



# WPDES PERMIT

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

**Grande Cheese Company - Juda**

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility  
located at  
N2607 CTH S, Juda, WI 53550  
to  
North Fork of Juda Branch Creek in Lower Sugar River of Sugar River in Green 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 \_\_\_\_\_  
Nate Willis  
Wastewater Section Manager

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

**PERMIT TERM: EFFECTIVE DATE - August 01, 2026**

**EXPIRATION DATE - June 30, 2031**

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# 1 Influent Requirements

## 1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
702	Monitoring of influent wastes from off-site sources to feed the anaerobic digester. Influent flows shall be monitored at the whey diversion valve hub before entering the high strength waste tank

### 1.1.1 Waste Type Applicability

Wastes from off-site sources shall be limited to food and dairy product processing wastes. Off-site wastes shall only be accepted provided the permittee is in compliance with the limits and conditions contained in this WPDES permit.

### 1.1.2 Waste Type Exclusions

The permittee may not accept or store any off-site wastes containing the following:

- Septage as defined in s. NR 113.03(55), Wis. Adm. Code
- Non-CAFO manure as defined in s. NR 151.015(12), Wis. Adm. Code
- Sewage sludge as defined in s. NR 204.03(55), Wis. Adm. Code
- Domestic wastewater as defined in s. NR 205.03(14), Wis. Adm. Code
- Municipal wastewater as defined in s. NR 205.03(19) Wis. Adm. Code
- CAFO manure as defined in s. NR 243.03(36), Wis. Adm. Code

## 1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

### 1.2.1 Sampling Point 702 - Off-Site Wastes to Digester

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Volume		gal	Daily	Measure	

#### 1.2.1.1 Volume Monitoring

Volume monitoring is only required on days when off-site wastes are discharged to the whey diversion valve hub.

#### 1.2.1.2 Daily Log

The permittee shall maintain a daily log of the influent waste discharged to the digester. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department. The daily log shall include the:

- Name of the trucking company hauling waste
- Driver name of waste hauling vehicle
- Identification number assigned to waste stream from New Waste Stream Approval
- Volume

- Date discharged to digester

If a truck load contains more than one type of waste, the permittee shall include the identification number and volume for each waste present.

### 1.2.1.3 New Waste Stream Approval Requirements

For each new waste stream, the permittee shall submit to the Department the information required in this subsection to identify the source and characteristics of the new waste material. The permittee shall not accept, handle, discharge to a storage or treatment unit, or land apply new waste material until Department approval has been granted.

1. The proposed waste identification number for the new waste stream.
2. Name of the waste generator (company name), facility address, waste generator's contact information.
3. Name of the entity responsible for hauling the waste from the waste generator's facility to the permittee's facility.
4. The type/nature of waste material (e.g., treatment plant sludge, dairy permeate, off-spec or dated product, etc.) and industrial category (including SIC code, if applicable).
5. A detailed description of the industrial process or treatment system from which each individual waste material originates, regardless of the volume of the material.
6. SDS sheets for any specific chemicals that could be present in their original state in the waste material.
7. The annual volume of the waste material anticipated to be received, the expected frequency received, volume per receipt event, and period of the year it will be received.
8. Laboratory analyses from a certified or registered laboratory shall include one test each for the parameters listed below:  
**COD, Total Kjeldahl Nitrogen (TKN), Chloride, Total Phosphorus (TP), Fats, Oils, Greases (FOG), Total Suspended Solids (TSS) for liquids or Total Solids (TS) for solids, and pH**  
Where it is believed that waste material may contain any of the substances listed in 40 CFR 122 Appendix D Table V, analyses shall be submitted for those substances.  
**Arsenic, Cadmium, Copper, Fecal Coliform, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc**  
In addition, if any waste material is received from a Primary Industry listed in 40 CFR 122 Appendix D Table I the results of a pollutant scan of that waste material for the applicable pollutant group identified shall be submitted. Analytical results shall be provided on a wet weight basis for liquid wastes and on a dry weight basis for sludge and other solid or semi-solid material.
9. Information demonstrating that the input of the waste material to an anaerobic digester will be beneficial and not detrimental to the treatment plant.
10. Verification that the new waste is not hazardous under NR 518.

Based on the information provided, the Department may request additional information on the quality or content of the proposed receiving material.

### 1.2.1.4 New Waste Stream Records Requirements

The permittee shall maintain records of each new waste stream request as described under "Records Retention" in the Standard Requirements section, and if requested, made available to the Department. This includes all the information listed in the 'New Waste Stream Approval Requirements' subsection as well as the Department approval letter for the waste stream. With each new waste stream request, the permittee shall submit an up to date list of approved waste streams to include:

- The proposed waste identification number for the new waste stream.
- Name of the waste generator (company name), facility address, waste generator's contact information.

- Name of the entity responsible for hauling the waste from the waste generator's facility to the permittee's facility.
- The type/nature of waste material (e.g., treatment plant sludge, dairy permeate, off-spec or dated product, etc.) and industrial category (including SIC code, if applicable).

## 2 Surface Water Requirements

### 2.1 Sampling Point(s)

The discharge(s) shall be limited to the waste type(s) designated for the listed sampling point(s).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
001	[EFFLUENT] Representative samples shall be collected from the manhole where the Cheese WWTP effluent and Whey WWTP effluent combine before being redistributed to the existing two effluent pipes that discharge to the North Fork Juda Branch River.

### 2.2 Monitoring Requirements and Effluent Limitations

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

#### 2.2.1 Sampling Point (Outfall) 001 - Cheese + Whey Combined Eff

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		MGD	Daily	Continuous	
BOD <sub>5</sub> , Total	Weekly Avg	10 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually May through October.
BOD <sub>5</sub> , Total	Weekly Avg	12 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually November through April.
BOD <sub>5</sub> , Total	Daily Max	202 lbs/day	3/Week	Calculated	
BOD <sub>5</sub> , Total	Monthly Avg	101 lbs/day	3/Week	Calculated	
Suspended Solids, Total	Daily Max	30 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Monthly Avg	20 mg/L	3/Week	24-Hr Flow Prop Comp	
Suspended Solids, Total	Daily Max	280 lbs/day	3/Week	Calculated	
Suspended Solids, Total	Monthly Avg	140 lbs/day	3/Week	Calculated	
Dissolved Oxygen	Daily Min	7.0 mg/L	Daily	Grab	
pH Field	Daily Max	9.0 su	Daily	Grab	
pH Field	Daily Min	6.0 su	Daily	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 Variable Limit		mg/L	3/Week	See Table	Using the daily effluent pH result, look up the daily maximum variable ammonia limit from the pH Dependent Table for Outfall 001. Report the variable limit in the Nitrogen, Ammonia Variable Limit column of the DMR.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Daily Max - Variable	mg/L	3/Week	24-Hr Flow Prop Comp	Limit effective year-round. Enter the ammonia result and compare to Nitrogen, Ammonia Variable Limit to determine compliance.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Weekly Avg	3.2 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually May through September.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Weekly Avg	8.1 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in October.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Weekly Avg	10 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in November.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Weekly Avg	9.7 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in December.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Weekly Avg	11 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually January through March.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Weekly Avg	6.8 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in April.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	1.5 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually May through September.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	3.6 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in October.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	4.5 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in November.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	4.4 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in December.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	4.6 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually January through March.
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total	Monthly Avg	2.8 mg/L	3/Week	24-Hr Flow Prop Comp	Effective annually in April.
Phosphorus, Total	Monthly Avg	0.8 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective until June 30, 2028. See the MDV/Phosphorus subsections and phosphorus schedules.

