

WPDES PERMIT

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

LAND O' LAKES SANITARY DISTRICT #1

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at

6388 CHIPPEWA DRIVE, LAND O'LAKES, WISCONSIN

to

THE GROUNDWATER OF THE TAMERACK PIONEER RIVER WATERSHED IN THE UPPER WISCONSIN RIVER DRAINAGE BASIN VIA SEEPAGE CELLS IN VILAS COUNTY

in accordance with the effluent limitations, monitoring requirements and other conditions set forth in this permit.

The permittee shall not discharge after the date of expiration. If the permittee wishes to continue to discharge after this expiration date an application shall be filed for reissuance of this permit, according to Chapter NR 200, Wis. Adm. Code, at least 180 days prior to the expiration date given below.

Resour

PERMIT TERM: EFFECTIVE DATE - April 01, 2025 EXPIRATION DATE - March 31, 2030

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1 Influent Requirements

1.1 Sampling Point(s)

	Sampling Point Designation				
Sampling Point Number	Point applicable)				
701	Representative samples shall be collected from the influent metering manhole.				

1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

1.2.1 Sampling Point 701 - INFLUENT TO PLANT

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and	Sample	Sample	Notes
		Units	Frequency	Type	
Flow Rate		MGD	Daily	Total Daily	
BOD ₅ , Total		mg/L	Monthly	24-Hr Flow	
				Prop Comp	
Suspended Solids,		mg/L	Monthly	24-Hr Flow	
Total				Prop Comp	
Nitrogen, Total		mg/L	Monthly	24-Hr Flow	
Kjeldahl				Prop Comp	
Nitrogen, Organic		mg/L	Monthly	Calculated	Organic Nitrogen = Total
Total					Kjeldahl Nitrogen -
					Ammonia Nitrogen
Nitrogen, Ammonia		mg/L	Monthly	24-Hr Flow	
(NH ₃ -N) Total				Prop Comp	

2 Land Treatment Requirements

2.1 Sampling Point(s)

	Sampling Point Designation					
Sampling	Sampling Point Location, Waste Description/Sample Contents and Treatment Description (as					
Point	applicable)					
Number						
003	Representative samples shall be collected from the effluent sampling manhole prior to discharge to the					
	seepage cells.					

2.2 Monitoring Requirements and Limitations

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

2.2.1 Sampling Point (Outfall) 003 - EFFLUENT TO SEEPAGE CELLS, Absorption Pond (Seepage Cell)

	Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
Flow Rate		MGD	Daily	Total Daily		
BOD ₅ , Total	Monthly Avg	50 mg/L	Monthly	24-Hr Flow Prop Comp		
Suspended Solids, Total		mg/L	Monthly	24-Hr Flow Prop Comp		
pH Field		su	Monthly	Grab		
Nitrogen, Total Kjeldahl		mg/L	Monthly	24-Hr Flow Prop Comp		
Nitrogen, Organic Total		mg/L	Monthly	Calculated	Organic Nitrogen = Total Kjeldahl Nitrogen - Ammonia Nitrogen	
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Monthly	24-Hr Flow Prop Comp		
Nitrogen, Nitrite + Nitrate Total		mg/L	Monthly	24-Hr Flow Prop Comp		
Nitrogen, Total		mg/L	Monthly	Calculated	Total Nitrogen = Total Kjeldahl Nitrogen + (Nitrite + Nitrate) Nitrogen	

Monitoring Requirements and Limitations					
Parameter Limit Type Limit and Units Sample Sample Type Notes					
Chloride		mg/L	Monthly	24-Hr Flow Prop Comp	

Daily Log – Monitoring Requirements and Limitations

All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under "Records Retention" in the Standard Requirements section, and if requested, made available to the Department.

Parameters	Limit	Units	Sample Frequency	Sample Type
Cells Being Loaded	-	Cell Number	Daily	Log
Start to End Time	-	Date, Hour	Daily	Log

2.2.1.1 Average Annual Design Flow

The average annual design flow of the permittee's wastewater treatment facility is 0.085 MGD.

