WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

Del Monte Foods, Inc.

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at
1400 Plover Rd., Plover, WI
to
the groundwaters of Fourmile Creek, Fivemile Creek, and Little Plover River drainage basins in the Southern Sub-basin of the Upper Wisconsin River Watershed located in Portage County

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

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

State of Wisconsin Department of Natural Resources
For the Secretary

By _____
Geisa Bittencourt
Wastewater Field Supervisor

_____
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - October 01, 2025 **EXPIRATION DATE - September 30, 2030**

TABLE OF CONTENTS

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	Representative samples of the mixed canning process wastewater after the storage tank/pump reservoir. The wastewater will be used for land treatment through irrigation at outfalls 001, 007, 008 or 010 for recycling of the water and nutrients into the cover crop.

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**
Flow Rate		MGD	Daily	Total Daily	
Chloride		mg/L	2/Month	Composite	
Nitrogen, Nitrite + Nitrate Total		mg/L	2/Month	Composite	
Nitrogen, Total Kjeldahl		mg/L	2/Month	Composite	
Nitrogen, Total		mg/L	2/Month	Composite	

2 Land Treatment 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 Description/Sample Contents and Treatment Description (as applicable)**
001	Vegetable canning process wastewater discharge to the 125 acre full pivot system located south of the factory and County Highway B.
003	Representative samples shall be collected prior to discharging to lawn and buffer sprinkler system. Discharge is limited to can cooling water and non-contact cooling water.
007	Vegetable canning process wastewater discharge to the 49 acre 1/2 Pivot system located south of the factory and County Highway B.
008	Vegetable canning process wastewater discharged to the 112.6 acre full pivot system located north of the factory buildings and west of County Highway R.
009	Representative samples shall be collected prior to discharging to clear water infiltration system located west of Cty Road R and north of the factory. Discharge is limited to can cooling water and non-contact cooling water.
010	Vegetable canning process wastewater and cooling water discharged via spray irrigation to the new spray field located north of the 112.6 acre spray field (Outfall 008).

2.2 Monitoring Requirements and Limitations

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

2.2.1 Sampling Point (Outfall) 001 - 125 ACRE CTR PIVOT SYSTEM; 007- 49 ACRE PARTIAL PIVOT SYSTEM; 008- 112.6 ACRE CTR PIVOT SYSTEM, and 010- NEW SPRAY IRRIGATION FIELD, Spray Irrigation

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	
Hydraulic Application Rate	Monthly Avg	9,000 gal/ac/day	Monthly	Calculated	This limitation applies May - Nov of each year.
Hydraulic Application Rate	Monthly Avg	4,500 gal/ac/day	Monthly	Calculated	This limitation applies Dec of each year.
Hydraulic Application Rate	Monthly Avg	0 gal/ac/day	Monthly	Calculated	This limitation applies Jan - April of each year.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Nitrogen, Max Applied On Any Zone	Annual Total	350 lbs/ac/yr	Annual	Total Annual	
Chloride, Max Applied to Any Zone		lbs/ac/yr	Annual	Total Annual	
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	
Fertilizer Used		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	0.65	Inches/Load Cycle	Daily	Calculated

2.2.1.1 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.

2.2.1.2 Irrigation Months

Discharge to the spray irrigation sites shall occur only between May 1 to November 30, except the Department may approve (in writing) spray irrigation in December during unusually warm weather that would allow the wastewater to seep into the ground and be absorbed by the cover crop. During the discharge period, application of wastewater shall not occur on saturated, frozen or snow covered soil where these conditions result in wastewater ponding or runoff.

2.2.1.3 Annual Site Nitrogen Loading

The total annual nitrogen loading (pounds/acre/year) to the wastewater irrigation acreage shall not exceed these limitations, except that the Department may approve (in writing) an alternate 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.

2.2.1.4 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.

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

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

2.2.1.5 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.

2.2.2 Sampling Point (Outfall) 003 - PRIOR TO LAWN SPRINKLER and 009- PRIOR TO COOLING WATER SEEPAGE, Other

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		MGD	Daily	Total Daily	

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**
Start to End Time	-	Date, Hour	Daily	Log
Wastewater Loading Volume	-	Gallons	Daily	Log

3 Groundwater Requirements

3.1 Monitoring Requirements and Limitations

3.1.1 Groundwater Monitoring System for 125 Acre Center Pivot Spray Irrigation (001)

Location of Monitoring System: Area Surrounding Land Treatment Outfall 001, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover.
Groundwater Monitoring Well(s) to be Sampled: 809 (W2B-R(PIEZ)), 812 (W4B-R), 814 (W2AR), 815 (W4AR-R)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 812 (W4B-R)

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: None

"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	N/A	N/A	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.8	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.5	N/A	Quarterly
Solids, Total Dissolved	mg/L	640	N/A	Quarterly

3.1.1.1 Preventive Action Limits for pH

A result for pH is considered to have exceeded the pH PAL for this site if the result is less than 6.8 s.u. or greater than 8.8 s.u.

