



# WPDES PERMIT

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

**Lakeside Foods Inc**

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

709 Allen St, Random Lake, WI 53075

to

**Silver Creek in the North Branch Milwaukee River Watershed of the Milwaukee River Basin and  
Groundwaters of the State via Spray Irrigation and Landspreading on Department Approved Sites**

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 - July 01, 2025**

**EXPIRATION DATE - June 30, 2030**

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# 1 In-Plant Requirements

## 1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
101	INPLANT: Vegetable processing wastewater, boiler blow down, and cooling tower blow down generated at the Lakeside Foods Inc. plant in Random Lake, WI. Representative samples are collected from the pumping station before discharging to irrigation sprayfields via Outfall 002 and/or Outfall 004.

## 1.2 Monitoring Requirements and Limitations

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

### 1.2.1 Sampling Point 101 - PROCESS WW PRIOR TO IRRIGATION

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
BOD <sub>5</sub> , Total		mg/L	2/Month	Composite	
Chloride		mg/L	2/Month	Composite	
Nitrogen, Total Kjeldahl		mg/L	2/Month	Composite	
Nitrogen, Nitrite + Nitrate Total		mg/L	2/Month	Composite	
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total		mg/L	2/Month	Composite	
Nitrogen, Organic Total		mg/L	2/Month	Calculated	Organic nitrogen = total Kjeldahl nitrogen (mg/L) - ammonia nitrogen (mg/L)
Nitrogen, Total		mg/L	2/Month	Calculated	Total nitrogen = total Kjeldahl nitrogen (mg/L) + [NO <sub>2</sub> + NO <sub>3</sub> ] nitrogen (mg/L)

#### 1.2.1.1 Sampling Frequency

Sampling requirements specified in **Table 1.2.1** of the permit are only required during weeks when there is a discharge to spray irrigation Outfall 002 or Outfall 004.

#### 1.2.1.2 Composite Sample

Composite samples shall consist of a minimum of three grab samples taken over a one hour time period during which the facility is in full operation and a representative sample can be collected.

## 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	OUTFALL: Reverse osmosis reject generated during softening/conditioning of well water. Flow rate is gathered via a continuous inline meter from RO unit. Representative samples shall be collected before mixing with Random Lake WWTP effluent from the 2" RO discharge pipe that dumps into the 6" storm sewer pipe that projects above 4' from floor by door to microlab. Outfall is located about 1740 feet West-Northwest of the plant and discharges to Silver Creek via ~1,500 ft storm sewer.

### 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 - RO Retentate

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	Daily Max	30 mg/L	Monthly	Composite	
BOD <sub>5</sub> , Total	Monthly Avg	15 mg/L	Monthly	Composite	
Suspended Solids, Total	Daily Max	12 mg/L	Monthly	Composite	
Suspended Solids, Total	Monthly Avg	12 mg/L	Monthly	Composite	
Dissolved Oxygen	Daily Min	4.0 mg/L	5/Week	Grab	
Nitrogen, Ammonia (NH <sub>3</sub> -N) Total		mg/L	Monthly	Composite	
Additive - Chem Treat RL9906	Weekly Avg	14 mg/L	3/Week	Calculated	
Phosphorus, Total	Monthly Avg	0.5 mg/L	Monthly	Composite	
Phosphorus, Total		lbs/month	Monthly	Calculated	Calculate the Total Monthly Discharge of phosphorus and report on the last day of the month on the DMR.

<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		lbs/yr	Monthly	Calculated	Calculate the sum of total monthly mass of phosphorus discharged for the calendar year and report on the last day of the month on the DMR.
Temperature Maximum	Daily Max	81 deg F	3/Week	Multiple Grab	Effective every January, February and December
Temperature Maximum	Daily Max	82 deg F	3/Week	Multiple Grab	Effective every March and November
Temperature Maximum	Daily Max	84 deg F	3/Week	Multiple Grab	Effective every April
Temperature Maximum	Daily Max	87 deg F	3/Week	Multiple Grab	Effective every May
Temperature Maximum	Daily Max	88 deg F	3/Week	Multiple Grab	Effective every June and August
Temperature Maximum	Daily Max	89 deg F	3/Week	Multiple Grab	Effective every July
Temperature Maximum	Daily Max	86 deg F	3/Week	Multiple Grab	Effective every September
Temperature Maximum	Daily Max	85 deg F	3/Week	Multiple Grab	Effective every October
Temperature Maximum	Weekly Avg	53 deg F	3/Week	Multiple Grab	Effective every January, November and December
Temperature Maximum	Weekly Avg	54 deg F	3/Week	Multiple Grab	Effective every February
Temperature Maximum	Weekly Avg	56 deg F	3/Week	Multiple Grab	Effective every March
Temperature Maximum	Weekly Avg	59 deg F	3/Week	Multiple Grab	Effective every April
Temperature Maximum	Weekly Avg	69 deg F	3/Week	Multiple Grab	Effective every May
Temperature Maximum	Weekly Avg	80 deg F	3/Week	Multiple Grab	Effective every June
Temperature Maximum	Weekly Avg	85 deg F	3/Week	Multiple Grab	Effective every July and August
Temperature Maximum	Weekly Avg	77 deg F	3/Week	Multiple Grab	Effective every September
Temperature Maximum	Weekly Avg	65 deg F	3/Week	Multiple Grab	Effective every October
pH Field	Daily Max	9.0 su	5/Week	Grab	
pH Field	Daily Min	6.0 su	5/Week	Grab	

### 2.2.1.1 Composite Sample

Composite samples shall consist of a minimum of three grab samples taken over a one hour time period during which

the facility is in full operation and a representative sample can be collected.

