2025	11		
1-day P_{99} = 21 µg/L					
4-day P_{99} = 16 µg/L					

Chloride Effluent Data

	Chloride (mg/L)
1-day P_{99}	372
4-day P_{99}	311
30-day P_{99}	276
Mean	257
Std	42
Sample size	48
Range	175 - 326

The following table presents the average concentrations and loadings at Outfall 001 from December 2020 to October 2025 for all parameters with limits in the current permit to meet the requirements of s. NR 201.03(6), Wis. Adm. Code:

Parameters with Effluent Limits

	Average Measurement
BOD_5	3.6 mg/L
TSS	5.0 mg/L*
pH field	7.6 s.u.
Dissolved Oxygen	9.6 mg/L
Ammonia Nitrogen	0.75 mg/L
Phosphorus	0.54 mg/L

*Results below the limit 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 P_{99}) 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_{10}

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.

$$\text{Limitation} = \frac{(WQC)\,(Qs + (1-f)\,Qe) - (Qs - f\,Qe)\,(Cs)}{Qe}$$

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 the case for Mount Hope and the limits are set based on the 1-Q_{10}.

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

Daily Maximum Limits based on Acute Toxicity Criteria (ATC)

RECEIVING WATER FLOW = 0.01 cfs, (1-Q_{10} (estimated as 80% of 7-Q_{10})), as specified in s. NR 106.06(3)(bm), Wis. Adm. Code.

SUBSTANCE	REF. HARD.* mg/L	ATC	MAX. EFFL. LIMIT**	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.	1-day P_{99}	1-day MAX. CONC.
Chlorine		19	22	4.3	-		
Arsenic		340	384	77	<1.1		
Cadmium	357	44	50	10	<0.17		
Chromium	301	4,446	5,021	1,004	<1.5		
Copper	357	52	58			21	17
Lead	356	365	411	82	<5.4		
Nickel	268	1,080	1,218	244	<4.7		
Zinc	333	345	389	78	23		

SUBSTANCE	REF. HARD.* mg/L	ATC	MAX. EFFL. LIMIT**	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.	1-day P_{99}	1-day MAX. CONC.
Chloride (mg/L)		757	853			372	326

* 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.

Weekly Average Limits based on Chronic Toxicity Criteria (CTC)

RECEIVING WATER FLOW = 0.025 cfs (¼ of the 7-Q_{10}), 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}
Chlorine		7.3		7.8	1.5	-	-
Arsenic		152	-	158	32	<1.1	
Cadmium	175	3.8	0.10	4.0	0.8	<0.17	
Chromium	301	326	-	339	68	<1.5	
Copper	357	31	4.3	32			16
Lead	356	96	7.1	99	20	<5.4	
Nickel	268	120	16	124	25	<4.7	
Zinc	333	345	-	359	72	23	
Chloride (mg/L)		395	18.4	410			311

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

Monthly Average Limits based on Wildlife Criteria (WC)

RECEIVING WATER FLOW = 0.0043 cfs (¼ of the 90-Q_{10}), as specified in s. NR 106.06(4), Wis. Adm. Code

SUBSTANCE	WC	MO'LY AVE. LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.	30-day P_{99}
Mercury (ng/L)	1.3	1.4	0.28	11	-

Monthly Average Limits based on Human Threshold Criteria (HTC)

RECEIVING WATER FLOW = 0.0158 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	0.10	464	93	<0.17
Chromium (+3)	3,818,000	-	4,789,607	957,921	<1.5
Lead	140	7.1	174	35	<5.4
Nickel	43,000	16	53,939	10,788	<4.7

Attachment #1

Monthly Average Limits based on Human Cancer Criteria (HCC)

RECEIVING WATER FLOW = 0.0158 cfs (¼ of Harmonic Mean), as specified in s. NR 106.06(4), Wis. Adm. Code.

SUBSTANCE	HCC	MO'LY AVE. LIMIT	1/5 OF EFFL. LIMIT	MEAN EFFL. CONC.
Arsenic	13	17	3.3	<1.1

Conclusions and Recommendations

Based on a comparison of the effluent data and calculated effluent limitations, **effluent limitations are required for mercury and monitoring is recommended for chloride**. Limits and/or monitoring recommendations are made in the paragraphs below:

Copper – Considering available effluent data from the previous permit term from June 2020 to July 2020 the 1-day P_{99} concentration is 19 µg/L, with a maximum concentration of 17 µg/L. The maximum effluent concentration and the 1-day P_{99} of the effluent data do not exceed the calculated daily maximum limit, **therefore concentration and mass limits, as well as monthly monitoring, are not required.**

Chloride – Considering available effluent data from the current permit term, from February 2025 to October 2025, the 1-day P_{99} chloride concentration is 372 mg/L, and the 4-day P_{99} of effluent data is 311 mg/L.

These effluent concentrations are below the calculated WQBELs for chloride, **therefore no effluent limits are needed. Chloride monitoring is recommended to ensure that 11 sample results are available at the next permit issuance to meet the data requirements of s. NR 106.85, Wis. Adm. Code.**

Mercury – The permit application included a detect for mercury, even though the Mount Hope Wastewater Treatment Facility is categorized as a minor facility as defined in s. NR 200.02(8), Wis. Adm. Code. Although a sample taken on October 26, 2025, indicated a level of 11 ng/L of mercury, which exceeds 1/5th of the limit, a limit and additional monitoring are not recommended.

