Permit Fact Sheet

General Information

<table>
<thead>
<tr>
<th>Permit Number:</th>
<th>WI-0035963-08-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permittee Name:</td>
<td>Village of Mount Calvary</td>
</tr>
<tr>
<td>Address:</td>
<td>P O BOX 205</td>
</tr>
<tr>
<td>City/State/Zip:</td>
<td>MOUNT CALVARY WI 53057-0205</td>
</tr>
<tr>
<td>Discharge Location:</td>
<td>Lat. 43.83212°N / Long. 88.23749°W</td>
</tr>
<tr>
<td>Receiving Water:</td>
<td>Unnamed Tributary to the Sheboygan River, located in the Sheboygan River Watershed in the Northeast Lakeshore Basin in Fond du Lac County</td>
</tr>
<tr>
<td>StreamFlow (Q₇,₁₀):</td>
<td>&lt;0.01 cfs</td>
</tr>
<tr>
<td>Stream Classification:</td>
<td>Limited Forage Fish community, non-public water supply</td>
</tr>
<tr>
<td>Design Flow(s)</td>
<td>Daily Maximum 0.475 MGD</td>
</tr>
<tr>
<td></td>
<td>Weekly Maximum 0.380 MGD</td>
</tr>
<tr>
<td></td>
<td>Monthly Maximum 0.294 MGD</td>
</tr>
<tr>
<td></td>
<td>Annual Average 0.135 MGD</td>
</tr>
<tr>
<td>Significant Industrial Loading?</td>
<td>None</td>
</tr>
<tr>
<td>Operator at Proper Grade?</td>
<td>The facility is rated as a Basic level in Subclasses A1, B, and C. Peter Litersky has advanced level certification for appropriate subclasses.</td>
</tr>
<tr>
<td>Approved Pretreatment Program?</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Facility Description

The Village of Mount Calvary operates a 0.135 MGD annual average design flow municipal wastewater treatment facility that serves an approximate population of 595 with no significant industrial users. The treatment facility consists of an oxidation ditch operated as an extended activated sludge WWTF. Preliminary treatment consists of fine screening and grit removal, followed by biological treatment in a pair of concentric aeration tanks which surround the center secondary clarifier. The facility’s clarifier was rehabilitated in 2014. Final effluent is then aerated prior to discharge to the un-named tributary to the Sheboygan River. Disinfection of the effluent is not required based on the conditions of s. NR 210.06(3), Wis. Adm. Code. It should be noted that recreational use surveys may be re-evaluated in the future to ensure the conditions are being met. This re-evaluation could result in requiring disinfection of the effluent in the future.

The class B biosolids produced by the facility are stored onsite and hauled to Department approved sites for land application through injection.

Substantial Compliance Determination

Enforcement During Last Permit: Provide brief summary of any formal enforcement actions taken during previous permit term. The facility has completed all previously required actions as part of the enforcement process.
After a desk top review of all Edit list as needed for a facility: discharge monitoring reports, CMARs, land app reports, compliance schedule items], and a site visit on Insert Date of Site Visit, this facility has been found to be in substantial compliance with their current permit.

3)

<table>
<thead>
<tr>
<th>Sample Point Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sample Point Number</strong></td>
</tr>
<tr>
<td>701</td>
</tr>
<tr>
<td>001</td>
</tr>
<tr>
<td>002</td>
</tr>
</tbody>
</table>

### 1 Influent - Proposed Monitoring

**Sample Point Number: 701- Influent**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Type</th>
<th>Limit and Units</th>
<th>Sample Frequency</th>
<th>Sample Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Rate</td>
<td>MGD</td>
<td>Daily</td>
<td>Continuous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD5, Total</td>
<td>mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspended Solids, Total</td>
<td>mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Changes from Previous Permit:**

Influent monitoring requirements were re-evaluated for the proposed permit term and no changes are needed from the previous permit.