3 Groundwater Requirements

3.1 Monitoring Requirements and Limitations

3.1.1 Groundwater Monitoring System for Groundwater Monitoring System

Location of Monitoring System: Adjacent to Seepage Cells

 $\textbf{Groundwater Monitoring Well(s) to be Sampled:} \ MW\ 801, MW\ 802, MW\ 803, MW\ 804, MW\ 805, MW\ 806$

Piezometer, MW 807 BACKGROUND

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: MW 807 BACKGROUND

Preventive Action Limits (PAL) and Enforcement Standards (ES) listed in the table below are from ss. NR 140.10 and NR.140.12, Wis. Adm. Code. PALs for s. NR 140.20 Wis. Adm. Code Indicator Parameters and s. NR 140.28 Wis. Adm. Code Exemptions with Alternative Concentration Limits listed in the table below have been calculated based on background groundwater quality data from this/these designated well(s). Groundwater contaminant concentrations shall be minimized and PALs met in groundwater monitoring wells to the extent it is technically and economically feasible.

Groundwater Monitoring Well(s) Used for Point of Standards Application:

"Point of standards application" refers to any point of present groundwater use (i.e., potable well) or a specific groundwater monitoring well that is located beyond the design management zone or the property boundary, whichever is closer to the land treatment/disposal system at which the concentration of a substance in groundwater is measured for purposes of determining whether a PAL or an ES has been attained or exceeded. See the Standard Requirements section of this permit for additional conditions related to exceedance of groundwater standards.

Required Monitoring: Grab samples shall be collected from each monitoring well and analyzed for the parameters per the frequency shown in the table below.

PARAMETER	UNITS	PREVENTIVE	ENFORCEMENT	FREQUENCY
		ACTION LIMIT	STANDARD	
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as	mg/L	2.0	10	Quarterly
N) Dissolved				-
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	6.5	N/A	Quarterly
Nitrogen, Total Kjeldahl	mg/L	N/A	N/A	Quarterly
Dissolved				-
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.2	N/A	Quarterly
Solids, Total Dissolved	mg/L	250	N/A	Quarterly

3.1.1.1 Preventive Action Limits for pH

A result for pH is considered to have exceeded the pH PAL for this site if the result is less than **4.5 s.u.** or greater than **6.5 s.u.**

3.1.1.2 Preventive Action Limits for Indicator Parameters

PALs for Indicator Parameters have been established for this site. For more information see "Indicator Parameter Preventive Action Limits and Alternative Concentration Limits" in the Standard Requirements section.

4 Septage Management Requirements

4.1 Sampling Point(s)

The discharge(s) shall be limited to land application for the listed sampling point(s) on Department approved land application sites, or by hauling to another permitted facility.

	Sampling Point Designation					
Sampling	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)					
Point						
Number						
990	All septic tank solids shall be managed in compliance with chapter NR 113, Wisconsin Administrative					
	Code, for Servicing Septic or Holding Tanks, etc.					

4.2 Record Keeping Requirements and Limitations

The permittee shall comply with the following record keeping requirements and limitations.

4.2.1 Sampling Point 990 - Septage

4.2.1.1 System Maintenance

To ensure proper system maintenance, the accumulated solids in the septic tank(s) shall be removed regularly, consistent with the recommended removal rates in the operations and maintenance manual. The permittee shall obtain the following copies of records from the licensed septage hauler and they shall be retained for at least five years and made available to the Department on request. The records shall include: the licensed hauler used; the volume of waste pumped; dates when the waste was removed; the land application site DNR number and the method used to satisfy the pathogen and vector attraction control (injection, incorporation, or pH adjustment) requirements of ch. NR 113; Wis. Administrative Code, and/or the treatment plant where it was disposed. Winter application is not allowed.

NOTE: The contents of the septic system must be removed and disposed of by a licensed and certified septage hauler in accordance with chapter NR 113, Wis. Adm. Code. If the permittee intends to manage the septage directly then advance notice to the Department is required. The Standard Requirements section herein specifies land application requirements for septage when managed directly by the permittee.

5 Schedules

5.1 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
Land Treatment Management Plan Submittal: Submit an update to the management plan to optimize the land treatment system performance and demonstrate compliance with ch. NR 206, Wis. Adm. Code. The land treatment system shall be operated in accordance with the approved management plan.	06/30/2025