The sample collected and reported with the permit application is believed to be a result of sample contamination and not representative of the discharge. Mount Hope is a community with a population of 213 people, no industrial contributors and no dental offices. As a minor municipal facility with sludge data less than the high quality sludge mercury concentration of 17 mg/kg, effluent testing of mercury is not required per s. NR 106.145(3) Wis. Adm. Code as these facilities are not expected to have mercury in the effluent that would cause reasonable potential to exceed the mercury water quality standard. Mount Hope has tested their sludge for mercury annually with results consistently been below the high quality sludge mercury concentration of 17 mg/kg since 2008. The effluent sample that was collected for the permit application was not collected using the sampling requirements in s. NR 106.145(9) which is necessary to get a representative mercury sample so it will not be used in this evaluation.

If future mercury sludge data were to be higher than the high quality sludge mercury concentration of 17 mg/L, effluent monitoring would need to be included in the permit. The permit application did not require monitoring for mercury because Mount Hope WWTF 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 October 2020 to September 2025 was 3.3 mg/kg, with a maximum reported concentration of 4.7 mg/kg. Therefore, **no mercury monitoring is recommended at Outfall 001.**

PFOS and PFOA – The need for PFOS and PFOA monitoring is evaluated in accordance with s. NR 106.98(2), Wis. Adm. Code.

Available monitoring sample data from the Mount Hope Waterworks(PWS ID: 12201112) is provided in the table below:

Water Supply PFAS Data

Sample Date	Sample ID	Well #	PFOS (ng/L)	PFOA (ng/L)
07/19/2023	CB08212-01	BF873	0	0
		Average =	0	0

The limited data above shows the municipal water supply is below 1/5th of the applicable PFOS and PFOA criteria.

Previous monitoring produced a PFOS result of 0 ng/L and a PFOA result of 0 ng/L. These results are less than one fifth of the respective criteria for each substance. Based on the type of discharge, the effluent flow rate, and non-detected levels of PFOS/PFOA in the source water, **PFOS and PFOA monitoring is not recommended.**

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.

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. The current permit has daily maximum, weekly average and monthly average limits. These limits are re-evaluated at this time due to the following changes:

- Subchapter IV of ch. NR 106, Wis. Adm. Code allows limits based on available dilution instead of limits set to twice the acute criteria.
- Section NR 106.07(3), Wis. Adm. Code requires weekly and monthly average limits for municipal treatment plants.

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:

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

Where:

A = 0.411 and B = 58.4 for a Limited Forage Fishery, and
pH (s.u.) = that characteristic of the effluent.

The effluent pH data was examined as part of this evaluation. A total of 521 sample results were reported from December 2020 to October 2025. The maximum reported value was 9.0 s.u. (Standard pH Units). The effluent pH was 8.7 s.u. or less 99% of the time. The 1-day P_{99}, calculated in accordance with s. NR 106.05(5), Wis. Adm. Code, is 8.7 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 8.6 s.u. Therefore, a value of 8.7 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 8.7 s.u. into the equation above yields an ATC = 2.2 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-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_{10} (estimated as 80 % of 7-Q_{10}) and the 2×ATC approach are shown below.

Daily Maximum Ammonia Nitrogen Determination

	Ammonia Nitrogen Limit mg/L
2×ATC	4.4
1-Q_{10}	2.5

The 1-Q_{10} method yields the most stringent limits for Mount Hope Wastewater Treatment Facility.

The current permit has variable daily maximum effluent limits based on effluent pH. Presented below is a table of daily maximum limitations corresponding to various effluent pH values.

Daily Maximum Ammonia Nitrogen Limits – LFF (using 1-Q_{10})

Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L	Effluent pH s.u.	Limit mg/L
$6.0 \leq pH \leq 6.1$	61	$7.0 < pH \leq 7.1$	37	$8.0 < pH \leq 8.1$	7.8
$6.1 < pH \leq 6.2$	60	$7.1 < pH \leq 7.2$	33	$8.1 < pH \leq 8.2$	6.5
$6.2 < pH \leq 6.3$	59	$7.2 < pH \leq 7.3$	30	$8.2 < pH \leq 8.3$	5.3
$6.3 < pH \leq 6.4$	57	$7.3 < pH \leq 7.4$	26	$8.3 < pH \leq 8.4$	4.4
$6.4 < pH \leq 6.5$	55	$7.4 < pH \leq 7.5$	22	$8.4 < pH \leq 8.5$	3.6
$6.5 < pH \leq 6.6$	53	$7.5 < pH \leq 7.6$	19	$8.5 < pH \leq 8.6$	3.0
$6.6 < pH \leq 6.7$	50	$7.6 < pH \leq 7.7$	16	$8.6 < pH \leq 8.7$	2.5
$6.7 < pH \leq 6.8$	47	$7.7 < pH \leq 7.8$	14	$8.7 < pH \leq 8.8$	2.1
$6.8 < pH \leq 6.9$	44	$7.8 < pH \leq 7.9$	11	$8.8 < pH \leq 8.9$	1.8
$6.9 < pH \leq 7.0$	41	$7.9 < pH \leq 8.0$	9.5	$8.9 < pH \leq 9.0$	1.5

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

Weekly and monthly average limits are not included in the current permit but are being evaluated here due to changes to ch. NR 106, Wis. Adm. Code. **The weekly and monthly average ammonia nitrogen limits calculation from the previous memo do not change** because there have been no changes in the effluent and receiving water flow rates. The calculations from the previous WQBEL memo are shown in attachment #3.