<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>
Phosphorus, Total	Monthly Avg	0.6 mg/L	3/Week	24-Hr Flow Prop Comp	This is an interim MDV limit effective on July 1, 2028. See the MDV/Phosphorus subsections and phosphorus schedules.
Phosphorus, Total		lbs/month	Monthly	Calculated	Report the total monthly phosphorus discharged in lbs/month on the last day of the month.
Phosphorus, Total		lbs/yr	Annual	Calculated	Report the sum of the total monthly discharges (for the months that the MDV is in effect) for the calendar year on the Annual DMR.
Chlorine, Total Residual	Daily Max	26 µg/L	Daily	Grab	
Chlorine, Total Residual	Monthly Avg	11 µg/L	Daily	Grab	
Chlorine, Total Residual	Weekly Avg	11 µg/L	Daily	Grab	
Temperature Maximum	Weekly Avg	75 deg F	Daily	Continuous	Effective annually in January and March.
Temperature Maximum	Weekly Avg	70 deg F	Daily	Continuous	Effective annually in February and December.
Temperature Maximum	Weekly Avg	80 deg F	Daily	Continuous	Effective annually in April and October.
Temperature Maximum	Weekly Avg	82 deg F	Daily	Continuous	Effective annually in May.
Temperature Maximum	Weekly Avg	86 deg F	Daily	Continuous	Effective annually in June.
Temperature Maximum	Weekly Avg	88 deg F	Daily	Continuous	Effective annually in September.
Temperature Maximum	Weekly Avg	77 deg F	Daily	Continuous	Effective annually in November.
Chloride		mg/L	4/Month	24-Hr Flow Prop Comp	Samples shall be completed on four consecutive days in the month.
Nitrogen, Total Kjeldahl		mg/L	Quarterly	24-Hr Flow Prop Comp	
Nitrogen, Nitrite + Nitrate Total		mg/L	Quarterly	24-Hr Flow Prop Comp	

Monitoring Requirements and Effluent Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total		mg/L	Quarterly	Calculated	Total Nitrogen shall be calculated as the sum of reported values for Total Kjeldahl Nitrogen and Total Nitrite + Nitrate Nitrogen.
Acute WET		TU <sub>a</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	Sample annually in rotating quarters. See WET section below.
Chronic WET		TU <sub>c</sub>	See Listed Qtr(s)	24-Hr Flow Prop Comp	Sample twice annually in rotating quarters. See WET section below.

### 2.2.1.1 Variable Daily Maximum Ammonia Limitations

Daily maximum ammonia limits vary based on the effluent pH value. pH sampling shall occur on the same day total ammonia (NH<sub>3</sub>-N) sampling occurs and as required by the permit. Report the applicable Variable Ammonia Limit from the 'Variable Ammonia Limitation Table' below on the Electronic Discharge Monitoring Report (eDMR) in the 'Nitrogen, Ammonia Variable Limit' column. Compare ammonia limits in the Variable Ammonia Limitation Table below to the reported ammonia result and report number of exceedances on the eDMR.

Note that pH values should be rounded to the 0.1 s.u. before using the table below. For example, if the pH field reading is 8.04, the value of 8.0 should be used.

**Variable Ammonia Limitation Table**

Effluent pH (s.u.)	NH <sub>3</sub> -N Limit (mg/L)	Effluent pH (s.u.)	NH <sub>3</sub> -N Limit (mg/L)	Effluent pH (s.u.)	NH <sub>3</sub> -N Limit (mg/L)
6.0 < pH ≤ 6.1	63	7.0 < pH ≤ 7.1	41	8.0 < pH ≤ 8.1	9.6
6.1 < pH ≤ 6.2	62	7.1 < pH ≤ 7.2	37	8.1 < pH ≤ 8.2	7.9
6.2 < pH ≤ 6.3	61	7.2 < pH ≤ 7.3	34	8.2 < pH ≤ 8.3	6.5
6.3 < pH ≤ 6.4	59	7.3 < pH ≤ 7.4	30	8.3 < pH ≤ 8.4	5.4
6.4 < pH ≤ 6.5	57	7.4 < pH ≤ 7.5	26	8.4 < pH ≤ 8.5	4.4
6.5 < pH ≤ 6.6	56	7.5 < pH ≤ 7.6	23	8.5 < pH ≤ 8.6	3.6
6.6 < pH ≤ 6.7	53	7.6 < pH ≤ 7.7	19	8.6 < pH ≤ 8.7	3.0
6.7 < pH ≤ 6.8	51	7.7 < pH ≤ 7.8	16	8.7 < pH ≤ 8.8	2.5
6.8 < pH ≤ 6.9	48	7.8 < pH ≤ 7.9	14	8.8 < pH ≤ 8.9	2.1
6.9 < pH ≤ 7.0	45	7.9 < pH ≤ 8.0	12	8.9 < pH ≤ 9.0	1.8

### 2.2.1.2 pH – Grab Sample Analyses

When pH Field limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform pH testing required in this permit using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall utilize a pH probe/meter that incorporates and uses automatic temperature compensation,
- The permittee shall analyze pH samples as soon as possible after collection not to exceed 15 minutes (this may mean transporting samples to an offsite laboratory is not an option), and

- The permittee shall calibrate the pH probe/meter daily, using unexpired 4, 7, and 10 buffers prior to use.

**2.2.1.3 Dissolved Oxygen (DO) – Grab Sample Analyses**

When dissolved oxygen (DO) grab limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform DO testing required in this permit using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall utilize a DO probe/meter that incorporates and uses automatic temperature compensation,
- The permittee shall set the barometric pressure on the DO meter to local elevation and not sea level,
- The permittee shall analyze DO samples as soon as possible after collection not to exceed 15 minutes (this may mean transporting samples to an offsite laboratory is not an option), and
- The permittee shall calibrate the DO probe/meter daily prior to use.

**2.2.1.4 Total Residual Chlorine – Grab Sample Analyses**

When total residual chlorine (TRC) limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform TRC testing using an approved method from ch. NR 219, Wis. Adm. Code, Table B,
- The permittee shall collect samples in a glass bottle and completely fill the bottle with sample so there is no visual headspace,
- The permittee shall analyze TRC samples as soon as possible after collection, not to exceed 15 minutes (this may mean transporting to an offsite laboratory is not an option),
- The permittee shall verify their detection limit at least annually, and
- The permittee shall follow all TRC requirements in their permit.

**2.2.1.5 Effluent Temperature Monitoring**

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. For monitoring temperature continuously, collect measurements in accordance with s. NR 218.04(13), Wis. Adm. Code. This means that discrete measurements shall be recorded at intervals of not more than 15 minutes during the 24-hour period. In either case, report the maximum temperature measured during the day on the DMR. For seasonal discharges collect measurements either manually or continuously during the period of operation and report the daily maximum effluent temperature on the DMR.

**2.2.1.6 Effluent Temperature Limitations**

Limits for Temperature, Maximum: The effluent limitations for “Temperature, Maximum” become effective on March 1, 2019. Monitoring is required daily. Daily maximum temperatures shall be reported so that applicable daily maximum limits can be compared to the reported daily maximum temperatures and applicable weekly average limits can be compared to the weekly averages of the reported daily maximum temperatures.