5.2 Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen

Required Action	Due Date
Optimization of Operation and Maintenance Report: The permittee shall continue to evaluate their operation and maintenance (O & M) options to optimize the treatment and land disposal systems for the reduction to the greatest extent possible of effluent total nitrogen. The permittee shall submit semi-annual progress reports summarizing O & M actions taken for reduction of total nitrogen, data logs, observations and results. The report shall summarize effectiveness of current optimization practices and recommend additional actions to be taken, as needed. If additional actions need to be taken, these actions shall be implemented as soon as feasible.	06/30/2025
If the evaluation concludes the facility can achieve nitrogen reduction using the existing treatment system with operational improvements, and minor facility modifications, the remaining actions identified below are not required.	
If the report concludes upgrading the permittee's wastewater treatment is necessary to reduce nitrogen, the submittal shall include an engineering design report addressing the treatment plant upgrades, and a facility plan if required pursuant to ch. NR 110 Wis. Adm. Code. Significant changes to facility infrastructure will need to be reviewed by the department prior to implementation.	
Progress Report: The permittee shall submit a report as detailed above.	12/31/2025
Progress Report: The permittee shall submit a report as detailed above.	06/30/2026
Progress Report: The permittee shall submit a report as detailed above.	12/31/2026
Progress Report: The permittee shall submit a report as detailed above.	06/30/2027
Progress Report: The permittee shall submit a report as detailed above.	12/31/2027
Progress Report: The permittee shall submit a report as detailed above.	06/30/2028
Progress Report: The permittee shall submit a report as detailed above.	12/31/2028
Progress Report: The permittee shall submit a report as detailed above.	06/30/2029
Progress Report: The permittee shall submit a report as detailed above. In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit a report to the Department by June 30th and December 31st.	12/31/2029

5.3 Groundwater Monitoring Well Survey and Site Map Submittal

Required Action	Due Date
Monitoring Well Survey and Site Map: Each groundwater monitoring well shall be surveyed and recorded on a table for the elevation of the top of casing (TOC), the calculated ground surface elevation and the latitude/longitude decimal degrees. This shall be undertaken after groundwater monitoring well (804) installation or repair.	01/31/2026
Submit a site map in accordance with s. NR 141.065, Wis. Adm. Code. All monitoring well locations shall be reported to the department on a plan map drawn to a specific scale. The map shall indicate structure boundaries, property boundaries, any nearby surface waters and a north arrow. The plan shall show the wells in relation to each other, to property and structure boundaries and to a common reference point on a horizontal grid system. The origin of the grid system shall be located according to latitude and longitude or according to the state plane coordinate system. The exact vertical location of the top of the well casing shall be referenced to the nearest benchmark for the national geodetic survey datum to an accuracy of 0.01 feet. This plan map shall show the exact location of the installed well on a horizontal grid system which is accurate to within 1 foot.	

6 Standard Requirements

Chapter NR 205, Wisconsin Administrative Code: The conditions in ss. NR 205.07(1) and NR 205.07(2), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(2), Wis. Adm. Code.

6.1 Reporting and Monitoring Requirements

6.1.1 Monitoring Results

Monitoring results obtained during the previous month shall be summarized and reported on a Department Wastewater Discharge Monitoring Report. The report may require reporting of any or all of the information specified below under 'Recording of Results'. This report is to be returned to the Department no later than the date indicated on the form. A copy of the Wastewater Discharge Monitoring Report Form or an electronic file of the report shall be retained by the permittee.

Monitoring results shall be reported on an electronic discharge monitoring report (eDMR). The eDMR shall be certified electronically by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

If the permittee monitors any pollutant more frequently than required by this permit, the results of such monitoring shall be included on the Wastewater Discharge Monitoring Report.

The permittee shall comply with all limits for each parameter regardless of monitoring frequency. For example, monthly, weekly, and/or daily limits shall be met even with monthly monitoring. The permittee may monitor more frequently than required for any parameter.

6.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code, and completed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sampling shall be performed in accordance with procedures contained in s. NR 140.16, Wis. Adm. Code, and the WDNR publications, Groundwater Sampling Desk Reference (PUBL-DG-037-96) and Groundwater Sampling Field Manual (PUBL-DG-038-96). The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation and/or groundwater standard. If the required level cannot be met by any of the methods available in ch. NR 219, Wis. Adm. Code, then the method with the lowest limit of detection shall be selected. Additional test procedures may be specified in this permit.

6.1.3 Recording of Results

The permittee shall maintain records which provide the following information for each effluent measurement or sample taken:

- the date, exact place, method and time of sampling or measurements;
- the individual who performed the sampling or measurements;
- the date the analysis was performed;
- the individual who performed the analysis;
- the analytical techniques or methods used; and
- the results of the analysis.