**Explanation of Limits and Monitoring Requirements**

Influent monitoring is needed to assess loading to the facility and treatment performance. Requirements for flow, BOD, and TSS are established in accordance with s. NR 210.04(2), Wis. Admin. Code. Taking into consideration guidance and requirements in administrative code, influent monitoring frequencies for Mount Calvary’s permit were determined to be appropriate for pollutants that have final effluent limits in effect during this permit term.
# 2 Surface Water - Proposed Monitoring and Limitations

## Sample Point Number: 001- Effluent

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Type</th>
<th>Limit and Units</th>
<th>Sample Frequency</th>
<th>Sample Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOD5, Total</td>
<td>Daily Max</td>
<td>30 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
</tr>
<tr>
<td>BOD5, Total</td>
<td>Weekly Avg</td>
<td>29 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
</tr>
<tr>
<td>BOD5, Total</td>
<td>Monthly Avg</td>
<td>15 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
</tr>
<tr>
<td>Suspended Solids, Total</td>
<td>Daily Max</td>
<td>30 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
</tr>
<tr>
<td>Suspended Solids, Total</td>
<td>Weekly Avg</td>
<td>30 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
</tr>
<tr>
<td>Suspended Solids, Total</td>
<td>Monthly Avg</td>
<td>20 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
</tr>
<tr>
<td>Nitrogen, Ammonia (NH3-N) Total</td>
<td>Daily Max</td>
<td>3.4 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td>Limit effective year-round.</td>
</tr>
<tr>
<td>Nitrogen, Ammonia (NH3-N) Total</td>
<td>Weekly Avg</td>
<td>3.4 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td>Limit effective year-round.</td>
</tr>
<tr>
<td>Nitrogen, Ammonia (NH3-N) Total</td>
<td>Monthly Avg</td>
<td>3.4 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td>Limit effective October - March each year.</td>
</tr>
<tr>
<td>Nitrogen, Ammonia (NH3-N) Total</td>
<td>Monthly Avg</td>
<td>2.2 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td>Limit effective April - September each year.</td>
</tr>
<tr>
<td>pH Field</td>
<td>Daily Min</td>
<td>6.0 su</td>
<td>5/Week</td>
<td>Grab</td>
<td></td>
</tr>
<tr>
<td>pH Field</td>
<td>Daily Max</td>
<td>9.0 su</td>
<td>5/Week</td>
<td>Grab</td>
<td></td>
</tr>
<tr>
<td>Dissolved Oxygen</td>
<td>Daily Min</td>
<td>4.0 mg/L</td>
<td>5/Week</td>
<td>Grab</td>
<td></td>
</tr>
<tr>
<td>Chloride</td>
<td>Weekly Avg</td>
<td>450 mg/L</td>
<td>4/Month</td>
<td>24-Hr Flow Prop Comp</td>
<td>Interim limit in effect until September 30, 2025.</td>
</tr>
<tr>
<td>Chloride</td>
<td>Weekly Avg</td>
<td>400 mg/L</td>
<td>4/Month</td>
<td>24-Hr Flow Prop Comp</td>
<td>Sampling shall be done on four consecutive days. The final water quality based effluent limit becomes effective on October 1, 2025 per Schedule 4.5.</td>
</tr>
<tr>
<td>Chloride</td>
<td>Monthly Avg</td>
<td>400 mg/L</td>
<td>4/Month</td>
<td>24-Hr Flow Prop Comp</td>
<td>Sampling shall be done on four consecutive days. The final water quality based</td>
</tr>
<tr>
<td>Parameter</td>