Effluent Data

The following table evaluates the statistics based upon ammonia data reported from December 2020 to October 2025.

Ammonia Nitrogen Effluent Data

Ammonia Nitrogen mg/L	May - September	October – April
1-day P_{99}	0.9	10
4-day P_{99}	0.7	7.3
30-day P_{99}	0.34	3.5
Mean*	0.06	0.68
Std	0.54	5.2
Sample size	425	529
Range	<0.02 - 8.1	0.05 - 32

*Values lower than the limit of detection were substituted with a zero

Reasonable Potential

The permit currently has daily maximum limits year-round as well as average weekly and monthly limits from May – September and October – April. Where there are existing ammonia nitrogen limits in the permit, the limits must be retained regardless of reasonable potential, consistent with s. NR 106.33(1)(b), Wis. Adm. Code:

> (b) If a permittee is subject to an ammonia limitation in an existing permit, the limitation shall be included in any reissued permit. Ammonia limitations shall be included in the permit if the permitted facility will be providing treatment for ammonia discharges.

Conclusions and Recommendations

In summary, after rounding to two significant figures, the following ammonia nitrogen limitations are recommended. No mass limitations are recommended in accordance with s. NR 106.32(5), Wis. Adm Code.

Final Ammonia Nitrogen Limits

	Daily Maximum mg/L	Weekly Average mg/L	Monthly Average mg/L
May – September	Variable	6.5 mg/L	2.8 mg/L
October – March	Variable	**32 mg/L**	**13 mg/L**

Additional limits to meet the requirements in s. NR 106.07, Wis. Adm Code, are denoted in bold text.

PART 4 – WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR BACTERIA

Section NR 102.04(5), Wis. Adm. Code, states that all surface waters shall be suitable for supporting recreational use and shall meet *E. coli* criteria during the recreation season. Section NR 102.04(5)(b), Wis. Adm. Code, allows the Department to make exceptions when it determines, in accordance with s. NR 210.06(3), Wis. Adm. Code, that wastewater disinfection is not required to meet E. coli limits and protect the recreational use. Section NR 210.06(3), Wis. Adm. Code, tasks the Department with determining the need for disinfection using a site-specific analysis based on potential risk to human or animal health. It sets out the factors that must be considered in determining the necessity to disinfect municipal wastewater or to change the length of the disinfection season.

Mount Hope Wastewater Treatment Facility had previously been exempted from disinfection based on the limited aquatic life or limited forage fish community classification of the receiving water. Section NR 210.06(3)(g), Wis. Adm. Code, states that disinfection decisions may be made based on the hydrologic classifications listed in s. NR 104.02(1), Wis. Adm. Code (**not** on the water quality classifications - i.e., limited forage fish, limited aquatic life - that are defined in s. NR 104.02(3), Wis. Adm. Code). The hydrologic classification for Gregory Branch is listed in ch. NR 104, Wis. Adm. Code, as continuous. Continuous streams have a higher likelihood of providing opportunities for full contact recreational activities. Therefore, disinfection should not be exempted based solely on this hydrological classification.

The Department has considered the information required by s. NR 210.06(3), Wis. Adm. Code, and has determined that the discharge cannot meet bacteria limits without disinfection. 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.

These limits are required during May through September. The permit will include a compliance schedule to meet these limits.

Total Residual Chlorine – **If Mount Hope Wastewater Treatment Facility decides to upgrade to use chlorination for disinfection, effluent limitations would be recommended to assure proper operation of the de-chlorination system.** Section NR 210.06(2)(b), Wis. Adm. Code, states, "When chlorine is used for disinfection, the daily maximum total residual chlorine concentration of the discharge may not exceed 0.10 mg/L." Because the WQBELs are more restrictive, they are recommended instead. Specifically, **a daily maximum limit of 22 µg/L would be required if Mount Hope Wastewater Treatment Facility decides to use chlorination for disinfection.** Due to revisions to s. NR 106.07(2), Wis. Adm. Code, mass limitations are no longer required. The calculated **weekly average effluent limitation of 7.8 µg/L would also be included in the permit because it is more restrictive than the daily maximum limit.**

Sections NR 106.07(3) and NR 205.065(7), Wis. Adm. Code require WPDES permits contain weekly average and monthly average limitations for municipal dischargers whenever practicable and necessary to protect water quality. **Therefore, a weekly average and monthly average limit of 7.8 µg/L would also be required** to meet expression of limits requirements in addition to the daily max limit.

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 Mount Hope Wastewater Treatment Facility currently has a limit of 1.0 mg/L, this limit should be included in the reissued permit. This limit remains applicable unless a more stringent WQBEL is given.

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 0.075 mg/L applies for the Little Grant 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.

$$\text{Limitation} = [(WQC)(Qs+(1-f)\ Qe) - (Qs-f\ Qe)\ (Cs)]/Qe$$

Where:

WQC = 0.075 mg/L for Little Grant River
Qs = 100% of the 7-Q_2 of 0.02 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 = 0.040 MGD = 0.062 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 as a median using the procedures specified in s. NR 102.07(1)(b) to (c), Wis. Code. 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.