6.1.4 Reporting of Monitoring Results

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating fees under ch. NR 101, Wis. Adm. Code, a reporting limit of 2.0 mg/L for BOD₅ and 2.5 mg/L Total Suspended Solids shall be considered to be limits of quantitation.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as "0" (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, "0" would be reported for any day during the month that no discharge occurred.

6.1.5 Compliance Maintenance Annual Reports

Compliance Maintenance Annual Reports (CMAR) shall be completed using information obtained over each calendar year regarding the wastewater conveyance and treatment system. The CMAR shall be submitted and certified by the permittee in accordance with ch. NR 208, Wis. Adm. Code, by June 30, each year on an electronic report form provided by the Department.

In the case of a publicly owned treatment works, a resolution shall be passed by the governing body and submitted as part of the CMAR, verifying its review of the report and providing responses as required. Private owners of wastewater treatment works are not required to pass a resolution; but they must provide an Owner Statement and responses as required, as part of the CMAR submittal.

The CMAR shall be certified electronically by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The certification verifies that the electronic report is true, accurate and complete.

6.1.6 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application. All pertinent sludge information, including permit application information and other documents specified in this permit or s. NR 204.06(9), Wis. Adm. Code shall be retained for a minimum of 5 years.

6.1.7 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

6.1.8 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants
 discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in
 the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

6.2 System Operating Requirements

6.2.1 Noncompliance Reporting

Sanitary sewer overflows and sewage treatment facility overflows shall be reported according to the 'Sanitary Sewer Overflows and Sewage Treatment Facility Overflows' section of this permit.

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department's regional office within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.

A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.

NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources immediately of any discharge not authorized by the permit. The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003.

6.2.2 Flow Meters

Flow meters shall be calibrated annually, as per s. NR 218.06, Wis. Adm. Code.

6.2.3 Raw Grit and Screenings

All raw grit and screenings shall be disposed of at a properly licensed solid waste facility or picked up by a licensed waste hauler. If the facility or hauler are located in Wisconsin, then they shall be licensed under chs. NR 500-555, Wis. Adm. Code.

6.2.4 Sludge Management

All sludge management activities shall be conducted in compliance with ch. NR 204 "Domestic Sewage Sludge Management", Wis. Adm. Code.

6.2.5 Prohibited Wastes

Under no circumstances may the introduction of wastes prohibited by s. NR 211.10, Wis. Adm. Code, be allowed into the waste treatment system. Prohibited wastes include those:

- which create a fire or explosion hazard in the treatment work;
- which will cause corrosive structural damage to the treatment work;
- solid or viscous substances in amounts which cause obstructions to the flow in sewers or interference with the proper operation of the treatment work;
- wastewaters at a flow rate or pollutant loading which are excessive over relatively short time periods so as to cause a loss of treatment efficiency; and
- changes in discharge volume or composition from contributing industries which overload the treatment works or cause a loss of treatment efficiency.

6.2.6 Bypass

This condition applies only to bypassing at a sewage treatment facility that is not a scheduled bypass, approved blending as a specific condition of this permit, a sewage treatment facility overflow or a controlled diversion as provided in the sections titled 'Scheduled Bypass', 'Blending' (if approved), 'SSO's and Sewage Treatment Facility Overflows' and 'Controlled Diversions' of this permit. Any other bypass at the sewage treatment facility is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. When evaluating feasibility of alternatives, the department may consider factors such as technical achievability, costs and affordability of implementation and risks to public health, the environment and, where the permittee is a municipality, the welfare of the community served; and
- The bypass was reported in accordance with the Noncompliance Reporting section of this permit.

6.2.7 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for bypassing specified in the above section titled 'Bypass' are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

6.2.8 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation. Sewage treatment facilities that have multiple treatment units to treat variable or seasonal loading conditions may shut down redundant treatment units when necessary for efficient operation. The following requirements shall be met during controlled diversions:

- Effluent from the sewage treatment facility shall meet the effluent limitations established in the permit.
 Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion does not include blending as defined in s. NR 210.03(2e), Wis. Adm. Code, and as
 may only be approved under s. NR 210.12, Wis. Adm. Code. A controlled diversion may not occur during
 periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in sewage treatment facility records and such records shall be available to the department on request.