**Effluent Limitations for 'Temperature Maximum'**

Month	Weekly Average Limit (°F)	Month	Weekly Average Limit (°F)
January	75 (AEL)	July	No Limit (AEL)

February	70 (AEL)	August	No Limit (AEL)
March	75 (AEL)	September	88 (AEL)
April	80 (AEL)	October	80 (AEL)
May	82 (AEL)	November	77 (AEL)
June	86 (AEL)	December	70 (AEL)

**2.2.1.7 MDV (Multi-Discharger Variance) Requirements**

**Optimization:** The permittee shall continue to optimize performance to control phosphorus discharges in accordance with s. 283.16(6), Wis. Stats. See the Schedules section for optimization requirements.

**Compliance Planning:** The permittee shall continue to evaluate alternative phosphorus compliance options such as water quality trading and adaptive management. Should the permittee request a future permit term of variance coverage, a financial alternatives analysis shall be completed. The financial alternatives analysis shall evaluate financial mechanisms that have the potential to make compliance with phosphorus WQBELs economically feasible.

**Watershed Provisions:** The permittee is required to implement watershed measures to reduce the amount of phosphorus entering the receiving water. The permittee has chosen to make payments to the county for phosphorus reductions to meet this requirement.

**Payment to County for Phosphorus Reduction:** The permittee shall make payments for phosphorus reduction to the county or counties approved by the Department per s. 283.16(8), Wis. Stats. The permittee shall make a total payment by March 1 of each year in the amount equal to the per pound amount of **\$68.40** times the number of pounds by which the effluent phosphorus discharged during the previous year exceeded the permittee’s target value or \$640,000, whichever is less. The target value is **0.2 mg/L** per s. 283.16(1)(h), Wis. Stats., and is applicable during the months that the MDV is in effect. The MDV is in effect **year-round**. Refer to the Schedules section for the scheduled annual requirements.

Annual Payment Calculation: The annual payment is equal to the phosphorus load that exceeds the target value multiplied by **\$68.40** per pound. Use the steps shown below to calculate the annual payment. In addition, the Department shall send a statement to the permittee specifying total payment due to the participating counties each year in accordance with the Schedules section.

Annual Payment = [Annual Phosphorus Load – Annual Target Load] × Price Per Pound

Calculation Steps:

- Calculate pounds of phosphorus discharged for each month that the MDV is in effect:

Monthly Phosphorus Load (lbs/month) = Total Monthly Flow (MG) × Monthly Avg. TP effluent conc. (mg/L) × 8.34

- Sum the lbs/month discharged for the months that the MDV is in effect to calculate the annual phosphorus load:

Annual Phosphorus Load (lbs/year) =  $\sum$  [Monthly Phosphorus Load (lbs/month)]

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- Calculate the Target Load (lbs/month) for each month that the MDV is in effect.

Monthly Target Load (lbs/month) = Total Monthly Flow (MG) × 0.2 mg/L × 8.34

- Sum the lbs/month for the months that the MDV is in effect to calculate the Annual Target Load:

Annual Target Load (lbs/year) =  $\sum$  [Monthly Target Load (lbs/month)]

- Calculate the annual payment:

Annual Payment (\$) = [Annual Phosphorus Load – Annual Target Load] × Price Per Pound

### 2.2.1.8 Whole Effluent Toxicity (WET) Testing

**Primary Control Water for Acute Tests:** Synthetic (standard) laboratory water

**Primary Control Water for Chronic Tests:** North Fork of Juda Branch Creek

**Instream Waste Concentration (IWC):** 69%

**Dilution Series:** At least five effluent concentrations and dual controls must be included in each test.

- **Acute:** 100, 50, 25, 12.5, 6.25% and any additional selected by the permittee.
- **Chronic:** 100, 75, 50, 25, 12.5% and any additional selected by the permittee.

#### **WET Testing Frequency:**

**Acute** tests are required during the following quarters:

- **Acute:**
  - July – September 2026
  - April – June 2027
  - January – March 2028
  - October – December 2029
  - July – September 2030
  - April – June 2031

Acute WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in **July – September 2032**.

**Chronic** tests are required during the following quarters:

- **Chronic:**
  - July – September & October – December 2026
  - April – June & July – September 2027
  - January – March & April – June 2028
  - January – March & October – December 2029
  - July – September & October - December 2030
  - January – March & April – June 2031

Chronic WET testing shall continue after the permit expiration date (until the permit is reissued) in accordance with the WET requirements specified for the last full calendar year of this permit. For example, the next test would be required in **July – September & October - December 2032**.

**Testing:** WET testing shall be performed during normal operating conditions. Permittees are not allowed to turn off or otherwise modify treatment systems, production processes, or change other operating or treatment conditions during WET tests.

**Reporting:** The permittee shall report test results on the Discharge Monitoring Report form, and also complete the "Whole Effluent Toxicity Test Report Form" (Section 6, "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2<sup>nd</sup> Edition*"), for each test. The original, complete, signed version of the Whole Effluent Toxicity Test Report Form shall be sent to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., P.O. Box 7921, Madison, WI 53707-7921, within 45 days of test completion. The Discharge Monitoring Report (DMR) form shall be submitted electronically by the required deadline.

**Determination of Positive Results:** An acute toxicity test shall be considered positive if the Toxic Unit - Acute ( $TU_a$ ) is greater than **1.0** for either species (fathead minnow (*Pimephales promelas*) and waterflea (*Ceriodaphnia dubia*)). The  $TU_a$  shall be calculated as follows:  $TU_a = 100 \div LC_{50}$ . A chronic toxicity test shall be considered positive if the Toxic Unit - Chronic ( $TU_c$ ) is greater than **1.4** for either species. The  $TU_c$  shall be calculated as follows:  $TU_c = 100 \div IC_{25}$ .

**Additional Testing Requirements:** Within 90 days of a test which showed positive results, the permittee shall submit the results of at least 2 retests to the Biomonitoring Coordinator on "Whole Effluent Toxicity Test Report Forms". The 90-day reporting period shall begin the day after the test which showed a positive result. The retests shall be completed using the same species and test methods specified for the original test (see the Standard Requirements section herein).

### 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, Waste Type/Sample Contents and Treatment Description (as applicable)
002	Land application of off-spec wastewater from the whey WWTP storage pond. Regulated as an industrial liquid waste. Representative samples shall be collected from the whey off-spec wastewater storage pond loadout pipe.
003	Land application of DAF thickened phosphorus sludge and waste activated sludge (WAS) from the Whey WWTP. Regulated as an industrial liquid sludge. Representative samples shall be collected from the 568,000 gallon sludge storage tank loadout pipe.
004	Land application of clarifier phosphorus sludge and gravity belt thickened waste activated sludge (TWAS) from the cheese WWTP. Regulated as an industrial liquid sludge. Representative samples shall be collected from the two 38,000 gallon or 68,200 gallon sludge storage tank loadout pipes.
005	Land application of high strength wastewater from both the whey and cheese plant. Regulated as an industrial liquid waste. Representative samples shall be collected from the 447,000 gallon high strength waste storage tank loadout pipe.
007	Land application of anaerobic reactor solids. Regulated as an industrial liquid sludge. Representative samples shall be collected from the 30,000 gallon anaerobic reactor solids storage tank loadout pipe.
008	Land application of brine approved for beneficial reuse as road deicer. Regulated as an industrial liquid waste and as a conditionally approved low hazard solid waste. Representative samples shall be collected from the 11,000 gallon brine storage tank loadout pipe.