<td>Limit Type</td>
<td>Limit and Units</td>
<td>Sample Frequency</td>
<td>Sample Type</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------</td>
<td>-----------------</td>
<td>------------------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>effluent limit becomes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>effective on October 1, 2025 per Schedule 4.5.</td>
</tr>
<tr>
<td>Chloride</td>
<td>Monthly Avg</td>
<td>lbs/day</td>
<td>4/Month</td>
<td>Calculated</td>
<td>Monitoring only upon reissuance. Limit effective October 1, 2025. Report the chloride mass results in the Chloride Weekly Average Mass column on the DMR. Compare to the Variable Chloride Mass Limitation chart to determine compliance.</td>
</tr>
<tr>
<td>Chloride, Variable Limit</td>
<td></td>
<td>lbs/day</td>
<td>4/Month</td>
<td>Calculated</td>
<td>Limit effective October 1, 2025. Look up the variable chloride mass limit in the &quot;Alternative Wet Weather Chloride Mass Limitation&quot; section below. Report the variable limit in the Chloride Variable Limit column on the DMR.</td>
</tr>
<tr>
<td>Phosphorus, Total</td>
<td>Monthly Avg</td>
<td>2.8 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td>This is an interim MDV limit effective upon reissuance through August 31, 2026. See the MDV/Phosphorus sections and phosphorus schedules.</td>
</tr>
<tr>
<td>Phosphorus, Total</td>
<td>Monthly Avg</td>
<td>0.8 mg/L</td>
<td>2/Week</td>
<td>24-Hr Flow Prop Comp</td>
<td>This is an interim MDV limit effective on September 1, 2026. See the MDV/Phosphorus sections and the phosphorus schedules.</td>
</tr>
<tr>
<td>Phosphorus, Total</td>
<td></td>
<td>lbs/month</td>
<td>Monthly</td>
<td>Calculated</td>
<td>Report the total monthly phosphorus discharged in lbs/month on the last day of the month on the DMR. See Standard Requirements for 'Appropriate Formulas' to calculate the Total Monthly Discharge in lbs/month.</td>
</tr>
</tbody>
</table>
### Monitoring Requirements and Limitations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Type</th>
<th>Limit and Units</th>
<th>Sample Frequency</th>
<th>Sample Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorus, Total</td>
<td></td>
<td>lbs/yr</td>
<td>Annual</td>
<td>Calculated</td>
<td>Report the sum of the total monthly discharges (for the months that the MDV is in effect) for the calendar year on the Annual report form.</td>
</tr>
<tr>
<td>Nitrogen, Total Kjeldahl</td>
<td>mg/L</td>
<td>See Listed Qtr(s)</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
<td>See Nitrogen Series Monitoring section below.</td>
</tr>
<tr>
<td>Nitrogen, Nitrite + Nitrate Total</td>
<td>mg/L</td>
<td>See Listed Qtr(s)</td>
<td>24-Hr Flow Prop Comp</td>
<td></td>
<td>See Nitrogen Series Monitoring section below.</td>
</tr>
<tr>
<td>Nitrogen, Total</td>
<td>mg/L</td>
<td>See Listed Qtr(s)</td>
<td>Calculated</td>
<td></td>
<td>See Nitrogen Series Monitoring section below. Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.</td>
</tr>
<tr>
<td>Temperature Maximum</td>
<td>deg F</td>
<td>Daily</td>
<td>Continuous</td>
<td></td>
<td>Monitoring only in calendar year 2026. (Jan. 1 - Dec. 31).</td>
</tr>
</tbody>
</table>