6.2.9 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

6.2.10 Operator Certification

The wastewater treatment facility shall be under the direct supervision of a state certified operator. In accordance with s. NR 114.53, Wis. Adm. Code, every WPDES permitted treatment plant shall have a designated operator-in-charge holding a current and valid certificate. The designated operator-in-charge shall be certified at the level and in all subclasses of the treatment plant, except laboratory. Treatment plant owners shall notify the department of any changes in the operator-in-charge within 30 days. Note that s. NR 114.52(22), Wis. Adm. Code, lists types of facilities that are excluded from operator certification requirements (i.e. private sewage systems, pretreatment facilities discharging to public sewers, industrial wastewater treatment that consists solely of land disposal, agricultural digesters and concentrated aquatic production facilities with no biological treatment).

6.3 Sewage Collection Systems

6.3.1 Sanitary Sewage Overflows and Sewage Treatment Facility Overflows

6.3.1.1 Overflows Prohibited

Any overflow or discharge of wastewater from the sewage collection system or at the sewage treatment facility, other than from permitted outfalls, is prohibited. The permittee shall provide information on whether any of the following conditions existed when an overflow occurred:

- The sanitary sewer overflow or sewage treatment facility overflow was unavoidable to prevent loss of life, personal injury or severe property damage;
- There were no feasible alternatives to the sanitary sewer overflow or sewage treatment facility overflow such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or preventive maintenance activities;
- The sanitary sewer overflow or the sewage treatment facility overflow was caused by unusual or severe weather-related conditions such as large or successive precipitation events, snowmelt, saturated soil

- conditions, or severe weather occurring in the area served by the sewage collection system or sewage treatment facility; and
- The sanitary sewer overflow or the sewage treatment facility overflow was unintentional, temporary, and caused by an accident or other factors beyond the reasonable control of the permittee.

6.3.1.2 Permittee Response to Overflows

Whenever a sanitary sewer overflow or sewage treatment facility overflow occurs, the permittee shall take all feasible steps to control or limit the volume of untreated or partially treated wastewater discharged, and terminate the discharge as soon as practicable. Remedial actions, including those in s. NR 210.21 (3), Wis. Adm. Code, shall be implemented consistent with an emergency response plan developed under the CMOM program.

6.3.1.3 Permittee Reporting

Permittees shall report all sanitary sewer overflows and sewage treatment overflows as follows:

- The permittee shall notify the department by telephone, fax or email as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the overflow;
- The permittee shall, no later than five days from the time the permittee becomes aware of the overflow, provide to the department the information identified in this paragraph using department form number 3400-184. If an overflow lasts for more than five days, an initial report shall be submitted within 5 days as required in this paragraph and an updated report submitted following cessation of the overflow. At a minimum, the following information shall be included in the report:
 - The date and location of the overflow;
 - o The surface water to which the discharge occurred, if any;
 - The duration of the overflow and an estimate of the volume of the overflow;
 - O A description of the sewer system or treatment facility component from which the discharge occurred such as manhole, lift station, constructed overflow pipe, or crack or other opening in a pipe;
 - The estimated date and time when the overflow began and stopped or will be stopped;
 - o The cause or suspected cause of the overflow including, if appropriate, precipitation, runoff conditions, areas of flooding, soil moisture and other relevant information;
 - Steps taken or planned to reduce, eliminate and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
 - A description of the actual or potential for human exposure and contact with the wastewater from the overflow;
 - Steps taken or planned to mitigate the impacts of the overflow and a schedule of major milestones for those steps;
 - To the extent known at the time of reporting, the number and location of building backups caused by
 excessive flow or other hydraulic constraints in the sewage collection system that occurred
 concurrently with the sanitary sewer overflow and that were within the same area of the sewage
 collection system as the sanitary sewer overflow; and
 - The reason the overflow occurred or explanation of other contributing circumstances that resulted in the overflow event. This includes any information available including whether the overflow was unavoidable to prevent loss of life, personal injury, or severe property damage and whether there were feasible alternatives to the overflow.

NOTE: A copy of form 3400-184 for reporting sanitary sewer overflows and sewage treatment facility overflows may be obtained from the department or accessed on the department's web site at http://dnr.wi.gov/topic/wastewater/SSOreport.html. As indicated on the form, additional information may be submitted to supplement the information required by the form.