#### 3.2 Monitoring Requirements and Limitations

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

##### 3.2.1 Sampling Point (Outfall) 002 - Whey Off-Spec WW; 005- High Strength WW

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Total Daily	
Solids, Total		Percent	Monthly	Grab	
Chloride		mg/L	Monthly	Grab	
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Phosphorus, Total		mg/L	Quarterly	Grab	

<b>Monitoring Requirements and 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>
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		mg/L	Quarterly	Grab	
BOD <sub>5</sub> , Total		mg/L	Annual	Grab	
pH Field		su	Annual	Grab	

<b>Daily Log – Monitoring Requirements and Limitations</b>				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department.				
<b>Parameters</b>	<b>Limit</b>	<b>Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Frozen Site Maximum Daily Loading Volume	6,800	Gal/Acre/Day	Daily	Calculated
Unfrozen Site Maximum Daily Loading Volume	13,500	Gal/Acre/Day	Daily	Calculated
Weekly Loading Volume	See NR 214 - Tbl 3	Inches/Week	Weekly	Calculated
Volume to Manure Pits	See NR 214.17(1)	Gallons/Day	Daily	Log
Manure Pit ID Number	-	Number		Log

<b>Annual Report – Summary of Monitoring Requirements and Limitations</b>				
The Annual Report is due by January 31 <sup>st</sup> of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
<b>Parameters</b>	<b>Limit</b>	<b>Units</b>	<b>Reporting Frequency</b>	<b>Sample Type</b>
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Volume Per Site	-	Gallons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

<b>Annual Report – Summary of Monitoring Requirements and Limitations</b>				
The Annual Report is due by January 31 <sup>st</sup> of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
<b>Parameters</b>	<b>Limit</b>	<b>Units</b>	<b>Reporting Frequency</b>	<b>Sample Type</b>
Total Volume to Manure Pits	-	Gallons	Annual	Total Annual

### 3.2.1.1 Sampling Requirements

Grab samples are required for all parameters and shall be collected prior to landspreading and representative of industrial liquid wastewater being discharged. Monitoring is only required during periods of active landspreading and is not required if waste is land applied under another WPDES permit by a WPDES permitted contract hauler. If waste is hauled to another WPDES permitted entity, the permittee shall track the volume of waste distributed on Form 3400-052 (Other Methods of Disposal or Distribution Report).

### 3.2.1.2 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

### 3.2.1.3 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

### 3.2.1.4 Discharge to Manure Pit(s)

Pursuant to s. NR 214.17(1), Wisconsin Administrative Code, an exemption may be granted in writing to certain provisions of NR 214 for discharges to manure pits, provided industrial wastes are less than 10 % of the mixture contained in the manure pit at the time it is landspread.

## 3.2.2 Sampling Point (Outfall) 003 - Whey WWTP Sludge; 004- Cheese WWTP Sludge; 007- Anaerobic Reactor Solids

<b>Monitoring Requirements and 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>
Flow Rate		gpd	Daily	Total Daily	
Solids, Total		Percent	Monthly	Grab Comp	
Chloride		Percent	Monthly	Grab Comp	
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total		Percent	Monthly	Grab Comp	
Nitrogen, Total Kjeldahl		Percent	Monthly	Grab Comp	
Nitrogen, Organic Total		Percent	Monthly	Grab Comp	

<b>Monitoring Requirements and 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>
Phosphorus, Total		Percent	Quarterly	Grab Comp	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab Comp	
Potassium, Total Recoverable		Percent	Quarterly	Grab Comp	
pH Field		su	Quarterly	Grab	
Lead Dry Wt		mg/kg	Once	Grab Comp	Monitoring once in 2028.
Zinc Dry Wt		mg/kg	Once	Grab Comp	Monitoring once in 2028.
Copper Dry Wt		mg/kg	Once	Grab Comp	Monitoring once in 2028.
Nickel Dry Wt		mg/kg	Once	Grab Comp	Monitoring once in 2028.
Cadmium Dry Wt		mg/kg	Once	Grab Comp	Monitoring once in 2028.
PCB Total Dry Wt		mg/kg	Once	Grab Comp	Monitoring once in 2028.
PFOA + PFOS		µg/kg	Annual	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Annual	Grab Comp	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

<b>Daily Log – Monitoring Requirements and Limitations</b>				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department.				
<b>Parameters</b>	<b>Limit</b>	<b>Units</b>	<b>Sample Frequency</b>	<b>Sample Type</b>
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Application Rate	-	Gal/Acre/Day	Daily	Calculated

<b>Annual Report – Summary of Monitoring Requirements and Limitations</b>				
The Annual Report is due by January 31 <sup>st</sup> of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
<b>Parameters</b>	<b>Limit</b>	<b>Units</b>	<b>Reporting Frequency</b>	<b>Sample Type</b>
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Volume Per Site	-	Gallons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

### 3.2.2.1 Sampling Requirements

Grab composite samples are required for all parameters, except pH, and shall be collected prior to landspreading and representative of industrial sludge being discharged. Individual grab samples shall be collected from the truck port. If multiple truck loads occur in the sample day, each truck should have a discrete grab sample which will then be composited prior to sending for sampling. Monitoring is only required during periods of active landspreading. Permit sampling is not required if waste is hauled by a WPDES permitted contract hauler. If waste is hauled by another WPDES permitted entity, the permittee shall track the volume of waste distributed on Form 3400-052 (Other Methods of Disposal or Distribution Report).

### 3.2.2.2 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

### 3.2.2.3 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

### 3.2.2.4 Sludge Monitoring for PFAS

Sampling shall occur for perfluoroalkyl and polyfluoroalkyl compounds (PFAS) listed in the table below and as indicated in sampling point sections above. Monitoring shall occur at each sample point when sludge is generated regardless of the end use (i.e. land applied, hauled to another facility, landfilled).

<b>PERFLUOROALKYLCARBOXILIC Acids (PFCAs)</b>	
PFBA	Perfluorobutanoic acid
PFPeA	Perfluroropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid

PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTrDA	Perfluorotridecanoic acid
PFTeDA	Perfluorotetradecanoic acid
<b>PERFLUOROALKYLSULFONIC Acids (PFSAs)</b>	
PFBS	Perfluorobutane sulfonic acid
PFPeS	Perfluroropentane sulfonic acid
PFHxS	Perfluorohexane sulfonic acid
PFHpS	Perfluoroheptane sulfonic acid
PFOS	Perfluorooctane sulfonic acid
PFNS	Perfluorononane sulfonic acid
PFDS	Perfluorodecane sulfonic acid
PFDoS	Perfluorododecane sulfonic acid
<b>TELOMER SULFONIC Acids</b>	
4:2FTSA	<i>1H,1H,2H,2H</i> -Perfluorohexane sulfonic acid
6:2FTSA	<i>1H,1H,2H,2H</i> -Perfluorooctane sulfonic acid
8:2FTSA	<i>1H,1H,2H,2H</i> -Perfluorodecane sulfonic acid
<b>PERFLUOROOCETANESULFONAMIDES (FOSAs)</b>	
PFOSA	Perflurorooctane sulfonamide
NMeFOSA	N-Methyl perfluorooctane sulfonamide
NEtFOSA	N-Ethyl perfluorooctane sulfonamide
<b>PERFLUOROOCETANESULFONAMIDOACETIC Acids</b>	
NMeFOSAA	N-Methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-Ethyl perfluorooctane sulfonamidoacetic acid
<b>NATIVE PERFLUOROOCETANESULFONAMIDOETHANOLS (FOSEs)</b>	
NMeFOSE	N-Methyl perfluorooctane sulfonamidoethanol
NEtFOSE	N-Ethyl perfluorooctane sulfonamidoethanol
<b>PERFLUOROALKYLETHERCARBOXYLIC Acids (PFECAs)</b>	
HFPO-DA	Hexafluoropropylene oxide dimer acid
ADONA	4,8-dioxa-3 <i>H</i> -perfluorononanoic acid
PFMPA	Perfluoro-3-methoxypropanoic acid
PFMBA	Perfluoro-4-methoxybutanoic acid
NFDHA	Nonafluoro-3,6-dioxaheptaonic acid
<b>CHLORO-PERFLUOROALKYLSULFONATE</b>	
9Cl-PF3ONS	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid
11Cl-PF3OUdS	11-chloroelcosafluoro-3-oxaundecane-1-sulfonic acid
PFEESA	Perfluroro(2-ethoxyethane)sulfonic acid
<b>TELOMER SULFONIC Acids</b>	
3:3FTCA	3-Perfluoropropyl propanoic acid
5:3FTCA	<i>2H,2H,3H,3H</i> -Perfluorooctanoic acid