#### 2.1.1 Changes from Previous Permit

Effluent limitations and monitoring requirements were re-evaluated for the proposed permit term and the following changes were made from the previous permit:

**Nitrogen Ammonia** – Year-round daily max limit reduced from 3.9 mg/L to 3.4 mg/L. Year-round weekly average of 3.4 mg/L replaces previous limits of 5.1 mg/L (April - May), 4.8 mg/L (June – September) and 12 mg/L (October - March). The monthly average for October – March was reduced from 6.5 mg/L to 3.4 mg/L.

**Chloride** – Final chloride limits are included in the proposed permit and become effective on October 1, 2025 per a schedule and include a weekly average limit of 400 mg/L, a monthly average limit of 400 mg/L, a weekly average limit of 450 lbs/day (during dry weather conditions), and a weekly average limit of 1,268 lbs/day (during wet weather conditions). The facility does not have a chloride variance.

**Phosphorus MDV** - The permittee has applied for a multi-discharger variance (MDV) for phosphorus for this permit term and the application has been approved by the Department. An MDV interim limit of 1.0 mg/L has been added that goes into effect upon reissuance. The permittee is now required to report the total amount of phosphorus discharged in lbs/month and lbs/year. By March 1 of each year the permittee shall make a payment(s) to participating county(s) of $58.85 per pound of phosphorus discharged during the previous year in excess of the target value of 0.2 mg/L.

**Total Nitrogen Monitoring (TKN, N02+N03 and Total N):** Annual monitoring in rotating quarters throughout the permit term was added to the proposed permit.

**Temperature Maximum** - Daily temperature monitoring is required for in calendar year 2026.
**Chronic WET testing:** Chronic WET testing is no longer required, and monitoring requirements were removed from the proposed permit.

### 2.1.2 Explanation of Limits and Monitoring Requirements

#### Monitoring Frequencies

Taking into consideration guidance and requirements in administrative code, effluent monitoring frequencies for Mount Calvary’s permit were determined to be appropriate for pollutants that have final effluent limits in effect during this permit term with the exception of phosphorus. Monitoring frequency for total phosphorus was updated from 4/Month to 2/Week to be consistent with other facilities of the same type, size, and effluent limitations.

#### Categorical Limits:

**BOD5, Total Suspended Solids, pH, Dissolved Oxygen:** Standard municipal wastewater requirements for BOD5, total suspended solids, dissolved oxygen, and pH are included based on ch. NR 210, Wis. Adm. Code ‘Sewage Treatment Works’ requirements for discharges to fish and aquatic life streams. Chapter NR 102, Wis. Adm. Code ‘Water Quality Standards for Surface Waters’ also specifies requirements for pH for fish and aquatic life streams.

**Water Quality Based Limits and WET Requirements and Disinfection (if applicable):**

Refer to the WQBEL memo for the detailed calculations, prepared by the Water Quality Bureau dated March 22, 2022, used for this reissuance.

**Nitrogen Ammonia** - Current acute and chronic ammonia toxicity criteria for the protection of aquatic life are included in Tables 2C and 4B of ch. NR 105, Wis. Adm. Code (effective March 1, 2004). Subchapter IV of ch. NR 106 establishes procedures for calculating water quality-based effluent limitations (WQBELs) for ammonia (effective September 1, 2016). Based on the methods specified in Subchapter IV of ch. NR 106, the current daily maximum limit is decreased from 3.9 mg/L to 3.4 mg/L, the currently weekly average limits of 5.1 mg/L (April – May), 4.8 mg/L (June – Sept), and 12 mg/L (October – March) are all decreased to 3.4 mg/L, and the monthly average limit for October – March is decreased from 6.5 mg/L to 3.4 mg/L and current monthly average ammonia limit of 2.2 mg/L (April – Sept) is retained in the proposed permit.

**Chloride** - Acute and chronic chloride toxicity criteria for the protection of aquatic life are included in Tables 1 and 5 of ch. NR 105, Wis. Adm. Code. Subchapter VII of ch. NR 106 establishes the procedure for calculating water quality based effluent limitations (WQBELs) for chloride. If the permittee's effluent data shows that a calculated WQBEL for chloride cannot be met, then the permit will include a chloride effluent limitation. Mount Calvary’s effluent chloride values were higher than the calculated weekly average limit of 400 mg/L and a compliance schedule to continue implementation of Source Reduction Measures has been included with an effective date of October 1, 2025 for the following final WQBELs: 400 mg/L (weekly average), 400 mg/L (monthly average), 450 lbs/day (weekly average during dry weather conditions), and 1,268 lbs/day (weekly average during wet weather conditions).

The facility had reapplied for a chloride variance as part of their permit application for reissuance but after subsequent meetings with the Department they have determined they are able to comply with their final chloride effluent limit by the date specified in the schedule and have withdrawn the variance application.

