



# WPDES PERMIT

*STATE OF WISCONSIN*  
*DEPARTMENT OF NATURAL RESOURCES*  
**PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE  
ELIMINATION SYSTEM**

**VILLAGE OF HAWKINS**

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

**105 HOMESTEAD, HAWKINS, WISCONSIN**

to

**THE SOUTH FORK OF MAIN CREEK WITHIN THE MAIN CREEK WATERSHED IN THE UPPER  
CHIPPEWA RIVER BASIN, RUSK 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.

State of Wisconsin Department of Natural Resources  
For the Secretary

By \_\_\_\_\_  
Adrian Stocks  
Field Operations Director

\_\_\_\_\_  
Date Permit Signed/Issued

**PERMIT TERM: EFFECTIVE DATE - October 01, 2018**

**EXPIRATION DATE - September 30, 2023**

## TABLE OF CONTENTS

<b>1 INFLUENT REQUIREMENTS</b>	<b>1</b>
1.1 SAMPLING POINT(S)	1
1.2 MONITORING REQUIREMENTS	1
1.2.1 <i>Sampling Point 701 - INFLUENT TO PLANT</i>	1
<b>2 SURFACE WATER REQUIREMENTS</b>	<b>2</b>
2.1 SAMPLING POINT(S)	2
2.2 MONITORING REQUIREMENTS AND EFFLUENT LIMITATIONS	2
2.2.1 <i>Sampling Point (Outfall) 002 - SURFACE WATER DISCHARGE</i>	2
<b>3 LAND APPLICATION REQUIREMENTS</b>	<b>8</b>
3.1 SAMPLING POINT(S)	8
3.2 MONITORING REQUIREMENTS AND LIMITATIONS	8
3.2.1 <i>Sampling Point (Outfall) 006 - LAGOON SLUDGE</i>	8
<b>4 SCHEDULES</b>	<b>12</b>
4.1 FACILITY UPGRADE	12
4.2 ANNUAL WATER QUALITY TRADING (WQT) REPORT	12
<b>5 STANDARD REQUIREMENTS</b>	<b>13</b>
5.1 REPORTING AND MONITORING REQUIREMENTS	13
5.1.1 <i>Monitoring Results</i>	13
5.1.2 <i>Sampling and Testing Procedures</i>	13
5.1.3 <i>Recording of Results</i>	13
5.1.4 <i>Reporting of Monitoring Results</i>	13
5.1.5 <i>Compliance Maintenance Annual Reports</i>	14
5.1.6 <i>Records Retention</i>	14
5.1.7 <i>Other Information</i>	15
5.1.8 <i>Reporting Requirements – Alterations or Additions</i>	15
5.2 SYSTEM OPERATING REQUIREMENTS	15
5.2.1 <i>Noncompliance Reporting</i>	15
5.2.2 <i>Flow Meters</i>	16
5.2.3 <i>Raw Grit and Screenings</i>	16
5.2.4 <i>Sludge Management</i>	16
5.2.5 <i>Prohibited Wastes</i>	16
5.2.6 <i>Bypass</i>	16
5.2.7 <i>Scheduled Bypass</i>	16
5.2.8 <i>Controlled Diversions</i>	17
5.2.9 <i>Proper Operation and Maintenance</i>	17
5.2.10 <i>Operator Certification</i>	17
5.3 SEWAGE COLLECTION SYSTEMS	17
5.3.1 <i>Sanitary Sewage Overflows and Sewage Treatment Facility Overflows</i>	17
5.3.2 <i>Capacity, Management, Operation and Maintenance (CMOM) Program</i>	19
5.3.3 <i>Sewer Cleaning Debris and Materials</i>	19
5.4 SURFACE WATER REQUIREMENTS	20
5.4.1 <i>Permittee-Determined Limit of Quantitation Incorporated into this Permit</i>	20
5.4.2 <i>Appropriate Formulas for Effluent Calculations</i>	20
5.4.3 <i>Effluent Temperature Requirements</i>	20
5.4.4 <i>Visible Foam or Floating Solids</i>	21
5.4.5 <i>Surface Water Uses and Criteria</i>	21
5.4.6 <i>Percent Removal</i>	21
5.5 LAND APPLICATION REQUIREMENTS	21
5.5.1 <i>Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations</i>	21

<i>5.5.2 General Sludge Management Information</i>	21
<i>5.5.3 Sludge Samples</i>	21
<i>5.5.4 Land Application Characteristic Report</i>	21
<i>5.5.5 Calculation of Water Extractable Phosphorus</i>	22
<i>5.5.6 Annual Land Application Report</i>	22
<i>5.5.7 Other Methods of Disposal or Distribution Report</i>	22
<i>5.5.8 Approval to Land Apply</i>	22
<i>5.5.9 Soil Analysis Requirements</i>	22
<i>5.5.10 Land Application Site Evaluation</i>	23
<b>6 SUMMARY OF REPORTS DUE</b>	<b>24</b>

# 1 Influent Requirements

## 1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
701	Representative samples shall be taken at the Parshall flume in the control building.