A previous evaluation resulted in a WQBEL of 0.075 mg/L using a background concentration of 0.089 mg/L. Section NR 217.13(2)(d), Wis. Adm. Code, states that the determination of upstream concentrations shall be evaluated at each permit reissuance. Additional data were considered in estimating the background phosphorus concentration.

In stream total phosphorus data upstream of the discharge is not available however the following data were considered in estimating the background phosphorus concentration:

Attachment #1

SWIMS ID	223221	223306	273038
Station Name	Grant River – University Farm Rd.	Little Grant River-Little Grant River	Little Grant River (Bridge)
Waterbody	Grant River	Little Grant River	Waterbody Name
Sample Count	12	1	1
First Sample	10/15/2007	06/25/2003	06/25/2003
Last Sample	10/14/2013	-	-
Mean	0.103 mg/L	0.255 mg/L	0.158 mg/L
Median	0.089 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 0.075 mg/L. However, s. NR 217.13(7), Wis. Adm. Code, specifies that "if the WQBEL 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 facility may opt to sample the receiving water upstream of the outfall. The WQBEL may be amended if background phosphorus stream data, collected during the period of May – October and with regards to other stipulations laid out in s. NR 217.13(2)(d), Wis. Adm. Code, is submitted to the department that shows the upstream concentration of Total Phosphorus is in fact less than the applicable criterion. For informational purposes only, the following table shows a range of limits based on possible background concentrations. This calculation is based on effluent flow 0.04 MGD and stream flow (7-Q_2) of 0.02 cfs at the criterion of 0.075 mg/L in accordance with s. NR 217.13(2), Wis. Adm. Code.

Total Phosphorus Background Concentrations & Limits

Upstream 'Concentrations' mg/L	Corresponding P Limit mg/L
0.02	0.093
0.03	0.090
0.04	0.086
0.05	0.083
0.06	0.080
0.07	0.077
> = 0.075	0.075

Effluent Data

The following table summarizes effluent total phosphorus monitoring data from December 2020 to October 2025.

Total Phosphorus Effluent Data

	Phosphorus mg/L
1-day P_{99}	3.7

Attachment #1

	Phosphorus mg/L
4-day P_{99}	2.0
30-day P_{99}	0.96
Mean	0.53
Std	0.81
Sample size	514
Range	0.04 - 5.29

Reasonable Potential Determination
The discharge has reasonable potential to cause or contribute to an exceedance of the water quality criterion and is currently operating the treatment facility to remove phosphorus and meet the WQBELs. Therefore, **the WQBELs are required to continue in the reissued permit per ss. NR 217.15 and 205.067(5), Wis. Adm. Codes.**

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 0.075 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 0.225 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.

Multi-Discharge Variance Interim Limit
With the permit application, Mount Hope Wastewater Treatment Facility 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 0.8 mg/L as a monthly average. A compliance schedule may be appropriate to meet this interim limit but compliance with 0.8 mg/L shall be no later than the end of the reissued permit. The previous interim limit of 1.0 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.

In accordance with s. NR 106.53(2)(b), Wis. Adm. Code, the highest daily maximum flow rate for a calendar month is used to determine the acute (daily maximum) effluent limitation. In accordance with s. NR 106.53(2)(c), Wis. Adm. Code, the highest 7-day rolling average flow rate for a calendar month is used to determine the sub-lethal (weekly average) effluent limitation. These values were based off actual flow reported from December 2020 to October 2025.

The table below summarizes the maximum temperatures reported during monitoring from January 2025 to December 2025.

Monthly Temperature Effluent Data & Limits

Month	Representative Highest Monthly Effluent Temperature		Calculated Effluent Limit	
	Weekly Maximum (°F)	Daily Maximum (°F)	Weekly Average Effluent Limitation (°F)	Daily Maximum Effluent Limitation (°F)
JAN	68	70	**54**	78
FEB	69	70	**54**	79
MAR	70	73	**57**	80
APR	72	76	**63**	81
MAY	79	81	**70**	84
JUN	81	84	**77**	85
JUL	85	86	**81**	86
AUG	85	85	**79**	86
SEP	82	86	**73**	**85**
OCT	80	81	**63**	83
NOV	74	76	**54**	80
DEC	70	72	**54**	79

Reasonable Potential

Permit limits for temperature are recommended based on the procedures in s. NR 106.56, Wis. Adm. Code.

- An acute limit for temperature is recommended for each month in which the representative daily maximum effluent temperature for that month exceeds the acute WQBEL. The representative daily maximum effluent temperature is the greater of the following:
  (a) The highest recorded representative daily maximum effluent temperature
  (b) The projected 99th percentile of all representative daily maximum effluent temperatures
- A sub−lethal limitation for temperature is recommended for each month in which the representative weekly average effluent temperature for that month exceeds the weekly average WQBEL. The representative weekly average effluent temperature is the greater of the following:
  (a) The highest weekly average effluent temperature for the month.

(b) The projected 99th percentile of all representative weekly average effluent temperatures for the month

Comparing the representative highest effluent temperature to the calculated effluent limits determines the reasonable potential of exceeding the effluent limits. The months in which limitations are recommended are shown in bold. Based on this analysis, daily maximum temperature limits are needed for the month of September and weekly average temperature maximum limits are necessary year round.