**Phosphorus** – Phosphorus rules became effective December 1, 2010 per NR 217, Wis. Adm. Code, that required the permittee to comply with water quality based effluent limits (WQBELs) for total phosphorous. The final phosphorus WQBELs are 0.225 mg/L monthly average and 0.075 mg/L six-month average and were to become effective as scheduled unless a variance was granted. For this permit term, the permittee has applied for the Multi-Discharger Variance (MDV) for phosphorus as provided for in s. 283.16, Wis. Stats., and approved by USEPA on February 6, 2017 until February 5, 2027. The permittee qualifies for the MDV because it is an existing source and a major facility upgrade is needed to comply with the applicable phosphorus WQBELs, thereby creating a financial burden.

Conditions of the MDV require the permittee to optimize phosphorus removal throughout the proposed permit term, comply with interim limits and make annual payments to participating county(s) by March 1 of each year based on the
pounds of phosphorus discharged during the previous year in excess of the specified target value. The “price per pound” value is $58.85 adjusted for CPI annually during the first quarter as defined by s. 283.16(8)(a)2, Wis. Stats and takes effect for reissued permits with effective dates starting April 1. This may differ from the “price per pound” that is public noticed; however, the “price per pound” is set upon reissuance and is applicable for the entire permit term. The participating county(s) uses these payments to implement non-point source (agricultural and urban) phosphorus control strategies at the watershed level.

**Total Nitrogen Monitoring (NO2+NO3, TKN and Total N)** - The Department has included effluent monitoring for Total Nitrogen in the permit through the authority under §§ 283.55(1)(e), Wis. Stats., which allows the department to require the permittee to submit information necessary to identify the type and quantity of any pollutants discharged from the point source, and through s. NR 200.065(1)(h), Wis. Adm. Code, which allows for this monitoring to be collected during the permit term. More information on the justification to include total nitrogen monitoring in wastewater permits can be found in the “Guidance for Total Nitrogen Monitoring in Wastewater Permits” dated October 1, 2019. Annual tests are scheduled in the following rotating quarters: October – December 2022; July – September 2023; January – March 2024; April – June 2025; and October – December 2026.

**Temperature** – Previous temperature-based limits removed from permit via modification 0035963-07-1. Further evaluation discussed in the WQBEL memo referenced above indicated that effluent temperature monitoring shall be conducted for one year. Monitoring is scheduled for 2026 to give the facility sufficient time to submit 12 months of data ahead of the application submittal for the next reissuance.

**PFOS and PFOA** – NR 106 Subchapter VIII – Permit Requirements for PFOS and PFOA Dischargers became effective on August 1, 2022. Pursuant to s. NR 106.98(2)(c), Wis. Adm. Code, the department evaluated the need for PFOS and PFOA monitoring taking into consideration the presence of potential PFOS or PFOA industrial wastes, remediation sites and other potential sources of PFOS or PFOA. Based on information available at the time the proposed permit was drafted, the department has determined the permittee does not need to sample for PFOS or PFOA as part of this permit reissuance. The department may re-evaluate the need for sampling at the next permit reissuance if new information becomes available that suggests PFOS or PFOA may be present in the discharge.

### 3 Land Application - Proposed Monitoring and Limitations

<table>
<thead>
<tr>
<th>Sample Point</th>
<th>Sludge Class (A or B)</th>
<th>Sludge Type (Liquid or Cake)</th>
<th>Pathogen Reduction Method</th>
<th>Vector Attraction Method</th>
<th>Reuse Option</th>
<th>Amount Reused/Disposed (Dry Tons/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>002</td>
<td>B</td>
<td>Liquid</td>
<td>Fecal Coliform Testing</td>
<td>Injection</td>
<td>Land Application</td>
<td>9.0 dry US tons (2021 permit application)</td>
</tr>
</tbody>
</table>

Does sludge management demonstrate compliance? **Yes**

Is additional sludge storage required? **No**

Is Radium-226 present in the water supply at a level greater than 2 pCi/liter? **Yes**

If yes, special monitoring and recycling conditions will be included in the permit to track any potential problems in landapplying sludge from this facility