## 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 Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Continuous	Continuous	
BOD <sub>5</sub> , Total		mg/L	Weekly	Composite	
Suspended Solids, Total		mg/L	Weekly	Composite	

## 2 Surface Water Requirements

### 2.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
002	Representative samples shall be collected at the flow-meter at the bridge on Main Creek. Discharges from April 1st through May 31st shall meet limits based on fill and draw flows and discharges from January 1st through March 31st and June 1st through December 31st shall meet limits based on continuous flows. The average annual facility design flow is 0.118 MGD.

### 2.2 Monitoring Requirements and Effluent Limitations

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

#### 2.2.1 Sampling Point (Outfall) 002 - SURFACE WATER DISCHARGE

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate	Daily Max	0.7 MGD	Daily	Total Daily	Flow is measured year round. Limitation is effective April and May.
BOD <sub>5</sub> , Total	Daily Max	30 mg/L	Weekly	Grab	Limitation is effective January through March and June through December.
BOD <sub>5</sub> , Total	Weekly Avg	45 mg/L	Weekly	Grab	Limitation is effective April and May.
BOD <sub>5</sub> , Total	Monthly Avg	30 mg/L	Weekly	Grab	Limitation is effective April and May.
BOD <sub>5</sub> , Total	Monthly Avg	15 mg/L	Weekly	Grab	Limitation is effective January through March and June through December.
Suspended Solids, Total	Daily Max	30 mg/L	Weekly	Grab	Limitation is effective January through March and June through December.
Suspended Solids, Total	Weekly Avg	45 mg/L	Weekly	Grab	Limitation is effective April and May.
Suspended Solids, Total	Monthly Avg	30 mg/L	Weekly	Grab	Limitation is effective April and May.
Suspended Solids, Total	Monthly Avg	20 mg/L	Weekly	Grab	Limitation is effective January through March and June through December.
pH Field	Daily Max	9.0 su	Weekly	Grab	
pH Field	Daily Min	6.0 su	Weekly	Grab	
Dissolved Oxygen	Daily Min	4.0 mg/L	Weekly	Grab	

<b>Monitoring Requirements and Effluent Limitations</b>					
<b>Parameter</b>	<b>Limit Type</b>	<b>Limit and Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>	<b>Notes</b>
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Daily Max - Variable	mg/L	Weekly	Grab	See the "Variable Ammonia Limit" column on the eDMR for the limitation.
Nitrogen, Ammonia Variable Limit		mg/L	Weekly	Calculated	See the "Variable Ammonia Limit" subsection for more information.
Phosphorus, Total	Monthly Avg	4.0 mg/L	Weekly	Grab	This limit represents the minimum control level.
Phosphorus, Total		lbs/day	Weekly	Calculated	See Standard Requirements "Appropriate Formulas for Effluent Calculations"
WQT TP Credits		lbs/day	Weekly	Calculated	Beginning July 1, 2019, report WQT TP Credits used. See the "Water Quality Trading (WQT)" subsections for more information.
WQT TP Credits		lbs/month	Monthly	Calculated	Beginning July 1, 2019 report WQT TP Credits used. See "Phosphorus Water Quality Trading (WQT)" subsection Table 2 for more information.
WQT TP Computed Compliance	6-Month Avg	0.119 mg/L	Weekly	Calculated	Beginning July 1, 2019 report the WQT TP Computed Compliance value. See "Phosphorus Water Quality Trading (WQT)" subsections for more information. Compliance is evaluated every six-months on June 30 and December 31.
WQT TP Computed Compliance	Monthly Avg	0.356 mg/L	Weekly	Calculated	Beginning July 1, 2019 report the WQT TP Computed Compliance value. See "Phosphorus Water Quality Trading (WQT)" subsections for more information.

<b>Monitoring Requirements and Effluent Limitations</b>					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
WQT TP Computed Compliance	6-Month Avg	0.117 lbs/day	Weekly	Calculated	Beginning July 1, 2019 report the WQT TP Computed Compliance value. See "Phosphorus Water Quality Trading (WQT)" subsections for more information. Compliance is evaluated every six-months on June 30 and December 31.