#### **2.2.1.2 Additive Chem Treat RL9906 Concentration Calculation**

Concentration shall be calculated during the most representative days, using the number of gallons of additive dosed and the effluent flow rate of the day.

#### **2.2.1.3 Total Maximum Daily Load (TMDL) Limitations**

**Approved TMDL:** The Milwaukee River Basin TMDL Waste Load Allocation (WLA) for total phosphorus was approved by the U.S. Environmental Protection Agency in March, 2018.

#### **2.2.1.4 TMDL Limitations for Total Phosphorus**

The approved TMDL phosphorus WLA for this permittee is **6.5 lbs/year WLA** which will go into effect pursuant to Compliance Schedule in permit section 6.3.

The phosphorus limit of **0.5 mg/L** is an interim limit set in accordance with s. NR. 217.17, Wis. Adm. Code. The interim limit will remain in effect unless a more stringent limit is required at a future permit issuance by ss. NR 217.13 and NR 217.16(2), Wis. Adm. Code, or the limit is relaxed following procedures outlined in ch. NR 207, Wis. Adm. Code. Sampling and reporting of phosphorus concentrations and masses discharged shall begin upon the permit effective date.

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

#### **2.2.1.5 Phosphorus Water Quality-Based Effluent Limitation(s)**

The final water quality based effluent limit (WQBEL) for phosphorus is 6.5 lbs/year and will take effect on the dated specified in the Compliance Schedule unless:

- (A) As part of the application for the next reissuance, or prior to filing the application, the permittee submits either: 1.) A watershed adaptive management plan and a completed Watershed Adaptive Management Request Form 3200-139; or 2.) An application for water quality trading; or 3.) An application for a variance; or 4.) New information or additional data that supports a recalculation of the numeric limitation; and
- (B) The Department modifies, revokes and reissues, or reissues the permit to incorporate a revised limitation before the effective date of the phosphorus WQBEL.

If Adaptive Management or Water Quality Trading is approved as part of the permit application for the next reissuance or as part of an application for a modification or revocation and reissuance, the plan and specifications submittal, construction, and final effective dates for compliance with the total phosphorus WQBEL may change in the reissued or modified permit. In addition, the numeric value of the WQBEL may change based on new information (e.g. a TMDL) or additional data. If a variance is approved for the next reissuance, interim limits and conditions will be imposed in the reissued permit in accordance with ss. 283.15 or 283.16, Stats., and applicable regulations. A permittee may apply for a variance to the phosphorus WQBEL at the next reissuance even if the permittee did not apply for a phosphorus variance as part of this permit reissuance.

Any increase in the limit is subject to s. NR 102.05(1) and ch. NR 207, Wis. Adm. Code. When a six-month average effluent limit is specified for Total Phosphorus the applicable averaging periods are May through October and November through April.

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

Rather than upgrading its wastewater treatment facility to comply with WQBELs for total phosphorus, the permittee may use Water Quality Trading or the Watershed Adaptive Management Option, to achieve compliance under ch. NR 217, Wis. Adm. Code, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such

alternative approach. The permittee may also implement an upgrade to its wastewater treatment facility in combination with Water Quality Trading or the Watershed Adaptive Management Option to achieve compliance, provided that the permit is modified, revoked and reissued, or reissued to incorporate any such alternative approach. If the Final Compliance Alternatives Plan concludes that a variance will be pursued, the Plan shall provide information regarding the basis for the variance.

#### **2.2.1.7 Submittal of Permit Application for Next Reissuance and Adaptive Management or Pollutant Trading Plan or Variance Application**

The permittee shall submit the permit application for the next reissuance at least 6 months prior to expiration of this permit. If the permittee intends to pursue adaptive management to achieve compliance with the phosphorus water quality based effluent limitation, the permittee shall submit with the application for the next reissuance: a completed Watershed Adaptive Management Request Form 3200-139, the completed Adaptive Management Plan and final plans for any system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code. If the permittee intends to pursue pollutant trading to achieve compliance, the permittee shall submit an application for water quality trading with the application for the next reissuance. If system upgrades will be used in combination with pollutant trading to achieve compliance with the final water quality-based limit, the reissued permit will specify a schedule for the necessary upgrades. If the permittee intends to seek a variance, the permittee shall submit an application for a variance with the application for the next reissuance.

#### **2.2.1.8 Effluent Temperature Monitoring**

For manually measuring effluent temperature, grab samples should be collected at 6 evenly spaced intervals during the 24-hour period or another representative sampling plan as approved by the Department. Alternative sampling intervals may be approved if the permittee can show that the maximum effluent temperature is captured during the sampling interval. Report the maximum temperature measured during the day on the DMR.