- The permittee shall identify each specific location and each day on which a sanitary sewer overflow or sewage treatment facility overflow occurs as a discrete sanitary sewer overflow or sewage treatment facility overflow occurrence. An occurrence may be more than one day if the circumstances causing the sanitary sewer overflow or sewage treatment facility overflow results in a discharge duration of greater than 24 hours. If there is a stop and restart of the overflow at the same location within 24 hours and the overflow is caused by the same circumstance, it may be reported as one occurrence. Sanitary sewer overflow occurrences at a specific location that are separated by more than 24 hours shall be reported as separate occurrences; and
- A permittee that is required to submit wastewater discharge monitoring reports under s. NR 205.07 (1) (r), Wis. Adm. Code, shall also report all sanitary sewer overflows and sewage treatment facility overflows on that report.

6.3.1.4 Public Notification

The permittee shall notify the public of any sanitary sewer and sewage treatment facility overflows consistent with its emergency response plan required under the CMOM (Capacity, Management, Operation and Maintenance) section of this permit and s. NR 210.23 (4) (f), Wis. Adm. Code. Such public notification shall occur promptly following any overflow event using the most effective and efficient communications available in the community. At minimum, a daily newspaper of general circulation in the county(s) and municipality whose waters may be affected by the overflow shall be notified by written or electronic communication.

6.3.2 Capacity, Management, Operation and Maintenance (CMOM) Program

- The permittee shall have written documentation of the Capacity, Management, Operation and Maintenance (CMOM) program components in accordance with s. NR 210.23(4), Wis. Adm. Code. Such documentation shall be available for Department review upon request. The Department may request that the permittee provide this documentation or prepare a summary of the permittee's CMOM program at the time of application for reissuance of the WPDES permit.
- The permittee shall implement a CMOM program in accordance with s. NR 210.23, Wis. Adm. Code.
- The permittee shall at least annually conduct a self-audit of activities conducted under the permittee's CMOM program to ensure CMOM components are being implemented as necessary to meet the general standards of s. NR 210.23(3), Wis. Adm. Code.

6.3.3 Sewer Cleaning Debris and Materials

All debris and material removed from cleaning sanitary sewers shall be managed to prevent nuisances, run-off, ground infiltration or prohibited discharges.

- Debris and solid waste shall be dewatered, dried and then disposed of at a licensed solid waste facility.
- Liquid waste from the cleaning and dewatering operations shall be collected and disposed of at a permitted wastewater treatment facility.
- Combination waste including liquid waste along with debris and solid waste may be disposed of at a licensed solid waste facility or wastewater treatment facility willing to accept the waste.

6.4 Land Treatment (Land Disposal) Requirements

6.4.1 Application of NR 140 to Substances Discharged

This permit does not authorize the permittee to discharge any substance in a concentration which would cause an applicable groundwater standard of ch. NR 140, Wis. Adm. Code, to be exceeded. The Department may seek a response under NR 140 if the permittee's discharge causes an exceedance of an applicable groundwater standard for any substance, including substances not specifically limited or monitored under this permit.

6.4.2 Appropriate Formulas for Land Treatment Calculations - Nitrogen & Chloride

The permittee shall use the following formulas for nitrogen and chloride calculations.

6.4.2.1 Nitrogen Formulas

Total Nitrogen = Total Kjeldahl Nitrogen + Nitrite + Nitrate, Nitrogen

Organic Nitrogen = Total Kjeldahl Nitrogen - Ammonia Nitrogen

6.4.2.2 Annual Total Nitrogen per Cell or per Zone

(annual ave. concentration in mg/L) (tot. annual flow in million gallons per cell or zone) (8.34) = lbs/ac/yr acreage of cell or zone

6.4.2.3 Annual Total Chloride per Cell or per Zone

(annual ave. concentration in mg/L) (tot. annual flow in million gallons per cell or zone) (8.34) = lbs/ac/yr acreage of cell or zone

6.4.3 Toxic or Hazardous Pollutants

The discharge of toxic or hazardous pollutants to land treatment systems is prohibited unless the applicant can demonstrate and the department determines that the discharge of such pollutants will be in such small quantities that no detrimental effect on groundwater or surface water will result pursuant to ss. NR 206.07(2)(c) and NR 214.04(1), Wis. Adm. Code. The criteria used shall include but not be limited to the toxicity of the pollutant, capacity of the soil to remove the pollutant, degradability, usual or potential presence of the pollutant in the existing environment, method of application and all other relevant factors.