The following general options are available for a facility to explore potential relief from the temperature limits:

- Effluent monitoring data: Verification or additional effluent monitoring (flow and/or temperature) may be appropriate if there were questions on the representativeness of the current effluent data. **The data reported on the DMRs appears to be higher than comparable facilities, verifying the data may result in some limits dropping out.**
- Monthly low receiving water flows: Contract with USGS to generate monthly low flow estimates for the receiving water to be used in place of the annual low flow.
- Mixing zone studies: A demonstration of rapid and complete mixing may allow for the use of a mixing zone other than the default 25%.
- Dissipative cooling demonstration: Effluent limitations based on sub-lethal criteria may be adjusted based on the potential for heat dissipation from municipal treatment plants as described in s. NR 106.59(4), Wis. Adm. Code.
- Collection of site-specific ambient temperature: default background temperatures for streams in Wisconsin, so actual data from the direct receiving water may provide for relaxed thermal limits but only if the site-specific temperatures are lower than the small stream defaults used in the above tables
- A variance to the water quality standard: This is typically considered to be the least preferable and most complex option as it requires the evaluation of the other alternatives.

These options are explained in additional detail in the August 15, 2013 Department *Guidance for Implementation of Wisconsin's Thermal Water Quality Standards*
https://dnr.wisconsin.gov/topic/Wastewater/Thermal.html

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 LC_{50} (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 distance between the outfall and the point where the receiving water becomes a non-variance waterbody (i.e., one that supports a cold water, warm water sport fish, or warm water forage fish community) is greater than four miles. For the Mount Hope Wastewater Treatment Facility that distance is approximately 5 miles. Given this distance, there is believed to be little potential for chronic toxicity effects in the Little Grant River associated with the discharge from the Mount Hope Wastewater Treatment Facility, so the need for chronic WET testing was not considered further.

- According to the *State of Wisconsin Aquatic Life Toxicity Testing Methods Manual* (s. NR 219.04, Table A, Wis. Adm. Code), a synthetic (standard) laboratory water may be used as the dilution water

and primary control in acute WET tests, unless the use of different dilution water is approved by the Department prior to use. The primary control water must be specified in the WPDES permit.

- Shown below is a tabulation of all available WET data for Outfall 001. Efforts are made to ensure that decisions about WET monitoring and limits are made based on representative data, as specified in s. NR 106.08(3), Wis. Adm Code. Data which is not believed to be representative of the discharge was not included in reasonable potential calculations. The table below differentiates between tests used and not used when making WET determinations.

WET Data History

Date Test Initiated	Acute Results LC_{50} %				Chronic Results IC_{25} %				Footnotes or Comments
	C. dubia	Fathead minnow	Pass or Fail?	Used in RP?	*C. dubia*	Fathead Minnow	Pass or Fail?	Use in RP?	
09/09/1996	>100	>100	Pass	Yes	-	-	-	-	1

Footnotes:

1. *Data Not Representative.* Significant changes were made to WET test methods in 2004 and these changes were assumed to be fully implemented by certified labs by no later than June 2005. It may be appropriate to exclude data collected before July 1, 2005, unless 1) it shows repeated toxicity that was never resolved or 2) older data is all that is available, and no significant changes have occurred which obviously make it unrepresentative. Ammonia limits were added to the permit in 2005 based on updated water quality criteria.

- According to s. NR 106.08, Wis. Adm. Code, WET reasonable potential is determined by multiplying the highest toxicity value that has been measured in the effluent by a safety factor, to predict the likelihood (95% probability) of toxicity occurring in the effluent above the applicable WET limit. The safety factor used in the equation changes based on the number of toxicity detects in the dataset. The fewer detects present, the higher the safety factor, because there is more uncertainty surrounding the predicted value. **WET limits must be given, according to s. NR 106.08(6), Wis. Adm. Code, whenever the applicable Reasonable Potential equation results in a value greater than 1.0.**

  Acute Reasonable Potential = [(TUa effluent) (B)(AMZ)]
  Chronic Reasonable Potential = [(TUc effluent) (B)(IWC)]

  According to s. NR 106.08(6)(d), Wis. Adm. Code, TUa and TUc effluent values are equal to zero whenever toxicity is not detected (i.e. when the LC_{50}, IC_{25} or $IC_{50} \geq 100\%$).

  Acute Reasonable Potential = $0 < 1.0$, reasonable potential is not shown, and a limit is not required.

The WET checklist was developed to help DNR staff make recommendations regarding WET limits, monitoring, and other related permit conditions. The checklist indicates whether acute and chronic WET limits are needed, based on requirements specified in s. NR 106.08, Wis. Adm. Code. The checklist steps the user through a series of questions, assesses points based on the potential for effluent toxicity, and suggests monitoring frequencies based on points accumulated during the checklist analysis. As toxicity potential increases, more points accumulate, and more monitoring is recommended to ensure that toxicity is not occurring. A summary of the WET checklist analysis completed for this permittee is shown in the table below. Staff recommendations based on best professional judgment are provided below the summary table. For guidance related to reasonable potential and the WET checklist, see Chapter 1.3 of the WET Guidance Document: https://dnr.wisconsin.gov/topic/Wastewater/WET.html.