#### **2.2.1.9 Effluent Temperature Limitations**

Limits for Temperature, Maximum: The effluent limitations for “Temperature, Maximum” become effective upon permit issuance. Monitoring is required 3X/week. 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 Effluent Limitation (°F)	Daily Maximum Effluent Limitation (°F)
JAN	53	81
FEB	54	81
MAR	56	82
APR	59	84
MAY	69	87
JUN	80	88

JUL	85	89
AUG	85	88
SEP	77	86
OCT	65	85
NOV	53	82
DEC	53	81

#### **2.2.1.10 Additives**

The permittee shall maintain a record of the dosage rate of all additives used on a monthly basis. The additives may be changed during the term of the permit following procedures in the 'Additives' subsection of the Standard Requirements.

### 3 Land Treatment Requirements

#### 3.1 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 Description/Sample Contents and Treatment Description (as applicable)
002	OUTFALL: Vegetable processing wastewater, boiler blow down, and cooling tower blow down generated at the Lakeside Foods Inc. plant in Random Lake, WI. 26 wetted acre West spray irrigation system. Northern ~13 acre parcel located at SW ¼, SW ¼, Sec. 27, T13N, R21E. Southern ~13 acre parcel located at NW ¼, NW ¼, Sec. 34, T13N, R21E. Flow rate is gathered via continuous flow meters from each traveling gun irrigation cart. Representative samples are collected from the pumping station.
004	OUTFALL: Vegetable processing wastewater, boiler blow down, and cooling tower blow down generated at the Lakeside Foods Inc. plant in Random Lake, WI. 116 wetted acre East spray irrigation system consisting of NE ¼, NE ¼, Sec. 26, T13N, R21E and E ½, NW ¼, Sec. 26, T13N, R21E and W ½, NE ¼, Sec. 26, T13N, R21E. Flow rate is gathered via continuous flow meters from each traveling gun irrigation cart. Representative samples are collected from the pumping station.

#### 3.2 Monitoring Requirements and Limitations

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

##### 3.2.1 Sampling Point (Outfall) 002 - 26-ACRE SPRAY IRRG SYSTEM, Spray Irrigation

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	7,000 gal/ac/day	Monthly	Calculated	Effective April-November
Hydraulic Application Rate	Monthly Avg	0 gal/ac/day	Monthly	Calculated	Effective December-March
Nitrogen, Max Applied On Any Zone	Annual Total	300 lbs/ac/yr	Annual	Calculated	
Chloride, Max Applied to Any Zone		lbs/ac/yr	Annual	Calculated	
Soil - Nitrogen, Available		mg/kg	Annual	Grab	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Soil - Phosphorus, Available		mg/kg	Annual	Grab	
Soil - Potassium, Available		mg/kg	Annual	Grab	
Soil - pH Lab		su	Annual	Grab	
Other Sources of Nitrogen		lbs/ac/yr	Annual	Measure	

Daily Log – Monitoring Requirements and Limitations				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department.				
Parameters	Limit	Units	Sample Frequency	Sample Type
Zone or Location Being Sprayed	-	Number	Daily	Log
Volume per Zone	-	Gallons	Daily	Log
Acres Being Sprayed	-	Acres	Daily	Log
Start to End Time	-	Date, Hour	Daily	Log
Maximum Applied Volume	1.10	Inches/Load Cycle	Daily	Calculated

### 3.2.1.1 Composite Sample

Composite samples shall consist of a minimum of three grab samples taken over a one hour time period during which the facility is in full operation and a representative sample can be collected.

### 3.2.1.2 Monthly Average Hydraulic Application Rate

Determine the monthly average hydraulic application rate (in gal/acre/day) for each outfall by calculating the total gallons of wastewater applied onto the site for the month, dividing that total by the number of wetted acres loaded during the month, and then dividing this resulting value by the number of days in the month. Enter this calculated monthly value on the Discharge Monitoring Report form in the box for the last day of the month, in the "Hydraulic Application Rate" column.

### 3.2.1.3 Maximum Applied Chloride/Nitrogen on Any Zone

Calculate the mass applied annually to each zone\* utilized during the calendar year using the equation below. Record the highest total mass applied to any zone within the treatment system each year on the eDMR with a sample date of December 31.

$$\frac{(\text{annual avg. concentration in mg/L}) (\text{tot. annual flow in million gallons per zone}) (8.34)}{\text{acreage of zone}} = \text{lbs/ac/yr}$$

\*A zone can be an entire field, or a portion as defined in the approved Land Treatment Management Plan.

### 3.2.1.4 Spray Irrigation Site(s) - Soil Analysis

The soil at each spray irrigation sample point (outfall) shall be tested annually for available nitrogen, available phosphorus, available potassium and pH. The soil tests shall be conducted by an approved testing facility. The permittee shall report sample results on an annual eDMR. If multiple soil tests are taken at this outfall, report all data on the eDMR and identify the zones sampled in the General Comments section of the report.