7:3FTCA	3-Perfluoroheptyl propanoic acid
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Note: If WDNR Lab Certification removes a particular compound from the reporting list above and upon receiving written communication from the department, reporting for that compound is no longer required.

### 3.2.2.5 Sampling and Reporting Sludge Samples for PFAS

Representative sludge samples shall be collected at each sample point as listed. At minimum, liquid sludge storage/digesters should be thoroughly mixed prior to sampling. Cake sludge samples should consist of seven equal size discrete samples and be collected from different areas and depths then composited into one sample for laboratory analysis.

Note: If additional equipment is used for collecting sludge samples (i.e., shovels, compositing buckets, bottles, etc.), then a one-time equipment blank is recommended to be collected with the first sample. An equipment blank sample is collected by passing laboratory verified PFAS-free water over or through field sampling equipment before the collection of a representative sludge sample. The equipment blank result shall be reported on the annual Sludge Characteristics Form (3400-049) in the comment section when reporting PFAS concentrations in the sludge.

The permittee shall report each of the PFAS sludge monitoring results on the annual Sludge Characteristics and Monitoring Form (3400-049) as provided by the department. The permittee shall also report the summation of PFOS and PFOA on this same form. All results shall be reported in dry weight. The annual Sludge Characteristics and Monitoring Form (3400-049) are due January 31, of the year following the collection of the sludge samples.

The laboratory performing the analysis on any samples shall be certified for the applicable PFAS compounds in the solids matrix by the Wisconsin Laboratory Certification Program established under s. 299.11, Wis. Stats., and in accordance with s. NR 149.41, Wis. Adm. Code. The department may reject any sample results if results are produced by a laboratory that is not in compliance with certification requirements under ch. NR 149, Wis. Adm. Code.

### 3.2.2.6 PFAS Land Application Requirements

The department recommends the landspreading and/or land application of sludge be done in a manner consistent with the most recent version of the [“Interim Strategy for Land Application of Biosolids and Industrial Sludges containing PFAS”](#).

### 3.2.3 Sampling Point (Outfall) 008 - Beneficial Reuse of Brine

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Volume		gal	Annual	Measure	
BOD <sub>5</sub> , Total		mg/L	Annual	Grab	
Chloride		mg/L	Annual	Grab	
Nitrogen, Total Kjeldahl		mg/L	Annual	Grab	
pH Field		su	Annual	Grab	

#### 3.2.3.1 Tracking Brine Used for Deicing

The permittee received a five-year conditional approval from the Department’s Solid Waste Program on December 21, 2023, for a low hazard waste exemption under s. 289.43(8)(b), Wis. Stats for use of salt brine as a highway

deicing additive. The permittee shall report the total annual volume of brine distributed for deicing operations on Form 3400-052 (Other Methods of Disposal or Distribution Report).

## 4 Schedules

### 4.1 Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L)

This compliance schedule requires the permittee to achieve compliance with the specified MDV interim effluent limit in accordance with s. 283.16(6), Wis. Stats., by the due date.

Required Action	Due Date
<b>Report on Effluent Discharges:</b> Submit a report on effluent discharges of phosphorus with conclusions regarding compliance.	12/31/2026
<b>Action Plan:</b> Submit an action plan for complying with the specified interim effluent limit. If construction is required, include plans and specifications with the submittal.	06/30/2027
<b>Initiate Actions:</b> Initiate actions identified in the plan.	12/31/2027
<b>Complete Actions:</b> Complete actions identified in the plan and achieve compliance with the specified interim effluent limit.	06/30/2028

### 4.2 Phosphorus Schedule - Optimization and Compliance Planning

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

Required Action	Due Date
<p><b>Optimization and Compliance Alternatives:</b> The permittee shall implement a phosphorus discharge optimization plan to control phosphorus discharges to the greatest extent practicable. Submit a progress report that summarizes the approach to phosphorus removal at the facility, the resulting concentration and mass loading for the last 12-month period, and any changes that were or are needed to optimize removal of phosphorus by the due date.</p> <p>The permittee shall also evaluate alternative phosphorus compliance options such as water quality trading and adaptive management. The progress report submitted on the date due shall also detail any outreach activities undertaken to evaluate these options, any communications with credit generators, brokers/clearinghouse, and any potential water quality trading or adaptive management projects that may lead to compliance with phosphorus WQBELs.</p> <p>Financial alternatives evaluation: If the permittee intends to seek a renewed variance at the end of this permit term, the permittee may complete a financial evaluation to support ongoing variance eligibility. The report must evaluate financial mechanisms that have the potential to make compliance with phosphorus WQBELs economically feasible.</p>	06/30/2027
<b>Progress Report #2:</b> Submit a progress report per the above for the prior calendar year.	06/30/2028
<b>Progress Report #3:</b> Submit a progress report per the above for the prior calendar year.	06/30/2029
<b>Progress Report #4:</b> Submit a progress report per the above for the prior calendar year.	06/30/2030
<p><b>Final MDV Optimization and Compliance Alternatives Report:</b> Submit a progress report per the above for the prior calendar year.</p> <p>If water quality trading or adaptive management will be used to comply with phosphorus limitations during the next permit term, submit a draft water quality trading plan, adaptive management plan, or executed clearinghouse credit purchase agreement.</p> <p>The financial alternatives evaluation as described above must be submitted by the date due if the</p>	12/31/2030

facility chooses to seek renewal of the variance.	
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### 4.3 Phosphorus Payment per Pound to County

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

Required Action	Due Date
<p><b>Annual Verification of Phosphorus Payment to County:</b> The permittee shall make a total payment to the participating county or counties approved by the Department by March 1 of each calendar year. The amount due is equal to the following: [(lbs of phosphorus discharged minus the permittee's target value) times (\$68.40 per pound)] or \$640,000, whichever is less. See the payment calculation steps in the Surface Water section.</p> <p>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.</p> <p>Note: The applicable Target Value is 0.2 mg/L as defined by s. 283.16(1)(h), Wis. Stats. The "per pound" value is \$50.00 adjusted for CPI.</p>	03/01/2027
<b>Annual Verification of Payment #2:</b> Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2028
<b>Annual Verification of Payment #3:</b> Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2029
<b>Annual Verification of Payment #4:</b> Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/01/2030
<b>Annual Verification of Payment #5:</b> Submit Form 3200-151 to the Department indicating total amount remitted to the participating counties.	03/31/2031
<b>Continued Coverage:</b> 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.	
<b>Annual Verification of Payment After Permit Expiration:</b> In the event that this permit is not reissued prior to the expiration date, the permittee shall continue to submit Form 3200-151 to the Department indicating total amount remitted to the participating counties by March 1 each year.	