**2.2.1.1 Phosphorus Water Quality Trading (WQT)**

The permittee may use water quality trading to demonstrate compliance with WQBELs for total phosphorus (TP) of 0.356 mg/L monthly average and 0.119 mg/L 6-month average and 0.117 lbs/day 6-month average. Pollutant reduction credits for total phosphorus are available as specified in Water Quality Trading Plan **WQT-2018-0001** or approved amendments thereof. **Effective July 1, 2019**

**Table 2. Available Phosphorus Credits per WQT-2018-0001**

Year	Available TP Credits (lbs/yr)
2018	602
2019	838
2020	879
2021	889
2022*	905

\*In the event that this permit is not reissued prior to the expiration date, 905 lbs/yr of credits will be available in subsequent year(s).

Only those pollutant reduction credits established by a water quality trading plan approved by the Department may be used by the permittee to demonstrate compliance with the WQBELs identified in this subsection. If the permittee wishes to use pollutant reduction credits not identified in an approved water quality trading plan, the permittee must amend the plan or develop a new plan and obtain Department approval of the amended or new plan prior to use of the new pollutant reduction credits. Prior to Department approval, the amended or new water quality trading plan will be subject to notice and opportunity for public comment. Any change in the number of available credits requires a permit modification.

In the event pollutant reduction credits as defined in the approved water quality trading plan are no longer generated, the permittee shall comply with the WQBELs for TP contained in this subsection.

**2.2.1.2 Demonstrating Compliance with TP WQBELs Using Water Quality Trading**

Use the following methods to demonstrate compliance with the TP WQBELs contained in the Water Quality Trading subsection above.

### **WQT TP CREDITS**

**Use the following method to calculate the credits to be used expressed as a mass in lbs/day:**

- Select and report as “WQT TP Credits” the TP pollutant reduction credits (in lbs/day) that will be used for each day that discharge is monitored for TP.
- Recommendation: When the TP discharge for a given day is greater than 0.119 mg/L or 0.117 lbs or both, report the greater of the two following values as the “WQT TP Credits” for that day:
  - $\text{WQT TP Credits (in lbs/day)} = \text{TP discharged (in lbs/day)} - 0.117 \text{ lbs/day}$ ; or
  - $\text{WQT TP Credits (in lbs/day)} = \text{TP discharged (in lbs/day)} - [\text{the day's flow in MGD} \times 0.119 \text{ mg/L} \times 8.34]$

Note: When the TP discharge is less than 0.119 mg/L and 0.117 lbs/day for a given day, report 0 (zero) as the “WQT TP Credits” for that day.

**Use the following method to calculate the credits to be used expressed as a mass in lbs/month:**

- On a monthly basis, average the reported daily TP credits used for the month, then multiply the average by the number of days of discharge during the month and report the product as “WQT TP Credits” (in lbs/month) for the last day of the month on the DMR.

$\text{WQT TP Credits (in lbs/month)} = \text{Average of daily WQT TP Credits (in lbs/day)} \times \text{Number of days of discharge/month}$

Note: The total number of TP credits selected for the twelve months of a calendar year shall not exceed that specified in the Water Quality Trading Plan approved by the Department.

### **WQT TP COMPUTED COMPLIANCE**

**Use the following method to demonstrate compliance with TP WQBELs expressed as a concentration in mg/L:**

- Convert the TP credits selected for the day to an equivalent concentration using the following formula:  
$$\text{TP credits (in mg/L)} = [\text{TP credits in lbs/day}] \div [\text{the day's flow in MGD} \times 8.34]$$
- Subtract the TP credits (in mg/L) for the day from the day's TP discharge (in mg/L) and report the difference as “WQT TP Computed Compliance” in mg/L.

**Use the following method to demonstrate compliance with TP WQBELs expressed as a mass in lbs/day:**

- Subtract the TP credits in lbs/day for the day from the day's TP discharge in lbs/day and report the difference as “WQT TP Computed Compliance” in lbs/day.