Is a priority pollutant scan required? **No**
### Municipal Sludge Description

<table>
<thead>
<tr>
<th>Sample Point</th>
<th>Sludge Class (A or B)</th>
<th>Sludge Type (Liquid or Cake)</th>
<th>Pathogen Reduction Method</th>
<th>Vector Attraction Method</th>
<th>Reuse Option</th>
<th>Amount Reused/Disposed (Dry Tons/Year)</th>
</tr>
</thead>
</table>

Priority pollutant scans are required once every 10 years at facilities with design flows between 5 MGD and 40 MGD, and once every 5 years if design flow is greater than 40 MGD.

### Sample Point Number: 002- Liquid Sludge

#### Monitoring Requirements and Limitations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Type</th>
<th>Limit and Units</th>
<th>Sample Frequency</th>
<th>Sample Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solids, Total</td>
<td>Percent</td>
<td>Annual Composite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arsenic Dry Wt</td>
<td>Ceiling</td>
<td>75 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Arsenic Dry Wt</td>
<td>High Quality</td>
<td>41 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Cadmium Dry Wt</td>
<td>Ceiling</td>
<td>85 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Cadmium Dry Wt</td>
<td>High Quality</td>
<td>39 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Copper Dry Wt</td>
<td>Ceiling</td>
<td>4,300 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Copper Dry Wt</td>
<td>High Quality</td>
<td>1,500 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Lead Dry Wt</td>
<td>Ceiling</td>
<td>840 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Lead Dry Wt</td>
<td>High Quality</td>
<td>300 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Mercury Dry Wt</td>
<td>Ceiling</td>
<td>57 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Mercury Dry Wt</td>
<td>High Quality</td>
<td>17 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Molybdenum Dry Wt</td>
<td>Ceiling</td>
<td>75 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Nickel Dry Wt</td>
<td>Ceiling</td>
<td>420 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Nickel Dry Wt</td>
<td>High Quality</td>
<td>420 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Selenium Dry Wt</td>
<td>Ceiling</td>
<td>100 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Selenium Dry Wt</td>
<td>High Quality</td>
<td>100 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Zinc Dry Wt</td>
<td>Ceiling</td>
<td>7,500 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Zinc Dry Wt</td>
<td>High Quality</td>
<td>2,800 mg/kg</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
</tr>
<tr>
<td>Nitrogen, Total Kjeldahl</td>
<td>Percent</td>
<td>Annual Composite</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nitrogen, Ammonium (NH4-N) Total</td>
<td>Percent</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phosphorus, Total</td>
<td>Percent</td>
<td>Annual Composite</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Monitoring Requirements and Limitations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Limit Type</th>
<th>Limit and Units</th>
<th>Sample Frequency</th>
<th>Sample Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphorus, Water Extractable</td>
<td>% of Tot P</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
<td>Monitoring required in 2024. See PCB permit section 3.2.1.5.</td>
</tr>
<tr>
<td>Potassium, Total Recoverable</td>
<td>Percent</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCB Total Dry Wt</td>
<td>mg/kg</td>
<td>Once</td>
<td>Composite</td>
<td></td>
<td>Monitoring required in 2024. See PCB permit section 3.2.1.5.</td>
</tr>
<tr>
<td>Radium 226 Dry Wt</td>
<td>pCi/g</td>
<td>Annual</td>
<td>Composite</td>
<td></td>
<td>See Section 5.5.14 of the permit for monitoring requirements.</td>
</tr>
</tbody>
</table>

Changes from Previous Permit:

Land application limits and monitoring requirements were re-evaluated for the proposed permit term and no changes are needed from the previous permit.

Explanation of Limits and Monitoring Requirements

No significant changes in sludge quality or generation quantity are anticipated. 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 a change occurs. Requirements for land application of municipal sludge are determined in accordance with ch. NR 204 Wis. Adm. Code. Ceiling and high-quality limits for metals in sludge are specified in s. NR 204.07(5). Requirements for pathogens are specified in s. NR 204.07(6) and in s. NR 204.07 (7) for vector attraction requirements. Limitations for PCBs are addressed in s. NR 204.07(3)(k). Radium requirements are addressed in s. NR 204.07(3)(n).