### 4.4 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
<b>Land Application Management Plan:</b> Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	03/31/2027

### 4.5 Tank Inspection Annual Report

Required Action	Due Date
<p><b>Annual Tank Inspection Report:</b> Submit an annual tank inspection report that shall cover the first year of the permit term. The Tank Inspection Report shall include: a summary of the findings of the inspections performed during the previous year on all storage tanks including but is not limited to; coatings evaluation, both interior and exterior, as well as lead and chromium content if applicable, structure evaluation (i.e. corrosion and holes), any and all modifications and repairs identified and/or completed with timelines, if applicable, and any and all photographs taken and checklists or forms utilized during inspections.</p>	12/31/2026
<p><b>Annual Tank Inspection Report #2:</b> Submit an annual tank inspection report that shall cover the previous year.</p>	12/31/2027
<p><b>Annual Tank Inspection Report #3:</b> Submit an annual tank inspection report that shall cover the previous year.</p>	12/31/2028
<p><b>Annual Tank Inspection Report #4:</b> Submit the 4th annual tank inspection report.</p>	12/31/2029
<p><b>Annual Tank Inspection Report #5:</b> Submit the 5th annual tank inspection report.</p>	12/31/2030
<p><b>Annual Tank Inspection Report 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 tank inspection reports by December 31 each year covering the summary of the findings of the inspections performed during the previous year on all storage tanks including but is not limited to; coatings evaluation, both interior and exterior, as well as lead and chromium content if applicable, structure evaluation (i.e. corrosion and holes), any and all modifications and repairs identified and/or completed with timelines, if applicable, and any and all photographs taken and checklists or forms utilized during inspections.</p>	

## 5 Standard Requirements

**Chapter NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers):** The conditions in ss. NR 205.07(1) and NR 205.07(3), 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(3), Wis. Adm. Code.

### 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 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 pursuant s. NR 205.07(1)(r)2., Wis. Adm. Code.

For the purpose of meeting sampling frequency requirements, a week is defined as a calendar week, which begins on Sunday and ends on Saturday. The calendar week shall be used as the basis for reporting monitoring data on discharge monitoring reports.

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

#### 5.1.3 Sample Types

The permittee shall use the following definitions from s. NR 218.04, Wis. Adm. Code as prescribed in the WPDES permit for the appropriate method and manner of obtaining samples:

**24-hour Composite Sample:** A combination of individual samples taken at intervals of not more than one hour such that the volumes of each of the individual samples and of the combination are proportional to the volumes of flow during each interval and during the 24-hour period respectively.

- **24-hour Flow Proportional Composite Sample:** A combination of individual grab samples taken over a 24-hr period, where the individual grab samples are of equal volume and taken at intervals after a specified volume of discharge has occurred.
- **24-hour Time Proportional Composite Sample:** A combination of individual grab samples taken over a 24-hr period, where the individual grab samples are of equal volume and taken at consistent intervals not exceeding 15 minutes.

**Composite Sample:** A combination of individual samples of equal volume taken at approximately equal intervals not exceeding one hour over a specified period of time.

- **3-hr Composite Sample:** A combination of three (3) individual grab samples of equal volume taken at one-hour intervals.

**Continuous Sample:** A composite of successive individual samples of equal volume taken automatically at equal intervals not exceeding 15 minutes. Where the term is used in connection with monitoring temperature or pH it means continuous in-line recording or monitoring at intervals of not more than 15 minutes.

Continuous sample is synonymous with in-line measurements and may apply to flow, temperature, pH, and dissolved oxygen measurements only. The in-line instrument takes automatic readings at intervals of not more than 15 minutes during a 24-hour period.

**Grab Sample:** A single sample taken at one moment of time or a combination of several smaller samples of equal volume taken in less than a 2-minute period. Where the term is used in connection with monitoring temperature or pH it means a single measurement.

#### 5.1.4 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.

#### 5.1.5 Reporting of Monitoring Results

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating fees under ch. NR 101, Wis. Adm. Code, a reporting limit of 2.0 mg/L for BOD<sub>5</sub> and 2.5 mg/L Total Suspended Solids shall be considered to be limits of quantitation.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for

results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.

- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as “0” (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, “0” would be reported for any day during the month that no discharge occurred.

### **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, except for sludge management forms and records, which shall be kept for a period of at least 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**

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 as directed at the end of this permit 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 Bypass

Except for a controlled diversion as provided in the 'Controlled Diversions' section of this permit, any bypass is prohibited and the Department may take enforcement action against a permittee for such occurrences under s. 283.89, Wis. Stats. The Department may approve a bypass if the permittee demonstrates all the following conditions apply:

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

### 5.2.3 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 unscheduled bypassing 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.

### 5.2.4 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation provided the following requirements are met:

- Effluent from the wastewater 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 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 wastewater treatment facility records and such records shall be available to the department on request.

### **5.2.5 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.

### **5.2.6 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).

### **5.2.7 Planned Changes**

In accordance with ss. 283.31(4)(b) and 283.59, Stats., the permittee shall report to the Department any facility expansion, production increase or process modifications which will result in new, different or increased discharges of pollutants. The report shall either be a new permit application, or if the new discharge will not violate the effluent limitations of this permit, a written notice of the new, different or increased discharge. The notice shall contain a description of the new activities, an estimate of the new, different or increased discharge of pollutants and a description of the effect of the new or increased discharge on existing waste treatment facilities. Following receipt of this report, the Department may modify this permit to specify and limit any pollutants not previously regulated in the permit.

### **5.2.8 Duty to Halt or Reduce Activity**

Upon failure or impairment of treatment facility operation, the permittee shall, to the extent necessary to maintain compliance with its permit, curtail production or wastewater discharges or both until the treatment facility operations are restored or an alternative method of treatment is provided.

## **5.3 Surface Water Requirements**

### **5.3.1 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.

### 5.3.2 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, except in cases of Water Quality Trading, wherein the applicable periods are January through June and July through December.]

**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.

### 5.3.3 Effluent Temperature Requirements

**Weekly Average Temperature** – If temperature limits are included in this permit, Weekly Average Temperature shall be calculated as 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 pursuant to Wis. Adm. Code, s. NR 102.28. ‘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 pursuant to Wis. Adm. Code, s. NR 102.29.

### 5.3.4 Visible Foam or Floating Solids

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

### 5.3.5 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:

- 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.

- 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.
- 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.
- 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.