### **2.2.1.3 Additional Water Quality Trading Requirements**

When using water quality trading to demonstrate compliance with WQBELs for TP, the permittee shall comply with the following:

- Failure to implement any of the terms or conditions of the approved water quality trading plan is a violation of this permit.
- Each month the permittee shall certify that the nonpoint source management practices installed to generate pollutant reduction credits are operated and maintained in a manner consistent with that specified in the approved



water quality trading plan. Such a certification may be made by including the following statement as a comment on the monthly discharge monitoring report:

*I certify that management practices identified in the approved water quality trading plan as the source of pollutant reduction credits are installed, established and properly maintained.*

- At least once a year the permittee or the permittee's agent shall inspect each nonpoint source management practice that generates pollutant reduction credits to confirm the implementation of the management practice and their appropriate operation and adequate maintenance.
- The permittee shall notify WDNR by telephone within 24 hours or next business day of becoming aware that pollutant reduction credits used or intended for use by the permittee are not being implemented or generated as defined in the approved trading plan. A written notification shall be submitted to the Department within 5 days regarding the status of the permittee's pollutant reduction credits.
- The permittee shall provide WDNR written notice within 7 days of the trade agreement upon which the approved water quality trading plan is based being amended, modified, or revoked. This notification shall include the details of any amendment or modification in addition to the justification for the changes.
- The permittee shall not use pollutant reduction credits for the demonstration of compliance when pollutant reduction credits are not being generated.

#### **2.2.1.4 Annual Water Quality Trading Report**

When using water quality trading to demonstrate compliance with WQBELs, the permittee shall report by January 31<sup>st</sup> each year the following information:

- The number of pollutant reduction credits (lbs/month) used each month of the previous year to demonstrate compliance;
- The source of each month's pollutant reduction credits by identifying the approved water quality trading plan that details the source;
- A summary of the annual inspection of each nonpoint source management practice that generated any of the pollutant reduction credits used during the previous year; and
- Identification of noncompliance or failure to implement any terms or conditions of this permit with respect to water quality trading that have not been reported in discharge monitoring reports.

#### **2.2.1.5 Water Quality Trading Reopener Clause**

Under any of the following conditions as provided by s. 283.53(2), Wis. Stats. and Wis. Adm. Code NR 203.135 and 203.136, the Department may modify or revoke and reissue this permit to modify or eliminate permit terms and conditions related to water quality trading:

- The permittee fails to implement the water quality trading plan as approved;
- The permittee fails to comply with permit terms and conditions related to water quality trading;
- New information becomes available that would change the number of credits available for the water quality trade or would change the Department's determinations that water quality trading is an acceptable option.

#### **2.2.1.6 Alternative Approaches to Phosphorus WQBEL Compliance**

The permittee may implement an upgrade to its wastewater treatment facility in combination with Water Quality Trading to achieve compliance, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach.

**2.2.1.7 Submittal of Permit Application for Next Reissuance and Pollutant Trading Plan**

The permittee shall submit the permit application for the next reissuance at least 6 months prior to expiration of this permit.

The permittee has submitted a Water Quality Trading Plan that was approved by WDNR on November 6, 2017. If the permittee intends to pursue pollutant trading to achieve compliance in a manner that differs from that allowed in this permit, the permittee shall submit a new application for water quality trading with the application for the next reissuance. If system upgrades will be used in combination with pollutant trading the permittee shall submit plans for any system upgrade.

### 3 Land Application Requirements

#### 3.1 Sampling Point(s)

The discharge(s) shall be limited to land application of the waste type(s) designated for the listed sampling point(s) on Department approved land spreading sites or by hauling to another facility.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
006	Samples shall be collected at a point and in a manner that will yield results representative of the sludge tested and at a time appropriate for the specific test being conducted.

#### 3.2 Monitoring Requirements and Limitations

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

##### 3.2.1 Sampling Point (Outfall) 006 - LAGOON SLUDGE

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Once	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Once	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Once	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Once	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Once	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Once	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Once	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Once	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Once	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Once	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Once	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Once	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Once	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Once	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Once	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Once	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Once	Composite	
Nitrogen, Total Kjeldahl		Percent	Once	Composite	
Nitrogen, Ammonium (NH <sub>4</sub> -N) Total		Percent	Once	Composite	
Phosphorus, Total		Percent	Once	Composite	
Phosphorus, Water Extractable		% of Tot P	Once	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Potassium, Total Recoverable		Percent	Once	Composite	
PCB Total Dry Wt	Ceiling	50 mg/kg	Once	Composite	
PCB Total Dry Wt	High Quality	10 mg/kg	Once	Composite	

Other Sludge Requirements	
Sludge Requirements	Sample Frequency
<b>List 3 Requirements – Pathogen Control:</b> The requirements in List 3 shall be met prior to land application of sludge.	<b>Once</b>
<b>List 4 Requirements – Vector Attraction Reduction:</b> The vector attraction reduction shall be satisfied prior to, or at the time of land application as specified in List 4.	<b>Once</b>