### 3.2.2 Sampling Point (Outfall) 004 - 116-ACRE SPRAY IRRG SYSTEM, Spray Irrigation

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gpd	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	7,000 gal/ac/day	Monthly	Calculated	Effective April-November
Hydraulic Application Rate	Monthly Avg	0 gal/ac/day	Monthly	Calculated	Effective December-March
Nitrogen, Max Applied On Any Zone	Annual Total	300 lbs/ac/yr	Annual	Calculated	
Chloride, Max Applied to Any Zone		lbs/ac/yr	Annual	Calculated	
Soil - Nitrogen, Available		mg/kg	Annual	Grab	
Soil - Phosphorus, Available		mg/kg	Annual	Grab	
Soil - Potassium, Available		mg/kg	Annual	Grab	
Soil - pH Lab		su	Annual	Grab	
Other Sources of Nitrogen		lbs/ac/yr	Annual	Measure	

Daily Log – Monitoring Requirements and Limitations				
All discharge and monitoring activity shall be documented on log sheets. Originals of the log sheets shall be kept by the permittee as described under “Records Retention” in the Standard Requirements section, and if requested, made available to the Department.				
Parameters	Limit	Units	Sample Frequency	Sample Type
Zone or Location Being Sprayed	-	Number	Daily	Log
Volume per Zone	-	Gallons	Daily	Log
Acres Being Sprayed	-	Acres	Daily	Log

<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.				
Parameters	Limit	Units	Sample Frequency	Sample Type
Start to End Time	-	Date, Hour	Daily	Log
Maximum Applied Volume	1.10	Inches/Load Cycle	Daily	Calculated

### 3.2.2.1 Composite Sample

Composite samples shall consist of a minimum of three grab samples taken over a one hour time period during which the facility is in full operation and a representative sample can be collected.

### 3.2.2.2 Monthly Average Hydraulic Application Rate

Determine the monthly average hydraulic application rate (in gal/acre/day) for each outfall by calculating the total gallons of wastewater applied onto the site for the month, dividing that total by the number of wetted acres loaded during the month, and then dividing this resulting value by the number of days in the month. Enter this calculated monthly value on the Discharge Monitoring Report form in the box for the last day of the month, in the "Hydraulic Application Rate" column.

### 3.2.2.3 Maximum Applied Chloride/Nitrogen on Any Zone

Calculate the mass applied annually to each zone\* utilized during the calendar year using the equation below. Record the highest total mass applied to any zone within the treatment system each year on the eDMR with a sample date of December 31.

$$\frac{(\text{annual avg. concentration in mg/L}) (\text{tot. annual flow in million gallons per zone}) (8.34)}{\text{acreage of zone}} = \text{lbs/ac/yr}$$

\*A zone can be an entire field, or a portion as defined in the approved Land Treatment Management Plan.

### 3.2.2.4 Spray Irrigation Site(s) - Soil Analysis

The soil at each spray irrigation sample point (outfall) shall be tested annually for available nitrogen, available phosphorus, available potassium and pH. The soil tests shall be conducted by an approved testing facility. The permittee shall report sample results on an annual eDMR. If multiple soil tests are taken at this outfall, report all data on the eDMR and identify the zones sampled in the General Comments section of the report.

## 4 Groundwater Requirements

### 4.1 Monitoring Requirements and Limitations

#### 4.1.1 Groundwater Monitoring System for Outfall 002 - 26 Wetted Acre Sprayfield

**Location of Monitoring System:** NW ¼, NW ¼. Sec. 34, T13N, R21E (lower)

**Groundwater Monitoring Well(s) to be Sampled:** MW-1 (807), MW-4 (808), MW-8 (809), MW-9 (810), MW-10 (818), MW-11 (819)

**Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality:** MW-8 (809)

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

**Groundwater Monitoring Well(s) Used for Point of Standards Application:** MW-1 (807), MW-4 (808), MW-9 (810), MW-10 (818), MW-11 (819)

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

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

PARAMETER	UNITS	PREVENTIVE ACTION LIMIT	ENFORCEMENT STANDARD	FREQUENCY
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	8.5	10	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.5	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.5	N/A	Quarterly
COD, Filtered	mg/L	41	N/A	Quarterly

##### 4.1.1.1 Exemptions and Alternative Concentration Limit

An alternative concentration limit (ACL) of **8.5 mg/l** has been established for the **Nitrite + nitrate, nitrogen preventive action limit** at this site. This ACL is authorized in conjunction with an exemption granted under s. NR 140.28, Wis. Adm. Code.

##### 4.1.1.2 Preventive Action Limits for pH

A result for pH is considered to have exceeded the pH PAL for this site if the result is less than **6.5** s.u. or greater than **8.5** s.u.

#### 4.1.1.3 Preventive Action Limits for Indicator Parameters

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

#### 4.1.2 Groundwater Monitoring System for Outfall 004 - 116 Wetted Acre Sprayfield

**Location of Monitoring System:** NW ¼, SE ¼, Sec. 26, T13N, R21E

**Groundwater Monitoring Well(s) to be Sampled:** MW-D2 (805), MW-E (806), MW-AR (811), MW-F (812), MW-G (813), MW-BR (815), MW-HRR (816), MW-I (817)

**Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality:** MW-AR (811)

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

**Groundwater Monitoring Well(s) Used for Point of Standards Application:** MW-D2 (805), MW-E (806), MW-F (812), MW-G (813), MW-BR (815), MW-HRR (816), MW-I (817)

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

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

PARAMETER	UNITS	PREVENTIVE ACTION LIMIT	ENFORCEMENT STANDARD	FREQUENCY
Depth To Groundwater	feet	N/A	N/A	Quarterly
Groundwater Elevation	feet MSL	N/A	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	2.2	10	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.4	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.3	N/A	Quarterly
COD, Filtered	mg/L	41	N/A	Quarterly

#### 4.1.2.1 Exemptions and Alternative Concentration Limit

An alternative concentration limit (ACL) of **2.2 mg/l** has been established for the **Nitrite + nitrate, nitrogen preventive action limit** at this site. This ACL is authorized in conjunction with an exemption granted under s. NR 140.28, Wis. Adm. Code.