Attachment #1

WET Checklist Summary

	Acute
AMZ/IWC	Not Applicable. **0 Points**
Historical Data	No testing from the last 5 years **5 Points**
Effluent Variability	Little variability, no violations or upsets, consistent WWTF operations. **0 Points**
Receiving Water Classification	Variance water > 4 miles to WWSF **0 Points**
Chemical-Specific Data	Ammonia nitrogen limit carried over from the current permit. Ammonia Nitrogen, Zinc, Chloride, and Copper detected. **3 Points**
Additives	1 Water Quality Conditioners added. Permittee does not have proper P chemical SOPs in place **16 Points**
Discharge Category	No Industrial Contributors. **0 Points**
Wastewater Treatment	Secondary or Better **0 Points**
Downstream Impacts	No impacts known **0 Points**
Total Checklist Points:	**24 Points**
Recommended Monitoring Frequency (from Checklist):	2 tests during permit term
Limit Required?	No
TRE Recommended? (from Checklist)	No

- After consideration of the guidance provided in the Department's *WET Program Guidance Document* (2022) and other information described above**, 2 acute WET tests throughout the permit term are recommended in the reissued permit.** Sampling WET concurrently with any chemical-specific toxic substances is recommended.
- If a satisfactory phosphorus chemical SOP is established and implemented at the facility prior to permit reissuance, then no WET testing would be required.

Thermal Table:

Temperature limits for receiving waters with unidirectional flow

(calculation using default ambient temperature data)

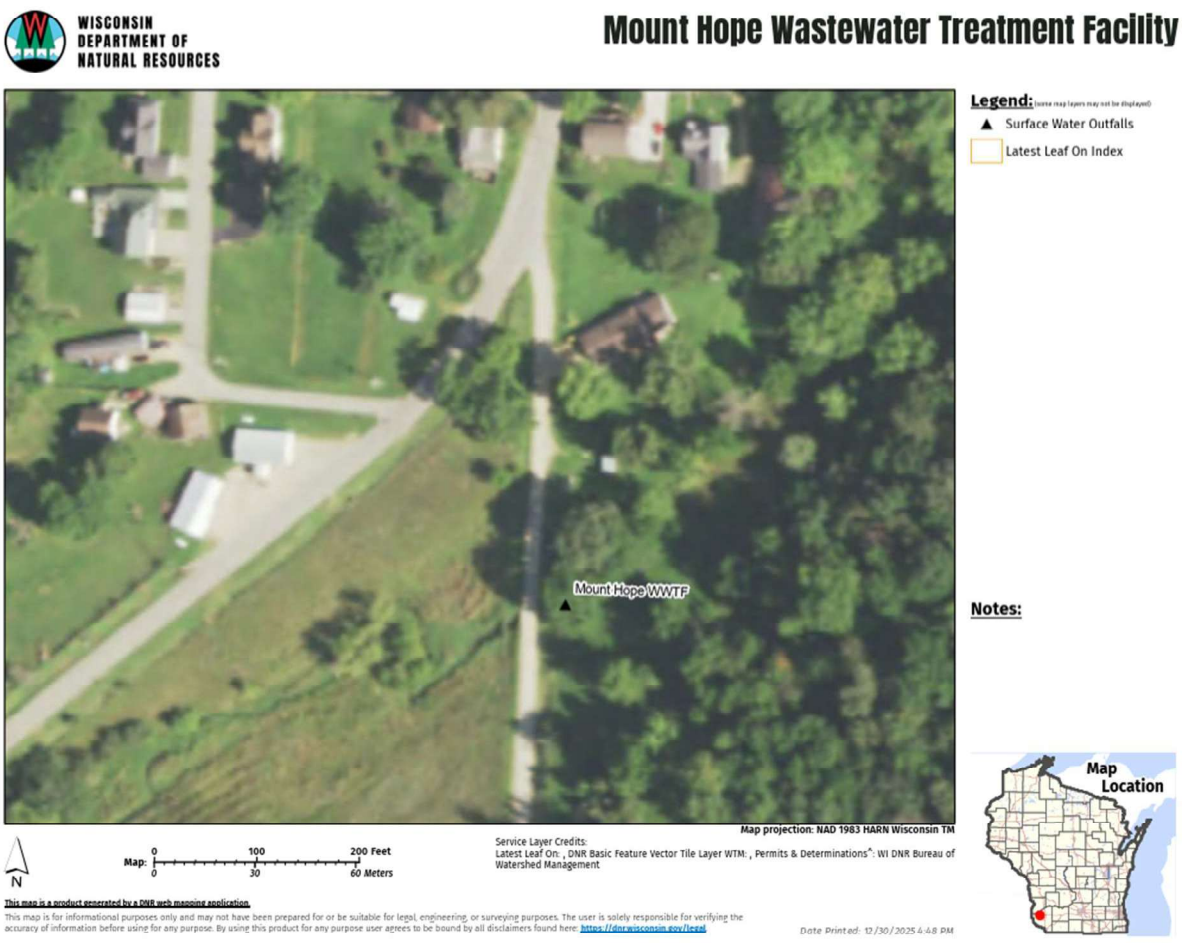
Facility:	0		**7-Q_{10}:**	0.01	cfs	**Temp Dates**	**Flow Dates**
Outfall(s):	001		**Dilution:**	25%	**Start:**	01/01/25	12/01/20
Date Prepared:			**f:**	0	**End:**	10/30/25	10/31/25
Design Flow (Qe):	0.04	MGD	**Stream type:**	Limited forage fish community			
Storm Sewer Dist.	0	ft	**Qs:Qe ratio:**	0.0	:1		
			Calculation Needed?	YES			