**3.2.1.1 Requirements for Potential and/or Unscheduled Land Application of Sludge**

Monitoring for List 1 and PCBs shall occur in the **2021** calendar year of the permit, unless a sludge removal date has been established which would occur within the permit term, but in a different year. In that case, monitoring for Lists 1, 2, 3 & 4 and PCBs shall occur in the year of, but prior to, land application of the removed sludge. Monitoring must be done and compliance assured prior to land application, in addition to all other requirements specified herein and in ch. NR 204, Wis. Adm. Code. The permittee shall notify the Department prior to such land application. If sludge removal and land application are necessary after the monitoring for List 1 in 2021, monitoring for Lists 2, 3 & 4 shall be done in the year of and prior to land application

**3.2.1.2 Changes in Feed Sludge Characteristics**

If a change in feed sludge characteristics, treatment process, or operational procedures occurs which may result in a significant shift in sludge characteristics, the permittee shall reanalyze the sludge for List 1, 2, 3 and 4 parameters each time such change occurs.

**3.2.1.3 Sludge Which Exceeds the High Quality Limit**

Cumulative pollutant loading records shall be kept for all bulk land application of sludge which does not meet the high quality limit for any parameter. This requirement applies for the entire calendar year in which any exceedance of Table 3 of s. NR 204.07(5)(c), is experienced. Such loading records shall be kept for all List 1 parameters for each site land applied in that calendar year. The formula to be used for calculating cumulative loading is as follows:

$$[(\text{Pollutant concentration (mg/kg)} \times \text{dry tons applied/ac}) \div 500] + \text{previous loading (lbs/acre)} = \text{cumulative lbs pollutant per acre}$$

When a site reaches 90% of the allowable cumulative loading for any metal established in Table 2 of s. NR 204.07(5)(b), the Department shall be so notified through letter or in the comment section of the annual land application report (3400-55).

**3.2.1.4 Sludge Analysis for PCBs**

The permittee shall analyze the sludge for Total PCBs one time during **2021**. The results shall be reported as "PCB Total Dry Wt". Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses

shall be performed in accordance with Table EM in s. NR 219.04, Wis. Adm. Code and the conditions specified in Standard Requirements of this permit. PCB results shall be submitted by January 31, following the specified year of analysis.

**3.2.1.5 Lists 1, 2, 3, and 4**

<p><b>List 1</b> <b>TOTAL SOLIDS AND METALS</b></p> <p>See the Monitoring Requirements and Limitations table above for monitoring frequency and limitations for the List 1 parameters</p>
Solids, Total (percent)
Arsenic, mg/kg (dry weight)
Cadmium, mg/kg (dry weight)
Copper, mg/kg (dry weight)
Lead, mg/kg (dry weight)
Mercury, mg/kg (dry weight)
Molybdenum, mg/kg (dry weight)
Nickel, mg/kg (dry weight)
Selenium, mg/kg (dry weight)
Zinc, mg/kg (dry weight)

<p><b>List 2</b> <b>NUTRIENTS</b></p> <p>See the Monitoring Requirements and Limitations table above for monitoring frequency for the List 2 parameters</p>
Solids, Total (percent)
Nitrogen Total Kjeldahl (percent)
Nitrogen Ammonium (NH <sub>4</sub> -N) Total (percent)
Phosphorus Total as P (percent)
Phosphorus, Water Extractable (as percent of Total P)
Potassium Total Recoverable (percent)

<p><b>List 3</b> <b>PATHOGEN CONTROL FOR CLASS B SLUDGE</b></p> <p>The permittee shall implement pathogen control as listed in List 3. The Department shall be notified of the pathogen control utilized and shall be notified when the permittee decides to utilize alternative pathogen control.</p> <p>The following requirements shall be met prior to land application of sludge.</p>		
<b>Parameter</b>	<b>Unit</b>	<b>Limit</b>
Fecal Coliform *	MPN/gTS or CFU/gTS	2,000,000
<b>OR, ONE OF THE FOLLOWING PROCESS OPTIONS</b>		
Aerobic Digestion	Air Drying	
Anaerobic Digestion	Composting	
Alkaline Stabilization	PSRP Equivalent Process	
* The Fecal Coliform limit shall be reported as the geometric mean of 7 discrete samples on a dry weight basis.		

**List 4  
VECTOR ATTRACTION REDUCTION**

The permittee shall implement any one of the vector attraction reduction options specified in List 4. The Department shall be notified of the option utilized and shall be notified when the permittee decides to utilize an alternative option.

One of the following shall be satisfied prior to, or at the time of land application as specified in List 4.