Water Extractable Phosphorus: Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

4 Schedules

4.1 Phosphorus Schedule - Optimization Plan

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

<table>
<thead>
<tr>
<th>Required Action</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimization Plan: The permittee shall prepare an Optimization Plan and submit it for Department approval. The plan shall include an evaluation of collected effluent data, possible source reduction measures and operational improvements to optimize performance to control phosphorus discharges. The plan shall contain a schedule for implementation of the measures and improvements. Once the</td>
<td>10/01/2023</td>
</tr>
</tbody>
</table>
plan is approved by the Department, the permittee shall take the steps called for in the Optimization Plan and follow the schedule of implementation as approved.

| Progress Report #1: Submit a progress report on optimizing removal of phosphorus. | 10/01/2024 |
| Progress Report #2: Submit a progress report on optimizing removal of phosphorus. | 10/01/2025 |
| Progress Report #3: Submit a progress report on optimizing removal of phosphorus. | 10/01/2026 |
| Progress Report #4: Submit a progress report on optimizing removal of phosphorus. | 10/01/2027 |

4.1.1 Explanation of Schedule

Optimization: Per s. 283.16(6)(a), Wis. Stats. the Department may include a requirement that the permittee optimize the performance of a point source in controlling phosphorus discharges, which may be necessary to achieve compliance with multi-discharger variance interim limits. This compliance schedule requires the permittee to prepare an optimization plan with a schedule for implementation and submit it for Department approval. The permittee shall take the steps called for in the optimization plan and submit annual progress reports on optimizing the removal of phosphorus.

4.2 Phosphorus Payment per Pound to County

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

<table>
<thead>
<tr>
<th>Required Action</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Verification of Phosphorus Payment to County: The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: [(\text{lbs of phosphorus discharged minus the permittee’s target value}) \times ($58.85 \text{ per pound}) \text{ or } $640,000, \text{ whichever is less.} ] See the payment calculation steps in the Surface Water section. The permittee shall submit Form 3200-151 to the Department by March 1 of each calendar year indicating total amount remitted to the participating counties to verify that the correct payment was made. The first payment verification form is due by the specified Due Date. Note: The applicable Target Value is 0.2 mg/L as defined by s. 283.16(1)(h), Wis. Stats. The &quot;per pound&quot; value is $50.00 adjusted for CPI.</td>
<td>03/01/2023</td>
</tr>
<tr>
<td>Annual Verification of Payment #2: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.</td>
<td>03/01/2024</td>
</tr>
<tr>
<td>Annual Verification of Payment #3: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.</td>
<td>03/01/2025</td>
</tr>
<tr>
<td>Annual Verification of Payment #4: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.</td>
<td>03/01/2026</td>
</tr>
<tr>
<td>Annual Verification of Payment #5: Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties. This schedule item is contingent upon continued federal authorization of the MDV. See “MDV Reopener Clause” in the Surface Water section of this permit.</td>
<td>03/01/2027</td>
</tr>
<tr>
<td>Continued Coverage: If the permittee intends to seek a renewed variance, an application for the MDV (Multi Discharger Variance) shall be submitted as part of the application for permit reissuance in accordance with s. 283.16(4)(b), Wis. Stats.</td>
<td></td>
</tr>
</tbody>
</table>
Annual Verification of Payment After Permit Expiration: In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.