6.4.4 Industrial Waste - Pretreatment Requirements

Industrial waste discharges to municipal land treatment systems shall be in compliance with the applicable pretreatment standards under ch. NR 211, Wis. Adm. Code, pursuant to s. NR 206.07(2)(e), Wis. Adm. Code.

6.4.5 Overflow

Discharge to a land treatment system shall be limited so that the discharge and any precipitation which falls within the boundary of the disposal system during such discharge does not overflow the boundary of the system unless the WPDES permit authorizes collection and discharge of runoff to surface water pursuant to s. NR 206.07(2)(g), Wis. Adm. Code.

6.4.6 Management Plan Requirements

All land disposal or land treatment systems shall be operated in accordance with an approved management plan. The management plan for municipal and domestic wastewaters shall conform to the requirements of s. NR 110.25(3m), Wis. Adm. Code, per s. NR 206.07(2)(h), Wis. Adm. Code. The management plan for industrial wastewaters shall conform to the applicable requirements of ss. NR 214.12(5)(b), NR 214.13(5)(e), NR 214.14(5)(d), NR 214.15(5)(c), and NR 214.16(5), Wis. Adm. Code.

6.5 Groundwater Standard Requirements

6.5.1 Application of NR 140 to Substances Discharged

This permit does not authorize the permittee to discharge any substance in a concentration which would cause an applicable groundwater standard of ch. NR 140, Wis. Adm. Code, to be exceeded. The Department may seek a

response under NR 140 if the permittee's discharge causes exceedance of an applicable groundwater standard for any substance, including substances not specifically limited or monitored under this permit.

6.5.2 Groundwater Sampling

Groundwater sampling shall be performed in accordance with the procedures contained in s. NR 140.16, Wis. Adm. Code, and the WDNR publications, <u>Groundwater Sampling Desk Reference</u> (PUBL-DG-037-96) and <u>Groundwater Sampling Field Manual</u> (PUBL-DG-038-96).

6.5.3 Indicator Parameter Preventive Action Limits and Alternative Concentration Limits

The methodology for the assessment of background groundwater quality and calculation of indicator PALs and ACLs can be found in <u>Evaluating and Calculating Preventative Action Limits and Alternative Concentration Limits for Groundwater Discharges</u> (3400-2020-10).

6.5.4 Groundwater Monitoring Forms

Results of the groundwater analyses shall be summarized and reported on a Groundwater Monitoring Form. This report form is to be returned to the Department no later than the date indicated on the form. A copy of the groundwater monitoring form or an electronic file of the form shall be retained by the permittee. Groundwater monitoring results shall be reported on an electronic groundwater monitoring form and certified electronically via the 'eReport Certify' page by a responsible executive or municipal officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

6.5.5 Notification of Attaining or Exceeding Groundwater Quality Standards

The permittee shall notify the Department when monitoring results indicate that a Preventive Action Limit or Enforcement Standard has been attained or exceeded per ss. NR 140.24 (1)(a) and NR 140.26 (1)(a) Wis. Adm. Code. This notification may be provided in the general remarks section of the groundwater monitoring form or by letter attached to the groundwater monitoring form. Any values reported as exceeding a groundwater standard shall be confirmed as being from a representative sample and as a correct laboratory analysis result.

6.5.6 Preventive Action Limit (PAL) Exceedance

Sections NR 206.07 (1)(c) and NR 214.07 (1), Wis. Adm. Code, require all land disposal and land treatment system to be designed and operated to prevent exceedances of PALs. Results from groundwater samples that are less than this permit's PALs indicate that operation of the land treatment system is protective of groundwater quality. Substance concentrations that exhibit a trend over time of being greater than the PAL may indicate that additional technically and economically feasible actions are needed to reduce the discharge of the substance to the groundwater. In such a case, the Department may request an evaluation and response or propose a permit modification to require submittal of a groundwater evaluation report and implementation of a feasible response as specified in s. NR 140.24, Wis. Adm. Code.

6.5.7 Enforcement Standard (ES) Exceedance Within the Design Management Zone

Substance concentrations greater than this permit's ES in a permittee's monitoring well located within the property boundary and within the design management zone of the land treatment system may indicate that the groundwater concentration exceeds an ES outside of these boundaries. If the Department determines there is reasonable evidence that an ES is being attained or exceeded beyond the property boundary or beyond the design management zone, the Department may request an evaluation and response or propose a permit modification to require an evaluation report and appropriate response as specified in s. NR 140.24, Wis. Adm. Code, per s. NR 140.27, Wis. Adm. Code.