<b>Option</b>	<b>Limit</b>	<b>Where/When it Shall be Met</b>
Volatile Solids Reduction	≥38%	Across the process
Specific Oxygen Uptake Rate	≤1.5 mg O <sub>2</sub> /hr/g TS	On aerobic stabilized sludge
Anaerobic bench-scale test	<17 % VS reduction	On anaerobic digested sludge
Aerobic bench-scale test	<15 % VS reduction	On aerobic digested sludge
Aerobic Process	>14 days, Temp >40°C and Avg. Temp > 45°C	On composted sludge
pH adjustment	>12 S.U. (for 2 hours) and >11.5 (for an additional 22 hours)	During the process
Drying without primary solids	>75 % TS	When applied or bagged
Drying with primary solids	>90 % TS	When applied or bagged
Equivalent Process	Approved by the Department	Varies with process
Injection	-	When applied
Incorporation	-	Within 6 hours of application

**3.2.1.6 Daily Land Application Log**

<b>Daily Land Application Log</b>		
<b>Discharge Monitoring Requirements and Limitations</b>		
<p>The permittee shall maintain a daily land application log for biosolids land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the biosolids land applied. The log book records shall form the basis for the annual land application report requirements.</p>		
<b>Parameters</b>	<b>Units</b>	<b>Sample Frequency</b>
DNR Site Number(s)	Number	Daily as used
Outfall number applied	Number	Daily as used
Acres applied	Acres	Daily as used
Amount applied	As appropriate * /day	Daily as used
Application rate per acre	unit */acre	Daily as used
Nitrogen applied per acre	lb/acre	Daily as used
Method of Application	Injection, Incorporation, or surface applied	Daily as used

\*gallons, cubic yards, dry US Tons or dry Metric Tons

## 4 Schedules

### 4.1 Facility Upgrade

Required Action	Due Date
<b>Facility Maintenance Activity Status Report:</b> In the fourth year Phosphorus report the Village identified a number of maintenance activities needed to the wastewater treatment facility. Summarize the status of projects over the previous year.	09/30/2019
<b>Facility Upgrade Status Report:</b> Summarize the status of projects over the previous year.	09/30/2020
<b>Construction:</b> Complete the identified projects.	09/30/2021

### 4.2 Annual Water Quality Trading (WQT) Report

Required Action	Due Date
<b>Annual WQT Report:</b> Submit an annual WQT report that shall cover the first year of the permit term. The WQT report shall include the total number of pollutant credits used, the source of the pollution reduction credits, a summary of annual inspections performed, and identification of noncompliance or failure to implement any terms or conditions of the approved water quality trading plan.	01/31/2019
<b>Annual WQT Report:</b> Submit an annual WQT report covering the previous year.	01/31/2020
<b>Annual WQT Report:</b> Submit an annual WQT report covering the previous year.	01/31/2021
<b>Annual WQT Report:</b> Submit an annual WQT report covering the previous year.	01/31/2022
<b>Annual WQT Report:</b> Submit the 5th annual WQT report. If the permittee wishes to continue to comply with phosphorus limits through WQT in subsequent permit terms, the permittee shall submit a revised WQT plan including a demonstration of credit need, compliance record of the existing WQT plan, and any additional practices needed to maintain compliance over time.	01/31/2023
<b>Annual WQT Reports Required After Permit Expiration:</b> In the event that this permit is not reissued by the expiration date, the permittee shall continue to submit annual WQT reports by January 31 each year covering total number of pollutant credits used, the source of the pollution reduction credits, a summary of annual inspections performed, and identification of noncompliance or failure to implement any terms or conditions of the approved water quality trading plan for the previous calendar year.	

## 5 Standard Requirements

**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).

### 5.1 Reporting and Monitoring Requirements

#### 5.1.1 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.

#### 5.1.2 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 shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in 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.

#### 5.1.3 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.

#### 5.1.4 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 NR 101 fees, the 2 mg/l lower reporting limits for BOD<sub>5</sub> and 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.

### **5.1.5 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.

### **5.1.6 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.

### 5.1.7 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.

### 5.1.8 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.

## 5.2 System Operating Requirements

### 5.2.1 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.**

### **5.2.2 Flow Meters**

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

### **5.2.3 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.

### **5.2.4 Sludge Management**

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

### **5.2.5 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.

### **5.2.6 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 preventative 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.

### **5.2.7 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.

### **5.2.8 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. 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.

### **5.2.9 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.

### **5.2.10 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).

## **5.3 Sewage Collection Systems**

### **5.3.1 Sanitary Sewage Overflows and Sewage Treatment Facility Overflows**

### 5.3.1.1 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 preventative 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.

### 5.3.1.2 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 NR 210.21 (3), Wis. Adm. Code, shall be implemented consistent with an emergency response plan developed under the CMOM program.