4.2.1 Explanation of Schedule

County Payment: Subsection 283.16(6)(b), Wis. Stats., requires permittees that have received approval for the multi-discharger variance (MDV) to implement a watershed project that is designed to reduce non-point sources of phosphorus within the HUC 8 watershed in which the permittee is located. The permittee has selected the “Payment to Counties” watershed option described in s. 283.16(8), Wis. Stats. Under this option the permittee shall make annual payment(s) to participating county(s) that are calculated based on the amount of phosphorus actually discharged during a calendar year in pounds per year less the amount of phosphorus that would have been discharged had the permittee discharged phosphorus at a target value concentration of 0.2 mg/L. The pounds of phosphorus discharged in excess of the target value is multiplied by a per pound phosphorus charge that will equal $58.85 per pound. This schedule requires the permittee to submit Form 3200-151 to the Department indicating the total amount remitted to the participating county(s).

4.3 Phosphorus Multi-Discharger Variance Interim Limit (0.8 mg/L)

The permittee shall comply with the 0.8 mg/L MDV interim effluent limit by the end of this compliance schedule.

<table>
<thead>
<tr>
<th>Required Action</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Submit Plans &amp; Specifications: The permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Wis. Stats., specifying treatment plant upgrades that must be constructed to achieve compliance with the interim phosphorus effluent limit and a schedule for completing construction of the upgrades by the ‘Complete Construction’ date specified below.</td>
<td>09/01/2024</td>
</tr>
<tr>
<td>Treatment Plant Upgrade: Upon approval of the final construction plans and schedule by the Department and pursuant to s. 281.41, Wis. Stats., the permittee shall initiate construction of the treatment plant upgrades in accordance with the approved plans and specifications.</td>
<td>09/01/2025</td>
</tr>
<tr>
<td>Construction Upgrade Progress Report: The permittee shall submit a progress report on construction upgrades.</td>
<td>03/01/2026</td>
</tr>
<tr>
<td>Complete Construction and Achieve Compliance: The permittee shall complete construction and achieve compliance with the phosphorus interim effluent limit of 1.0 mg/L.</td>
<td>09/01/2026</td>
</tr>
</tbody>
</table>

4.3.1 Explanation of Schedule

Subsection 283.16(6), Wis. Stats., establishes required interim phosphorus effluent limits that must be met for multi-discharger variance (MDV) eligibility. The schedule above provides the permittee to comply by September 1, 2026.

4.4 Water Quality Based Effluent Limits (WQBELs) for Chloride

The permittee shall comply with the WQBELs for Chloride as specified.

<table>
<thead>
<tr>
<th>Required Action</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloride Status Report: Submit a report on the status of meeting the weekly and monthly average water quality based effluent limit of 400 mg/L. The status report shall:</td>
<td>10/01/2023</td>
</tr>
<tr>
<td>Indicate which chloride source reduction measures or activities have been implemented and will continue to be implemented in order to meet the limits;</td>
<td></td>
</tr>
</tbody>
</table>
Include an analysis of trends in weekly, monthly, and annual average chloride concentrations and total mass discharge of chloride based on chloride sampling and flow data; and

Include an analysis of how effluent chloride varies with time and with significant loadings of chloride such as loads from industries and road salt intrusion into the collection system. The chloride status report is to be submitted by the Due Date.

| Chloride Status Report: Submit the chloride status report as defined above. | 10/01/2024 |
| Chloride WQBELs Effective: The chloride water quality based effluent limits take effect by the Due Date. | 10/01/2025 |

### 4.4.1 Explanation of Schedules

**Water Quality Based Effluent Limits (WQBELs) for Chloride**

This compliance schedule is provided per s. NR 106.117(3)(a), Wis. Adm. Code. The schedule requires a status report that shall identify chloride source reduction measures implemented and analyze chloride concentration and mass discharge based on chloride sampling and flow data. The status report shall document progress towards meeting the final limits of 400 mg/L as weekly and monthly averages, and the variable weekly average mass limits of 1,268 lbs/day (for wet weather conditions) or 450 lbs/day (for dry weather conditions).

### Attachments:

### Proposed Expiration Date:

**September 30, 2027**

### Justification Of Any Waivers From Permit Application Requirements

No waivers were given from permit application monitoring and reporting requirements.

**Prepared By:** Sarah Adkins  Wastewater Specialist

**Date:** August 4, 2022