Month	Water Quality Criteria			Receiving Water Flow Rate (Qs)	Representative Highest Effluent Flow Rate (Qe)		f	Representative Highest Monthly Effluent Temperature		Calculated Effluent Limit		**Adjusted Thermal Limits**	
	Ta (default)	Sub-Lethal WQC	Acute WQC		7-day Rolling Average (Qesl)	Daily Maximum Flow Rate (Qea)		Weekly Average	Daily Maximum	Weekly Average Effluent Limitation	Daily Maximum Effluent Limitation	**Weekly Average**	**Daily Maximum**
	(°F)	(°F)	(°F)	(cfs)	(MGD)	(MGD)		(°F)	(°F)	(°F)	(°F)	(°F)	(°F)
JAN	37	54	78	0.01	0.026	0.034	0	61	66	**55**	80	55.1	80.0
FEB	39	54	79	0.01	0.015	0.022	0	46	48	56	82	55.6	81.9
MAR	43	57	80	0.01	0.017	0.023	0	59	63	**58**	83	58.3	82.6
APR	50	63	81	0.01	0.021	0.032	0	78	87	**64**	**83**	64.0	82.6
MAY	59	70	84	0.01	0.022	0.029	0	70	74	71	85	70.8	85.4
JUN	64	77	85	0.01	0.018	0.022	0	78	81	78	87	78.2	86.5
JUL	69	81	86	0.01	0.026	0.042	0	81	85	**82**	87	81.7	86.7
AUG	68	79	86	0.01	0.024	0.046	0	82	82	**80**	87	79.7	86.6
SEP	63	73	85	0.01	0.017	0.025	0	77	79	**74**	86	74.0	86.4
OCT	55	63	83	0.01	0.015	0.023	0	73	80	**64**	85	63.9	84.9
NOV	46	54	80	0.01	0.016	0.030	0			55	**82**	54.8	81.9
DEC	40	54	79	0.01	0.024	0.049	0			55	**80**	54.9	80.3

Ammonia Nitrogen Calculations from WQBEL dated February 3, 2016:

AMMONIA (as N) LIMITS			
CLASSIFICATION:		**LIMITED FORAGE FISH**	
EFFLUENT FLOW (mgd):		0.04	
EFFLUENT FLOW (cfs):		0.062	
MAX. EFFLUENT pH (s.u.):		8.00	
BACKGROUND INFORMATION:		***summer***	***winter***
7Q10 (cfs)		0.01	0.01
7Q2 (cfs)		0.02	0.02
Ammonia (mg/L)		0.06	0.48
Temperature (deg C)		23	3
pH (std. units)		8.21	7.97
% of river flow used:		100	25
Reference weekly flow:		0.01	0.0025
Reference monthly flow:		0.017	0.00425
CRITERIA (in mg/L):			
Acute (@ effl. pH):		8.41	8.41
4-day Chronic (@ backgrd. pH):			
early life stages present		5.60	8.06
early life stages absent		7.69	31.06
30-day Chronic (@ backgrd. pH)			
early life stages present		2.24	3.22
early life stages absent		3.08	12.42
EFFLUENT LIMITS (in mg/L):			
Daily maximum (also see below)		16.82	16.82
Weekly average			
early life stages present		6.50	8.37
early life stages absent		8.92	32.29
Monthly average			
early life stages present		2.84	3.41
early life stages absent		3.91	13.24

Site Map:


WISCONSIN DEPARTMENT OF NATURAL RESOURCES
Mount Hope Wastewater Treatment Facility
Mount Hope WWTF
Legend:
Surface Water Outfalls
Latest Leaf On Index
Notes:
Map Location
Map projection: NAD 1983 HARN Wisconsin TM
Map: 0 100 200 Feet
0 30 60 Meters
N
Service Layer Credits:
Latest Leaf On: , DNR Basic Feature Vector Tile Layer WTM: , Permits & Determinations*: WI DNR Bureau of Watershed Management
This map is a product generated by a DNR web mapping application.
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Date Printed: 12/30/2025 4:48 PM

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Tony Evers, Governor
Karen Hyun, Ph.D., Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

9/24/2026

Dick Lambert
PO Box 65
Mount Hope, WI 53816

Subject: Conditional approval of a multi-discharger phosphorus variance
Receiving Stream: Little Grant River in Grant County
Permittee: Village of Mount Hope, WPDES WI-0020907

Dear Mr. Lambert:

In accordance with s. 283.16 of the Wisconsin Statutes, you have requested coverage under Wisconsin's multi-discharger phosphorus variance for the Village of Mount Hope Wastewater Treatment Facility in an application dated 10/2/2025. Wisconsin's multi-discharger phosphorus variance was approved by EPA on September 3, 2025. 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 Claucherty, MDV Point Source Coordinator
Bureau of Water Quality

e-cc Robert Keeney, Village of Mount Hope
Jennifer Jerich, WDNR
Caitlin Oconnell, WDNR
Michelle Woods, EPA Region 5
Tim Elkins, EPA Region 5

State of Wisconsin
Department of Natural Resources
Bureau of Water Quality
Permits Section - WQ/3

Multi-Discharger Variance Application Evaluation Checklist

Form 3200-145 (R 5/16)