#### 4.1.2.2 Preventive Action Limits for pH

A result for pH is considered to have exceeded the pH PAL for this site if the result is less than **6.4 s.u.** or greater than **8.4 s.u.**

#### **4.1.2.3 Preventive Action Limits for Indicator Parameters**

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

## 5 Land Application Requirements

### 5.1 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)
003	LIQUID WASTEWATER (LEACHATE): Liquid leachate from sweet corn solids. Representative samples are collected from the storage containment vessel. Leachate is hauled to approved land application sites.
006	BY-PRODUCT SOLIDS: Vegetable by-product solids. Silage generated as a byproduct of sweet corn production. The silage is hauled via sealed trucks to be used as daily animal feed. Representative samples are collected from the vehicle used to transport the waste to the approved land spreading site.

### 5.2 Monitoring Requirements and Limitations

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

#### 5.2.1 Sampling Point (Outfall) 003 - Vegetable Leachate

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total Kjeldahl		mg/L	Annual	Grab	
Chloride		mg/L	Annual	Grab	
Phosphorus, Total		mg/L	Annual	Grab	
Phosphorus, Water Extractable		% of Tot P	Annual	Grab	
Potassium, Total Recoverable		mg/L	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.				
Parameters	Limit	Units	Sample Frequency	Sample Type
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

<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.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
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

#### 5.2.1.1 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.

#### 5.2.1.2 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.

#### 5.2.1.3 Exemption Notices

The permittee is exempt from the specified monitoring and reporting requirements for sites storing less than 150 tons of sweet corn silage. The permittee is also exempt from the monitoring and reporting requirements for sites storing sweet corn silage between 150 tons and 1200 tons if the permittee: 1) has an approved “Stack Inventory and Evaluation” form; 2) provides the site owner a letter describing approved leachate storing and spreading requirements

as outlined in chs. NR 213 and 214, Wis. Adm. Code, and provides an aerial photo delineating restricted spreading areas; and 3) the site is included in an annual report submitted by the permittee following the year of silage storage which records the total amount of silage received and stored at the site.

### 5.2.2 Sampling Point (Outfall) 006 - Vegetable By-Products

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Annual	Grab Comp	
Nitrogen, Total Kjeldahl		Percent	Annual	Grab Comp	
Chloride		Percent	Annual	Grab Comp	
Phosphorus, Total		Percent	Annual	Grab Comp	
Phosphorus, Water Extractable		% of Tot P	Annual	Grab Comp	
Potassium, Total Recoverable		Percent	Annual	Grab Comp	

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

Annual Report – Summary of Monitoring Requirements and Limitations				
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.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Amount Per Site	-	Tons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	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 Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

#### **5.2.2.1 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.

#### **5.2.2.2 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.

#### **5.2.2.3 Sampling**

Representative samples shall be collected of the byproduct solids to be land applied. When the byproduct solids are large pieces, a large sample should be collected and ground to a homogenous slurry for analysis.

## 6 Schedules

### 6.1 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
<b>Land Treatment Management Plan:</b> Submit an update to the management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	12/01/2025

### 6.2 Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus

The permittee shall comply with the WQBELs for Phosphorus as specified. No later than 14 days following each compliance date, the permittee shall notify the Department in writing of its compliance or noncompliance. If a submittal is required, a timely submittal fulfills the notification requirement.

Required Action	Due Date
<p><b>Operational Evaluation Report:</b> The permittee shall prepare and submit to the Department for approval an operational evaluation report. The report shall include an evaluation of collected effluent data, possible source reduction measures, operational improvements or other minor facility modifications that will optimize reductions in phosphorus discharges from the treatment plant during the period prior to complying with final phosphorus WQBELs and, where possible, enable compliance with final phosphorus WQBELs by July 1, 2028. The report shall provide a plan and schedule for implementation of the measures, improvements, and modifications as soon as possible, but not later than July 1, 2028 and state whether the measures, improvements, and modifications will enable compliance with final phosphorus WQBELs. Regardless of whether they are expected to result in compliance, the permittee shall implement the measures, improvements, and modifications in accordance with the plan and schedule specified in the operational evaluation report.</p> <p>If the operational evaluation report concludes that the facility can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the permittee shall comply with the final phosphorus WQBEL by July 1, 2028 and is not required to comply with the milestones identified below for years 3 through 9 of this compliance schedule ('Preliminary Compliance Alternatives Plan', 'Final Compliance Alternatives Plan', 'Final Plans and Specifications', 'Treatment Plant Upgrade to Meet WQBELs', 'Complete Construction', 'Achieve Compliance').</p> <p><b>STUDY OF FEASIBLE ALTERNATIVES</b> - If the Operational Evaluation Report concludes that the permittee cannot achieve final phosphorus WQBELs with source reduction measures, operational improvements and other minor facility modifications, the permittee shall initiate a study of feasible alternatives for meeting final phosphorus WQBELs and comply with the remaining required actions of this schedule of compliance. If the Department disagrees with the conclusion of the report, and determines that the permittee can achieve final phosphorus WQBELs using the existing treatment system with only source reduction measures, operational improvements, and minor facility modifications, the Department may reopen and modify the permit to include an implementation schedule for achieving the final phosphorus WQBELs sooner than July 1, 2034.</p>	07/01/2026
<b>Compliance Alternatives, Source Reduction, Improvements and Modifications Status:</b> The permittee shall submit a 'Compliance Alternatives, Source Reduction, Operational Improvements and Minor Facility Modification' status report to the Department. The report shall provide an update on the permittee's: (1) progress implementing source reduction measures, operational improvements,	07/01/2027