6.5.8 Enforcement Standard Exceedance Outside the Design Management Zone

The permittee's land treatment system shall not cause the concentration of a substance in groundwater to attain or exceed this permit's ES at any point of present groundwater use, at any point beyond the property boundary, or at any point beyond the design management zone established under s. NR 140.22, Wis. Adm. Code. When this condition is not met, the permittee shall, within 120 days following notification to the Department of the attainment or exceedance of an ES beyond the compliance boundary, submit a groundwater quality evaluation and response report as specified in s. NR 140.26(1)(b), Wis. Adm. Code. The Department may propose modification of this permit to require the permittee to implement additional treatment or other actions as specified in s. NR 140.26, Wis. Adm. Code.

6.5.9 New Monitoring Wells Installed During the Current Permit-Term

Monitoring wells that are installed as part of the compliance schedule or otherwise added to the monitoring well system during the permit, and thus are not currently listed as a monitoring well in the groundwater monitoring requirements, shall be monitored monthly for three months for the parameters listed in the groundwater monitoring requirements section following installation and development. If the new monitoring well is proposed to act as a background monitoring well for the use in calculating indicator parameter PALs and ACLs, then a minimum of eight rounds of sampling results are required prior to the calculation of indicator parameter PALs and ACLs for inclusion in a modified permit. The methodology and requirements for the assessment of background groundwater quality and calculation of indicator PALs and ACLs can be found in Evaluating and Calculating Preventative Action Limits and Alternative Concentration Limits for Groundwater Discharges (3400-2020-10).

6.6 Land Application Requirements

6.6.1 Land Application Report for Septage

Land Application Report Form 3400-55 shall be submitted by January 31, each year whether or not septage is land applied by the permittee.

6.6.2 Other Methods of Disposal or Distribution Report for Septage

The permittee shall submit Report Form 3400-52 by January 31, each year whether or not septage is hauled to another facility by the permittee.

6.6.3 Approval to Land Apply Septage

Septage may not be applied to a land application site by the permittee without a written site approval letter or Form 3400-122 from the Department.

6.6.4 Land Application Site Evaluation for Septage

The permittee may use land application sites provided the sites meet all applicable provisions of Wisconsin Administrative Code Chapter NR 113 and have been approved in writing by this Department. If the permittee wishes to have approval for additional sites, application shall be made using Landspreading Site Evaluation Form 3400-53. Complete information shall be submitted about each site, including plat, topographical and soil maps, aerial photograph of the site, any soil analyses results, and other information showing that the site complies with all application requirements. Land application may commence on a new site when a proposed site has been approved by the Department. The Department may issue a written notice to withdraw approval for any site that is found to be environmentally unacceptable or violates the conditions of this permit. A permittee may not land apply septage on sites that have been withdrawn by the department or that have not been approved by the department.

It is the permittee's responsibility to locate land application sites that meet the land application criteria set forth in ch. NR 113, Wis. Adm. Code.

6.6.5 Septage Hauling

The permittee is required to submit Form 3400-52 to the Department. If septage is hauled to another facility, information shall include the quantity of septage hauled, the name, address, phone number, contact person, and permit number of the receiving facility. Form 3400-52 shall be submitted annually by January 31 each year whether or not septage is hauled by the permittee.

7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Treatment Management Plan -Land Treatment Management Plan Submittal	June 30, 2025	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Optimization of Operation and Maintenance Report	June 30, 2025	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	December 31, 2025	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	June 30, 2026	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	December 31, 2026	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	June 30, 2027	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	December 31, 2027	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	June 30, 2028	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	December 31, 2028	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	June 30, 2029	7
Operation and Maintenance Improvements to Optimize Reduction of Total Nitrogen -Progress Report	December 31, 2029	7
Groundwater Monitoring Well Survey and Site Map Submittal -Monitoring Well Survey and Site Map	January 31, 2026	8
Compliance Maintenance Annual Reports (CMAR)	by June 30, each year	10
Land Application Report Form 3400-55	by January 31, each year whether or not septage is land applied by the permittee	18
Report Form 3400-52	by January 31, each year whether or not septage is hauled to another facility by the permittee	18
Groundwater	no later than the date indicated on the form	17
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	9

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:

Northern Region - Spooner, 810 W. Maple St, Spooner, WI 54801-1255