### 5.3.1.3 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;
  - The surface water to which the discharge occurred, if any;
  - The duration of the overflow and an estimate of the volume of the overflow;
  - 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;
  - 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 NR 205.07 (1) (r) shall also report all sanitary sewer overflows and sewage treatment facility overflows on that report.

#### **5.3.1.4 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.

#### **5.3.2 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.

#### **5.3.3 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.

## 5.4 Surface Water Requirements

### 5.4.1 Permittee-Determined Limit of Quantitation Incorporated into this Permit

For pollutants with water quality-based effluent limits below the Limit of Quantitation (LOQ) in this permit, the LOQ calculated by the permittee and reported on the Discharge Monitoring Reports (DMRs) is incorporated by reference into this permit. The LOQ shall be reported on the DMRs, shall be the lowest quantifiable level practicable, and shall be no greater than the minimum level (ML) specified in or approved under 40 CFR Part 136 for the pollutant at the time this permit was issued, unless this permit specifies a higher LOQ.

### 5.4.2 Appropriate Formulas for Effluent Calculations

The permittee shall use the following formulas for calculating effluent results to determine compliance with average concentration limits and mass limits and total load limits:

**Weekly/Monthly/Six-Month/Annual Average Concentration** = the sum of all daily results for that week/month/six-month/year, divided by the number of results during that time period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

**Weekly Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the week.

**Monthly Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the month.

**Six-Month Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the six-month period. [Note: When a six-month average effluent limit is specified for Total Phosphorus the applicable periods are May through October and November through April.]

**Annual Average Mass Discharge (lbs/day):** Daily mass = daily concentration (mg/L) x daily flow (MGD) x 8.34, then average the daily mass values for the entire year.

**Total Monthly Discharge:** = monthly average concentration (mg/L) x total flow for the month (MG/month) x 8.34.

**Total Annual Discharge:** = sum of total monthly discharges for the calendar year.

**12-Month Rolling Sum of Total Monthly Discharge:** = the sum of the most recent 12 consecutive months of Total Monthly Discharges.

### 5.4.3 Effluent Temperature Requirements

**Weekly Average Temperature** – The permittee shall use the following formula for calculating effluent results to determine compliance with the weekly average temperature limit (as applicable): Weekly Average Temperature = the sum of all daily maximum results for that week divided by the number of daily maximum results during that time period.

**Cold Shock Standard** – Water temperatures of the discharge shall be controlled in a manner as to protect fish and aquatic life uses from the deleterious effects of cold shock. ‘Cold Shock’ means exposure of aquatic organisms to a rapid decrease in temperature and a sustained exposure to low temperature that induces abnormal behavior or physiological performance and may lead to death.

**Rate of Temperature Change Standard** – Temperature of a water of the state or discharge to a water of the state may not be artificially raised or lowered at such a rate that it causes detrimental health or reproductive effects to fish or aquatic life of the water of the state.

#### **5.4.4 Visible Foam or Floating Solids**

There shall be no discharge of floating solids or visible foam in other than trace amounts.

#### **5.4.5 Surface Water Uses and Criteria**

In accordance with NR 102.04, Wis. Adm. Code, surface water uses and criteria are established to govern water management decisions. Practices attributable to municipal, industrial, commercial, domestic, agricultural, land development or other activities shall be controlled so that all surface waters including the mixing zone meet the following conditions at all times and under all flow and water level conditions:

- a) Substances that will cause objectionable deposits on the shore or in the bed of a body of water, shall not be present in such amounts as to interfere with public rights in waters of the state.
- b) Floating or submerged debris, oil, scum or other material shall not be present in such amounts as to interfere with public rights in waters of the state.
- c) Materials producing color, odor, taste or unsightliness shall not be present in such amounts as to interfere with public rights in waters of the state.
- d) Substances in concentrations or in combinations which are toxic or harmful to humans shall not be present in amounts found to be of public health significance, nor shall substances be present in amounts which are acutely harmful to animal, plant or aquatic life.

#### **5.4.6 Percent Removal**

During any 30 consecutive days, the average effluent concentrations of BOD<sub>5</sub> and of total suspended solids shall not exceed 15% of the average influent concentrations, respectively. This requirement does not apply to removal of total suspended solids if the permittee operates a lagoon system and has received a variance for suspended solids granted under NR 210.07(2), Wis. Adm. Code.

### **5.5 Land Application Requirements**

#### **5.5.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations**

In the event that new federal sludge standards or regulations are promulgated, the permittee shall comply with the new sludge requirements by the dates established in the regulations, if required by federal law, even if the permit has not yet been modified to incorporate the new federal regulations.