and minor facility modifications to optimize reductions in phosphorus discharges and, to the extent that such measures, improvements, and modifications will not enable compliance with the WQBELs, (2) status evaluating feasible alternatives for meeting phosphorus WQBELs.	
<p><b>Preliminary Compliance Alternatives Plan:</b> The permittee shall submit a preliminary compliance alternatives plan to the Department.</p> <p>If the plan concludes upgrading of the permittee's wastewater treatment facility is necessary to achieve final phosphorus WQBELs, the submittal shall include a preliminary engineering design report.</p> <p>If the plan concludes Adaptive Management will be used, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 without the Adaptive Management Plan.</p> <p>If water quality trading will be undertaken, the plan must state that trading will be pursued.</p>	07/01/2028
<p><b>Final Compliance Alternatives Plan:</b> The permittee shall submit a final compliance alternatives plan to the Department.</p> <p>If the plan concludes upgrading of the permittee's wastewater treatment is necessary to meet final phosphorus WQBELs, the submittal shall include a final engineering design report addressing the treatment plant upgrades, and a facility plan if required pursuant to ch. NR 110, Wis. Adm. Code.</p> <p>If the plan concludes Adaptive Management will be implemented, the submittal shall include a completed Watershed Adaptive Management Request Form 3200-139 and an engineering report addressing any treatment system upgrades necessary to meet interim limits pursuant to s. NR 217.18, Wis. Adm. Code.</p> <p>If the plan concludes water quality trading will be used, the submittal shall identify potential trading partners.</p> <p>Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	07/01/2029
<p><b>Progress Report on Plans &amp; Specifications:</b> Submit progress report regarding the progress of preparing final plans and specifications. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	07/01/2030
<p><b>Final Plans and Specifications:</b> Unless the permit has been modified, revoked and reissued, or reissued to include Adaptive Management or Water Quality Trading measures or to include a revised schedule based on factors in s. NR 217.17, Wis. Adm. Code, the permittee shall submit final construction plans to the Department for approval pursuant to s. 281.41, Stats., specifying treatment plant upgrades that must be constructed to achieve compliance with final phosphorus WQBELs, and a schedule for completing construction of the upgrades by the complete construction date specified below. (Note: Permit modification, revocation and reissuance, and reissuance are subject to s. 283.53(2), Stats.)</p> <p>Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	07/01/2031
<p><b>Treatment Plant Upgrade to Meet WQBELs:</b> The permittee shall initiate construction of the upgrades. The permittee shall obtain approval of the final construction plans and schedule from the Department pursuant to s. 281.41, Stats. Upon approval of the final construction plans and schedule by the Department pursuant to s. 281.41, Stats., the permittee shall construct the treatment plant upgrades in accordance with the approved plans and specifications. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.</p>	07/01/2032

<b>Construction Upgrade Progress Report #1:</b> The permittee shall submit a progress report on construction upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	01/31/2033
<b>Construction Upgrade Progress Report #2:</b> The permittee shall submit a progress report on construction upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	07/01/2033
<b>Complete Construction:</b> The permittee shall complete construction of wastewater treatment system upgrades. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	01/01/2034
<b>Achieve Compliance:</b> The permittee shall achieve compliance with final phosphorus WQBELs. Note: See 'Alternative Approaches to Phosphorus WQBEL Compliance' in the Surface Water section of this permit.	07/01/2034

### 6.3 Chloride Source Reduction Measures (SRMs) for Groundwater Discharges

Required Action	Due Date
<b>Chloride Reduction Plan:</b> The permittee shall complete and submit for Department review and approval a chloride reduction plan (CRP). The CRP is an initial step toward controlling chloride and ensuring compliance with chloride limits based on applicable groundwater standards. The CRP shall evaluate all applicable source reduction measures (SRMs) and establish appropriate implementation activities for the SRMs. The CRP shall include a schedule for implementing the selected SRMs.	02/28/2026
<b>Annual Progress Report:</b> Once the chloride reduction plan (CRP) is approved by the Department, the permittee shall submit an annual progress report, under the authority of s. NR 205.07(1)(h), Wis. Adm. Code. If a SRM implementation date of an approved CRP is not met, this may constitute a violation of the permit. Submittal of the first annual progress report is required by the Date Due.	02/28/2027
<b>Second Annual Progress Report:</b> Submit progress report in implementing the chloride reduction plan (CRP).	02/28/2028
<b>Third Annual Progress Report:</b> Submit progress report in implementing the chloride reduction plan (CRP).	02/28/2029
<b>Fourth Annual Progress Report:</b> Submit progress report in implementing the chloride reduction plan (CRP).	02/28/2030
<b>Annual Status Reports After Expiration:</b> In the event that this permit is not reissued on time, the permittee shall continue to submit annual status reports each year by February 28.	