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

Village of Mount Hope

WPDES Permit Number	County
WI- 0 | 0 | 2 | 0 | 9 | 0 | 7	Grant

1. Did the point source apply for the MDV at the appropriate time?	(•) Yes ( ) No. *STOP- facility not eligible at this time.*	*See Questions 1-3.*
2. This operation is (check one):	( ) New or relocated outfall. *STOP- facility not eligible.* (•) Existing outfall	*See Questions 5-6.*
3. Is the point source is located in an MDV eligible area?	(•) Yes ( ) No. *STOP- facility not eligible.*	*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:	6	*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?	(•) Yes ( ) No. *STOP- facility not eligible.*	*See Q8 on municipal form/Q9 on industrial form.*
6. List the months where phosphorus limits cannot be achieved during the permit term:	☒ All ☒ Jan ☒ Apr ☒ Jul ☒ Oct ☒ Feb ☒ May ☒ Aug ☒ Nov ☒ Mar ☒ Jun ☒ Sep ☒ 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	0.257	(•) 30-day P99 ( ) Other, specify:	(•) Yes ( ) No, why not:	*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

No schedule is needed to meet this interim limitation.

Provide Rationale:

Values provided on the MDV application yield the above listed 30-day P99. The facility is not able to achieve this level of treatment on a regular basis, however. Recent monthly averages as high as 0.8 mg/L are observed, and several months average around 0.6 mg/L. Therefore, the statutory default of 0.6 mg/L for the second permit term of MDV coverage is recommended. No schedule is required.

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.

9. *For Industries Only*- Where does the phosphorus in the effluent come from? (check all that apply)	☐ Process ☐ Additive Usage ☐ Water supply *Can intake credits be given or can the facility use an alternative water supply?* ◯ Not feasible ◯ Possibly, but further analysis needed ◯ Not evaluated at this time	*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?	◉ Yes ◯ In progress ◯ No	*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?	$ 871,986.00	*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.*
Source:	$637,000 capital cost adjusted based on CPI between December of 2020 and August 2026.	

Comments on planning efforts:

The Village of Mount Hope submitted a final compliance alternatives plan, prepared in March of 2020 by Fehr Graham Engineering & Environmental Inc. This document provides planning considerations for the low-level phosphorus WQBEL. Alternative compliance options are evaluated. Water quality trading may be a viable option in the future, however, currently no trading partners have been located. The Village should work to identify trading partners in the upcoming permit term. Tertiary treatment options are evaluated and provided site-specific cost estimates. These are used in the economic demonstration below, with adjustments for inflation that has occurred between 2020 and 2026.

13. Are adaptive management and water quality trading viable?	◯ Yes ◉ Perhaps. Additional analysis required. ◯ No	*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?	◉ Yes ◯ No. *STOP- facility not eligible.*	*See Q4 of this form in addition to the "eligibility" guidance in Section 2.01 of the MDV Implementation Guidance.*

Comments on economic demonstration:

Capital costs of $637,000 adjusted based on CPI between December of 2020 and August 2026 yield a new captial cost of $871,986.00. O&M increases, adjusted similarly are $19,290.60 annually. Assuming capital costs are financed with a 20-year CWFP loan at 2.5% interest, annual payments would be $55,935.40. With additional O&M costs, total annual cost increases would be $75,226.00. Assuming 90% residential use, households would be responsible for $67,703.40 annually. Divided amongst 98 households, the per-user increase is an annual average of $690.85. Existing rates are 483.66, so future rates are estimated at $1,174.51. This value is 1.90% of Mount Hope's $61,875 MHI. In Grant County with a secondary indicator score of 6, sewer rates at 1% of MHI meet the primary screener.

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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

16. MDV Plan Number: *Note: This is for tracking purposes. Contact Statewide Phosphorus Implementation Coordinator for the plan number.*	_____
17. Did the point source complete Form 3200-148?	( ) Yes ( ) No
18. Is the project area in the same HUC 8 watershed as the point of discharge?	( ) Yes ( ) No. *STOP- Watershed plan must be updated.*
19. 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.*	_____
20. Does the plan ensure that the annual load is offset annually?	( ) Yes ( ) No. *STOP- Watershed plan must be updated.*

21. Are projects occurring on land owned/operated by a CAFO or within a permitted MS4 boundary?

- ( ) Yes. *Work with appropriate DNR staff to ensure projects are not working towards other permit compliance.*
- ( ) No.

22. Are other funding sources being used as part of the MDV watershed project?

- ( ) Yes. *Work with appropriate DNR staff to ensure that funding sources can be appropriately used in the plan area.*
- ( ) No.

23. Do you have any concerns about the watershed project? *Note: Coordinate with other DNR staff as appropriate.*	( ) Yes. *STOP- Watershed plan must be updated.* ( ) No.

Comments:

Section 5. Payment to the County(ies)

24. At this time, the appropriate per pound payment is: $ 68.40

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

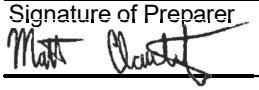
Section 6. Determination

Based on the available information, the MDV application is:

- (•) Approved
- ( ) Request for more information
- ( ) Denied

Additional Justification (if needed):

Some inaccuracies were found on the MDV application. DNR staff have corrected this information when evaluating MDV eligibility.

Certification		
Preparer Name	Title	
Matt Claucherty	Water Resources Management Specialist	
Signature of Preparer 		Date 9/24/2026