### 5.3.6 Total Residual Chlorine Requirements

When total residual chlorine (TRC) limit(s) or monitoring are included in a permit, the permittee shall comply with the following conditions:

- The permittee shall perform TRC monitoring required in this permit using an approved method from ch. NR 219, Wis. Adm. Code, which produces a detection limit that is less than or equal to the permitted limit or produces the lowest economically feasible detection limit if the approved methods cannot meet the permit limit. If the facility cannot achieve a detection limit less than or equal to the permit limit using the approved methods, contact the laboratory accreditation program for guidance.
- The permittee shall determine the limit of detection (LOD) as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, or the permittee shall contact the laboratory accreditation program for information on how to determine a verified detection limit allowed just for TRC. If the verified detection limit is determined using the special procedure, then the LOD and limit of quantitation (LOQ) shall be set to be equal to the verified detection limit determined from this special procedure.
- The permittee shall determine compliance with the TRC limit(s) as follows:
  - a) If the facility determines a statistical LOD as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, and the measured TRC levels are less than the LOD, the permittee shall report the results as less than the LOD (<LOD). For this situation the LOQ shall be established at 3.33 times the LOD or at the concentration of the lowest standard in the calibration curve. TRC levels that are < LOD are in compliance with the TRC limit.
  - b) If the facility determines the verified detection limit using the laboratory accreditation program special procedure, this verified detection limit shall be reported as the LOD and LOQ. If the measured TRC levels are less than the LOD, the permittee shall report the results as < LOD. TRC levels that are < LOD are in compliance with the TRC limit.
  - c) If the facility determines the statistical LOD as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, and the measured TRC levels are greater than the statistical LOD but less than the LOQ, TRC levels are in compliance with the TRC limit - except when the measured levels are consistently reported between the LOD and LOQ. When the measured TRC levels are consistently reported between the LOD and LOQ, the facility shall take action to determine the reliability of detected results (such as resampling and/or re-calculating dosages) and shall adjust the chemical feed system if necessary to reduce the chances of detecting levels between the statistical LOD and LOQ.
  - d) If the facility determines the statistical LOQ as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, or determines the verified detection limit using the laboratory accreditation program special procedure, TRC measured levels that are greater than the statistical LOQ and the TRC limit, are not in compliance with the TRC limit. The permittee shall report the level as a limit exceedance.
  - e) If the facility determines the statistical LOD as specified in s. NR 149.48 (2)(b), Wis. Adm. Code, and the measured level is < LOD, then a "0" (zero) value may be substituted for any test result less than the statistical LOD when calculating the average or mass discharge values. Calculated values shall then be compared directly to the average or mass limits to determine compliance.

- f) If the facility determines the verified detection limit using the laboratory accreditation program special procedure and the measured level is < LOD (set equal to the verified detection limit), then a "0" (zero) value may be substituted for any test result less than the LOD when calculating the average or mass discharge values. Calculated values shall then be compared directly to the average or mass limits to determine compliance.

### 5.3.7 Additives

In the event that the permittee wishes to commence use of a water treatment additive, or increase the usage of the additives greater than indicated in the permit application, the permittee must get a written approval from the Department prior to initiating such changes. This written approval shall provide authority to utilize the additives at the specific rates until the permit can be either reissued or modified in accordance with s. 283.53, Stats. Restrictions on the use of the additives may be included in the authorization letter.

### 5.3.8 Whole Effluent Toxicity (WET) Monitoring Requirements

In order to determine the potential impact of the discharge on aquatic organisms, static-renewal toxicity tests shall be performed on the effluent in accordance with the procedures specified in the "*State of Wisconsin Aquatic Life Toxicity Testing Methods Manual, 2<sup>nd</sup> Edition*" (PUB-WT-797, November 2004) as required by NR 219.04, Table A, Wis. Adm. Code). All of the WET tests required in this permit, including any required retests, shall be conducted on the *Ceriodaphnia dubia* and fathead minnow species. Receiving water samples shall not be collected from any point in contact with the permittee's mixing zone and every attempt shall be made to avoid contact with any other discharge's mixing zone.

### 5.3.9 Whole Effluent Toxicity (WET) Identification and Reduction

Within 60 days of a retest which showed positive results, the permittee shall submit a written report to the Biomonitoring Coordinator, Bureau of Water Quality, 101 S. Webster St., PO Box 7921, Madison, WI 53707-7921, which details the following:

- A description of actions the permittee has taken or will take to remove toxicity and to prevent the recurrence of toxicity;
- A description of toxicity reduction evaluation (TRE) investigations that have been or will be done to identify potential sources of toxicity, including the following actions:
  - a) Evaluate the performance of the treatment system to identify deficiencies contributing to effluent toxicity (e.g., operational problems, chemical additives, incomplete treatment)
  - b) Identify the compound(s) causing toxicity. Conduct toxicity screening tests on the effluent at a minimum of once per month for six months to determine if toxicity recurs. Screening tests are WET tests using fewer effluent concentrations conducted on the most sensitive species. If any of the screening tests contain toxicity, conduct a toxicity identification evaluation (TIE) to determine the cause. TIE methods are available from USEPA "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures (EPA/600/6-91/003) and "Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I" (EPA/600/6-91/005F).
  - c) Trace the compound(s) causing toxicity to their sources (e.g., industrial, commercial, domestic)
  - d) Evaluate, select, and implement methods or technologies to control effluent toxicity (e.g., in-plant or pretreatment controls, source reduction or removal)
- Where corrective actions including a TRE have not been completed, an expeditious schedule under which corrective actions will be implemented;
- If no actions have been taken, the reason for not taking action.

The permittee may also request approval from the Department to postpone additional retests in order to investigate the source(s) of toxicity. Postponed retests must be completed after toxicity is believed to have been removed.

### 5.3.10 Reopener Clause

Pursuant to s. 283.15(11), Wis. Stat. and 40 CFR 131.20, the Department may modify or revoke and reissue this permit if, through the triennial standard review process, the Department determines that the terms and conditions of this permit need to be updated to reflect the highest attainable condition of the receiving water.

## 5.4 Land Application Requirements

### 5.4.1 General Sludge Management Information

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

### 5.4.2 Monitoring and Calculating PCB Concentrations in Sludge

When sludge analysis for “PCB, Total Dry Wt” is required by this permit, the PCB concentration in the sludge shall be determined using either congener-specific analysis or Aroclor analysis. The permittee may decide which of these analyses is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code:

- If congener-specific analysis is employed: All PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection (LOD) and the limit of quantitation shall be used when calculating the total value of all congeners. All results shall be added together and the total PCB concentration by dry weight reported.
- If Aroclor analysis is employed, reporting protocols, consistent with s. NR 106.07(6)(e), should be as follows: If all Aroclors are less than the LOD, then the Total PCB Dry Wt result should be reported as less than the highest LOD. If a single Aroclor is detected, then that is what should be reported for the Total PCB result. If multiple Aroclors are detected, they should be summed and reported as Total PCBs. If the LOD cannot be achieved after using the appropriate clean up techniques, a reporting limit that is achievable for the Aroclors or each congener for the sample shall be determined. This reporting limit shall be reported and qualified indicating the presence of an interference.

### 5.4.3 Land Application Characteristic Report

The analytical results from testing of liquid wastes, by-product solids and sludges that are land applied shall be reported annually on the Characteristic Report Form 3400-49. The report form shall be submitted electronically no later than the date indicated on the form. 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 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.

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 sludge results shall be reported on a dry weight basis.

### 5.4.4 Annual Land Application Report

The annual totals for the land application loadings of liquid wastes, by-product solids and sludges to field spreading sites shall be submitted electronically on the Annual Land Application Report Form 3400-55 by January 31, each year whether or not waste is land applied. 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 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.

#### 5.4.5 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 waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive 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.

#### 5.4.6 Land Application Site Approval

The permittee is authorized to landspread permitted liquid wastes, by-product solids and sludges on sites approved in writing by the Department in accordance with ss. NR 214.17(2) and 214.18(2), Wis. Adm. Code. Any site use restrictions or granting of case-by-case exceptions shall be identified in the approval letter. If the permittee wishes to have approval for additional sites, application shall be made using Land Application Site Request Form 3400-053. Complete information shall be submitted about each site, including location maps and soil maps, any soil analyses results and other information showing that the site complies with all application requirements and permit conditions. Spreading on a site may commence upon receipt of Department approval. If an existing spreading site is found by the Department to be environmentally unacceptable, a written notice will be issued to withdraw approval of that site.