### 6.4 Groundwater Monitoring Well - Installation

Required Action	Due Date
<b>Plans and Specifications:</b> Submit plans and specifications for installation of monitoring wells MW-10 (818) and MW-11 (819) to be installed.	02/28/2026

<b>Installation:</b> Complete well installation in accordance with ch NR 141, Wisconsin Administrative Code. ( Note: Documentation of well construction must be submitted to the Department within 60 days of well installation.)	07/01/2026
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## 7 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.

### 7.1 Reporting and Monitoring Requirements

#### 7.1.1 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.

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.

#### 7.1.2 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.

#### 7.1.3 Recording of Results

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

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

### **7.1.4 Reporting of Monitoring Results**

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating fees under ch. NR 101, Wis. Adm. Code, a reporting limit of 2.0 mg/L for 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.

### **7.1.5 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.

### **7.1.6 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.

### **7.1.7 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.

## **7.2 System Operating Requirements**

### 7.2.1 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.**

### 7.2.2 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.

### 7.2.3 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.

#### **7.2.4 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.

#### **7.2.5 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.

#### **7.2.6 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).

#### **7.2.7 Spill Reporting**

The permittee shall notify the Department in accordance with ch. NR 706 (formerly NR 158), Wis. Adm. Code, in the event that a spill or accidental release of any material or substance results in the discharge of pollutants to the waters of the state at a rate or concentration greater than the effluent limitations established in this permit, or the spill or accidental release of the material is unregulated in this permit, unless the spill or release of pollutants has been reported to the Department in accordance with s. NR 205.07 (1)(s), Wis. Adm. Code.

#### **7.2.8 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.

### 7.2.9 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.

## 7.3 Surface Water Requirements

### 7.3.1 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.

### 7.3.2 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.

### 7.3.3 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.

### 7.3.4 Visible Foam or Floating Solids

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

### 7.3.5 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:

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

### 7.3.6 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.

## 7.4 Land Treatment Requirements for Industrial Discharges

**NR 214, Wisconsin Administrative Code:** The requirements of this section are based on ss. NR 214.12-16, Wis. Adm. Code, and apply to wastewater discharges to designed and constructed absorption pond, ridge & furrow, spray irrigation, overland flow and subsurface absorption treatment systems.

### 7.4.1 Formulas for Land Treatment Calculations

The permittee shall use the following formulas for land treatment calculations, unless an alternate calculation method is approved by the Department in the Land Treatment Management Plan.

#### 7.4.1.1 Monthly Average Hydraulic Application Rate

Determine the monthly average hydraulic application rate (in gal/acre/day) for each outfall by calculating the total gallons of wastewater applied onto the site for the month, dividing that total by the number of wetted acres loaded during the month, and then dividing this resulting value by the number of days in the month. Enter this calculated monthly value on the Discharge Monitoring Report form in the box for the last day of the month, in the "Hydraulic Application Rate" column.

#### **7.4.1.2 Annual Total Nitrogen per Cell or per Zone**

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

#### **7.4.1.3 Annual Total Chloride per Cell or per Zone**

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

### **7.4.2 Land Treatment Annual Report**

Annual Land Treatment Reports are due by February 28<sup>th</sup> of each year for the previous calendar year.

### **7.4.3 Chloride Requirements for Land Treatment Systems**

Since chloride is not significantly treated by the soil, the chloride level of the wastewater treated on land shall be minimized to the extent that is technically and economically feasible. The goal is to protect groundwater quality and prevent exceedance of the 125 mg/L groundwater preventive action limit.

### **7.4.4 Nitrogen Loading Requirements for Spray Irrigation**

The total annual nitrogen loading (pounds/acre/year) to the wastewater spray irrigation acreage shall not exceed the limitation contained in the land treatment annual report table of this permit. Determination of the annual pounds of nitrogen applied to the land treatment system shall include the nitrogen supplied by the wastewater, organic nitrogen becoming available to plants and any supplemental fertilizers used. The Department may approve (in writing) an alternative nitrogen loading limit in a spray irrigation management plan based on the annual nitrogen needs of the cover crop and the permittee's demonstration of nitrogen losses for the site as specified in s. NR 214.14(3)(c), Wis. Adm. Code.

### **7.4.5 Ponding**

The intensity of wastewater spray shall be limited to prevent ponding, except for temporary conditions following rainfall events.

### **7.4.6 Runoff**

The volume of wastewater sprayed shall be limited to prevent runoff of any wastewater mixed with rainwater as specified in s. NR 214.14(3)(f), Wis. Adm. Code. If wastewater runoff occurs, spray irrigation shall cease immediately.

### **7.4.7 Seasonal Irrigation Restriction**

Discharge to the spray irrigation field shall occur only between April 1 and October 31 each year, unless otherwise specified in the approved Land Treatment Management Plan.