#### **5.5.2 General Sludge Management Information**

The General Sludge Management Form 3400-48 shall be completed and submitted prior to any significant sludge management changes.

#### **5.5.3 Sludge Samples**

All sludge samples shall be collected at a point and in a manner which will yield sample results which are representative of the sludge being tested, and collected at the time which is appropriate for the specific test.

#### **5.5.4 Land Application Characteristic Report**

Each report shall consist of a Characteristic Form 3400-49 and Lab Report. The Characteristic Report Form 3400-49 shall be submitted electronically by January 31 following each year of analysis.



Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be 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 is true, accurate and complete. The Lab Report must be sent directly to the facility's DNR sludge representative or basin engineer unless approval for not submitting the lab reports has been given.

The permittee shall use the following convention when reporting sludge 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 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg .

All results shall be reported on a dry weight basis.

### **5.5.5 Calculation of Water Extractable Phosphorus**

When sludge analysis for Water Extractable Phosphorus is required by this permit, the permittee shall use the following formula to calculate and report Water Extractable Phosphorus:

Water Extractable Phosphorus (% of Total P) =

$[\text{Water Extractable Phosphorus (mg/kg, dry wt)} \div \text{Total Phosphorus (mg/kg, dry wt)}] \times 100$

### **5.5.6 Annual Land Application Report**

Land Application Report Form 3400-55 shall be submitted electronically by January 31, each year whether or not non-exceptional quality sludge is land applied. Non-exceptional quality sludge is defined in s. NR 204.07(4), Wis. Adm. Code. Following submittal of the electronic Annual Land Application Report Form 3400-55, this form shall be 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.

### **5.5.7 Other Methods of Disposal or Distribution Report**

The permittee shall submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied. Following submittal of the electronic Report Form 3400-52, this form shall be 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.

### **5.5.8 Approval to Land Apply**

Bulk non-exceptional quality sludge as defined in s. NR 204.07(4), Wis. Adm. Code, may not be applied to land without a written approval letter or Form 3400-122 from the Department unless the Permittee has obtained permission from the Department to self approve sites in accordance with s. NR 204.06 (6), Wis. Adm. Code. Analysis of sludge characteristics is required prior to land application. Application on frozen or snow covered ground is restricted to the extent specified in s. NR 204.07(3) (1), Wis. Adm. Code.

### **5.5.9 Soil Analysis Requirements**

Each site requested for approval for land application must have the soil tested prior to use. Each approved site used for land application must subsequently be soil tested such that there is at least one valid soil test in the four years prior to land application. All soil sampling and submittal of information to the testing laboratory shall be done in

accordance with UW Extension Bulletin A-2100. The testing shall be done by the UW Soils Lab in Madison or Marshfield, WI or at a lab approved by UW. The test results including the crop recommendations shall be submitted to the DNR contact listed for this permit, as they are available. Application rates shall be determined based on the crop nitrogen recommendations and with consideration for other sources of nitrogen applied to the site.

#### **5.5.10 Land Application Site Evaluation**

For non-exceptional quality sludge, as defined in s. NR 204.07(4), Wis. Adm. Code, a Land Application Site Request Form 3400-053 shall be submitted to the Department for the proposed land application site. The Department will evaluate the proposed site for acceptability and will either approve or deny use of the proposed site. The permittee may obtain permission to approve their own sites in accordance with s. NR 204.06(6), Wis. Adm. Code.

## 6 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Facility Upgrade -Facility Maintenance Activity Status Report	September 30, 2019	12
Facility Upgrade -Facility Upgrade Status Report	September 30, 2020	12
Facility Upgrade -Construction	September 30, 2021	12
Annual Water Quality Trading (WQT) Report -Annual WQT Report	January 31, 2019	12
Annual Water Quality Trading (WQT) Report -Annual WQT Report	January 31, 2020	12
Annual Water Quality Trading (WQT) Report -Annual WQT Report	January 31, 2021	12
Annual Water Quality Trading (WQT) Report -Annual WQT Report	January 31, 2022	12
Annual Water Quality Trading (WQT) Report -Annual WQT Report	January 31, 2023	12
Annual Water Quality Trading (WQT) Report -Annual WQT Reports Required After Permit Expiration	See Permit	12
Compliance Maintenance Annual Reports (CMAR)	by June 30, each year	14
General Sludge Management Form 3400-48	prior to any significant sludge management changes	21
Characteristic Form 3400-49 and Lab Report	by January 31 following each year of analysis	21
Land Application Report Form 3400-55	by January 31, each year whether or not non-exceptional quality sludge is land applied	22
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied	22
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	13

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 Street, Spooner, WI 54801-1255