#### 5.4.7 Operating Requirements/Management Plan

All land application sites used for treatment of liquid wastes, by-product solids and sludges shall be operated in accordance with a Department approved management plan. The management plan shall be consistent with the requirements of this permit, ss. NR 214.17 (3) and (6), and NR 214.18 (3) and (6), Wis. Adm. Code. If operational changes are needed, the land application management plan shall be amended by submitting a written request to the Department for approval. A land application management plan shall be submitted for approval at least 60 days prior to land application.

#### 5.4.8 Chloride Requirements for Liquid Wastes and By-Product Solids

The total pounds of chloride applied shall be limited to 340 pounds per acre per 2 year period. Calculate the chloride loading as follows:

$$\text{Wet Weight Solids: } \frac{\text{lbs of solids} \times \% \text{solids} \times \% \text{chloride}}{\text{acres land applied} \times 100 \times 100} = \text{lbs chloride/acre}$$

$$\text{Liquid: } \frac{\text{mg/L chloride} \times (\text{millions of gallons}) \times 8.34}{\text{acres land applied}} = \text{lbs chloride/acre}$$

#### 5.4.9 Nitrogen Requirements for Liquid Wastes and By-Product Solids and Sludges

NR 214.17(4) and NR 214.18(4) Wis. Adm. Code specify that the total pounds of nitrogen land applied per acre per year shall be limited to the nitrogen needs of the cover crop minus any other nitrogen added to the land application site, including fertilizer or manure. Nitrogen applied can be calculated on the basis of plant available nitrogen, as long as the release of nitrogen from the organic material is credited to future years. This permit requires that the Total Kjeldahl Nitrogen calendar year application amount shall not exceed 165 pounds per acre per year, except when alternate numerical nitrogen loading limits (consistent with the above sections of NR 214) are approved in writing via the Department's land application management plan approval. Calculate nitrogen loading as follows ("TKN" represents "Total Kjeldahl Nitrogen"):

Wet Weight Solids and Sludges:  $\frac{\text{lbs of solids} \times \% \text{solids} \times \% \text{TKN}}{\text{acres land applied} \times 100 \times 100} = \text{lbs TKN/acre}$

Liquid:  $\frac{\text{mg/L TKN} \times (\text{millions of gallons}) \times 8.34}{\text{acres land applied}} = \text{lbs TKN/acre}$

#### 5.4.10 Ponding

The volume of liquid wastes land applied shall be limited to prevent ponding, except for temporary conditions following rainfall events. If ponding occurs all land application shall cease immediately. The permittee shall land apply only the liquid wastes that are permitted.

#### 5.4.11 Runoff

The volume of liquid wastes land applied shall be limited to prevent runoff. If runoff occurs all land application shall cease immediately. The permittee shall land apply only the liquid wastes that are permitted.

#### 5.4.12 Soil Incorporation Requirements

- **Liquid Sludge Requirements:** The Department may require that liquid sludge be incorporated into the soil on specific land application sites when necessary to prevent surface runoff or objectionable odors. Requirements and procedures for incorporation of liquid sludge, when such incorporation may be necessary, shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- **Cake Sludge Requirements:** After land application, cake sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- **Liquid Wastewater Requirements:** The Department may require that liquid wastewater be incorporated or injected into the soil on specific land application sites when necessary to prevent surface runoff or objectionable odors. Requirements and procedures for injection or incorporation of liquid wastewater, when such injection or incorporation is necessary, shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.
- **By-Product Solids Requirements:** The Department may limit the volume of by-products solids that are landspread on a specific site when necessary to prevent surface runoff or leaching of contaminants to groundwater and objectionable odors. By-product solids shall, after application, be plowed, disced, or otherwise incorporated into the soil. Requirements and procedures for the incorporation of byproduct solids into the soil shall be specified in the management plan or in specific site applications, subject to Department approval. The permittee shall comply with the requirements in the Department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

#### 5.4.13 Field Stockpiles

The permittee is encouraged to landspread the by-product solids or sludges as they are transported to the fields; but if it becomes necessary to stockpile solids in the fields, the stockpiles shall be spread within 72 hours or as specified in the approved management plan.

#### **5.4.14 Additional Requirements from ch. NR 214, Wis. Adm. Code**

The requirements of s. NR 214.17 (4)(c) [pathogen prohibition for human consumption crop fields], (4)(d)1 [no adverse soil effects], (4)(d)10 [allowable whey spreading rates], and (4)(e)1-3 [by-product solids spreading within agricultural practices and not cause contamination] for landspreading of liquid wastes and by product solids and s. NR 214.18 (4)(b),(d)-(h) [application, nutrient, pH, metals, and PCB limitations] for sludge spreading systems are included by reference in this permit. The permittee shall comply with these requirements.

## 6 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L) -Report on Effluent Discharges	December 31, 2026	20
Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L) -Action Plan	June 30, 2027	20
Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L) -Initiate Actions	December 31, 2027	20
Phosphorus Multi-Discharger Variance Interim Limit (0.6 mg/L) -Complete Actions	June 30, 2028	20
Phosphorus Schedule - Optimization and Compliance Planning - Optimization and Compliance Alternatives	June 30, 2027	20
Phosphorus Schedule - Optimization and Compliance Planning -Progress Report #2	June 30, 2028	20
Phosphorus Schedule - Optimization and Compliance Planning -Progress Report #3	June 30, 2029	20
Phosphorus Schedule - Optimization and Compliance Planning -Progress Report #4	June 30, 2030	20
Phosphorus Schedule - Optimization and Compliance Planning -Final MDV Optimization and Compliance Alternatives Report	December 31, 2030	20
Phosphorus Payment per Pound to County -Annual Verification of Phosphorus Payment to County	March 1, 2027	21
Phosphorus Payment per Pound to County -Annual Verification of Payment #2	March 1, 2028	21
Phosphorus Payment per Pound to County -Annual Verification of Payment #3	March 1, 2029	21
Phosphorus Payment per Pound to County -Annual Verification of Payment #4	March 1, 2030	21
Phosphorus Payment per Pound to County -Annual Verification of Payment #5	March 31, 2031	21
Phosphorus Payment per Pound to County -Continued Coverage	See Permit	21
Phosphorus Payment per Pound to County -Annual Verification of Payment After Permit Expiration	See Permit	21
Land Application Management Plan -Land Application Management Plan	March 31, 2027	21
Tank Inspection Annual Report -Annual Tank Inspection Report	December 31, 2026	22
Tank Inspection Annual Report -Annual Tank Inspection Report #2	December 31, 2027	22
Tank Inspection Annual Report -Annual Tank Inspection Report #3	December 31, 2028	22
Tank Inspection Annual Report -Annual Tank Inspection Report #4	December 31, 2029	22

Tank Inspection Annual Report -Annual Tank Inspection Report #5	December 31, 2030	22
Tank Inspection Annual Report -Annual Tank Inspection Report Required After Permit Expiration	See Permit	22
General Sludge Management Form 3400-48	prior to any significant sludge management changes	31
Characteristic Report Form 3400-49	no later than the date indicated on the form	31
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	31
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit	32
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	23

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: South Central Region, 3911 Fish Hatchery Rd, Fitchburg, WI 53711-5397.