### **7.4.8 Irrigation Management Plan**

The spray irrigation treatment system shall be operated and managed in accordance with a Department approved management plan. The management plan shall be consistent with the conditions listed in this permit and s. NR 214.14(5), Wis. Adm. Code, which requires a load/rest cycle, cover crop removal, annual soil testing, etc. If operational changes are needed, the management plan shall be amended and such plan shall be submitted to the Department for approval prior to implementing such changes.

## **7.5 Groundwater Standard Requirements**

### **7.5.1 Application of NR 140 to Substances Discharged**

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

### **7.5.2 Groundwater Sampling**

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

### **7.5.3 Indicator Parameter Preventive Action Limits and Alternative Concentration Limits**

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

### **7.5.4 Groundwater Monitoring Forms**

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

### **7.5.5 Notification of Attaining or Exceeding Groundwater Quality Standards**

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

### **7.5.6 Preventive Action Limit (PAL) Exceedance**

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

### **7.5.7 Enforcement Standard (ES) Exceedance Within the Design Management Zone**

Substance concentrations greater than this permit's ES in a permittee's monitoring well located within the property boundary and within the design management zone of the land treatment system may indicate that the groundwater concentration exceeds an ES outside of these boundaries. If the Department determines there is reasonable evidence

that an ES is being attained or exceeded beyond the property boundary or beyond the design management zone, the Department may request an evaluation and response or propose a permit modification to require an evaluation report and appropriate response as specified in s. NR 140.24, Wis. Adm. Code, per s. NR 140.27, Wis. Adm. Code.

### 7.5.8 Enforcement Standard Exceedance Outside the Design Management Zone

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

### 7.5.9 New Monitoring Wells Installed During the Current Permit-Term

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

## 7.6 Land Application Requirements

### 7.6.1 General Sludge Management Information

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

### 7.6.2 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.

### 7.6.3 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.

#### 7.6.4 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.

#### 7.6.5 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.

#### 7.6.6 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.

#### 7.6.7 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:

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

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

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

### 7.6.9 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.

### 7.6.10 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.

### 7.6.11 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.

### 7.6.12 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.

### **7.6.13 By-Product Storage Sites**

All sites used for storage of by-product solids shall be located such that surface water or groundwater pollution does not occur. Written Department approval is required prior to storage of more than 150 tons of by-product solids on a site at any one time.

### **7.6.14 Annual Inspections-Stacking Pads and Leachate Containment**

Stacking pads for more than 1200 tons of silage and all leachate containment facilities shall be inspected annually for cracks and shall be repaired as necessary to prevent leakage from the containment system. The inspection reports shall be available for inspection by Department personnel for a period of three years, and shall include at a minimum the following information:

- date and name of person(s) performing the inspection
- description of what the inspection consisted of
- details of what was discovered during the inspection
- recommendations for repair or maintenance
- details or repair completed

### **7.6.15 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.

## 8 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Treatment Management Plan -Land Treatment Management Plan	December 1, 2025	18
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Operational Evaluation Report	July 1, 2026	18
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Compliance Alternatives, Source Reduction, Improvements and Modifications Status	July 1, 2027	19
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Preliminary Compliance Alternatives Plan	July 1, 2028	19
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Final Compliance Alternatives Plan	July 1, 2029	19
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Progress Report on Plans & Specifications	July 1, 2030	19
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Final Plans and Specifications	July 1, 2031	19
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Treatment Plant Upgrade to Meet WQBELs	July 1, 2032	19
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Construction Upgrade Progress Report #1	January 31, 2033	20
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Construction Upgrade Progress Report #2	July 1, 2033	20
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Complete Construction	January 1, 2034	20
Water Quality Based Effluent Limits (WQBELs) for Total Phosphorus - Achieve Compliance	July 1, 2034	20
Chloride Source Reduction Measures (SRMs) for Groundwater Discharges - Chloride Reduction Plan	February 28, 2026	20
Chloride Source Reduction Measures (SRMs) for Groundwater Discharges - Annual Progress Report	February 28, 2027	20
Chloride Source Reduction Measures (SRMs) for Groundwater Discharges - Second Annual Progress Report	February 28, 2028	20
Chloride Source Reduction Measures (SRMs) for Groundwater Discharges - Third Annual Progress Report	February 28, 2029	20
Chloride Source Reduction Measures (SRMs) for Groundwater Discharges - Fourth Annual Progress Report	February 28, 2030	20
Chloride Source Reduction Measures (SRMs) for Groundwater Discharges - Annual Status Reports After Expiration	See Permit	20
Groundwater Monitoring Well - Installation -Plans and Specifications	February 28, 2026	20
Groundwater Monitoring Well - Installation -Installation	July 1, 2026	21

General Sludge Management Form 3400-48	prior to any significant sludge management changes	30
Characteristic Report Form 3400-49	no later than the date indicated on the form	30
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	30
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	31
Groundwater Monitoring Form	no later than the date indicated on the form	29
Annual Land Treatment Reports	by February 28th of each year for the previous calendar year	28
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	22

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:  
Southeast Region - Plymouth, 1155 Pilgrim Rd, Plymouth, WI 53073