3.1.1.2 Preventive Action Limits for Indicator Parameters

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

3.1.2 Groundwater Monitoring System for 49 Acre Spray Irrigation Field (007)

Location of Monitoring System: Area Surrounding Land Treatment Outfall 007, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover

Groundwater Monitoring Well(s) to be Sampled: 827 (W17), 828 (W18), 829 (W19A), 830 (W19B)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 827 (W17)

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: None

"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	2.0	10	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
pH Field	su	8.9	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Nitrogen, Organic Dissolved	mg/L	2.8	N/A	Quarterly
Solids, Total Dissolved	mg/L	550	N/A	Quarterly

3.1.2.1 Preventive Action Limits for pH

A result for pH is considered to have exceeded the pH PAL for this site if the result is less than 6.9 s.u. or greater than 8.9 s.u.

3.1.2.2 Preventive Action Limits for Indicator Parameters

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

3.1.3 Groundwater Monitoring System for 112 Acre Full Pivot Spray Irrigation (008)

Location of Monitoring System: Area Surrounding Land Treatment Outfall 008, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover

Groundwater Monitoring Well(s) to be Sampled: 833 (W21), 834 (W22), 835 (W23)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 835 (W23)

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: None

"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	4.7	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	2.7	N/A	Quarterly
Solids, Total Dissolved	mg/L	430	N/A	Quarterly

3.1.3.1 Exemptions and Alternative Concentration Limit

An alternative concentration limit (ACL) of 4.7 mg/L has been established for the nitrite + nitrate nitrogen preventative action limit at this site. This ACL is authorized in conjunction with an exemption granted under s. NR 140.28, Wis. Adm. Code.

3.1.3.2 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.

3.1.3.3 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.

3.1.4 Groundwater Monitoring System for 36 Acre Full Pivot Spray Irrigation (010)

Location of Monitoring System: Area Surrounding Land Treatment Outfall 010, E ½ of Section 23, T23N, R8E and E ½ of Section 26, T23N E8E, Town of Plover.

Groundwater Monitoring Well(s) to be Sampled: 836 (W-24), 837 (W-25)

Groundwater Monitoring Well(s) Used to Evaluate Background Groundwater Quality: 837 (W-25)

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: None

"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	4.7	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	2.7	N/A	Quarterly
Solids, Total Dissolved	mg/L	430	N/A	Quarterly

3.1.4.1 Exemptions and Alternative Concentration Limit

An alternative concentration limit (ACL) of 4.7 mg/L has been established for the nitrite + nitrate nitrogen preventative action limit at this site. This ACL is authorized in conjunction with an exemption granted under s. NR 140.28, Wis. Adm. Code. This ACL is authorized in conjunction with an exemption granted under s. NR 140.28, Wis. Adm. Code.

3.1.4.2 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.

3.1.4.3 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 Land Application Requirements

4.1 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)**
005	Representative samples shall be collected in a time and a manner that will yield the most representative samples. Discharge is limited to vegetable by-product solids from processing green beans, wax beans, Italian beans, potatoes, beets and carrots. Records of by-product daily spreading amounts, site acres used, test results, and calendar year nitrogen and chloride pounds/acre loadings shall be maintained on site for at least three years.
011	Representative samples shall be collected in a time and a manner that will yield the most representative samples. Discharge is limited to vegetable processing wastewaters from processing by-product solids from green beans, wax beans, Italian beans, potatoes, beets and carrots. Records of wastewater daily spreading amounts, site acres used, test results, and calendar year nitrogen and chloride pounds/acre loadings shall be maintained on site for at least three years.

4.2 Monitoring Requirements and Limitations

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

4.2.1 Sampling Point (Outfall) 005 - VEGETABLE BY-PRODUCT SOLIDS

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

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 31st 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
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

4.2.1.1 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.

4.2.1.2 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.

4.2.1.3 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.

4.2.2 Sampling Point (Outfall) 011 - LIQUID WASTE LANDSPREADING

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

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
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

Annual Report – Summary of Monitoring Requirements and Limitations
The Annual Report is due by January 31st 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

Annual Report – Summary of Monitoring Requirements and Limitations The Annual Report is due by January 31st 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**
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

4.2.2.1 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.

4.2.2.2 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 Schedules

5.1 Land Treatment Management Plan

A management plan is required for the land treatment system.

Required Action	Due Date
Land Treatment Management Plan: Submit an updated management plan to optimize the land treatment system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. The management plan shall be consistent with the requirements of this permit, and NR 214.14 Wis. Adm. Code. To ensure this consistency, the management plan shall address the information identified in NR 214.14. The plan shall specify information on pretreatment processes, load and rest schedules, scheduled maintenance, vegetative cover control and removal, operational strategies for periods of adverse weather, monitoring procedures and any other pertinent information. If operational changes are needed, the Land Treatment Management Plan shall be amended by submitting a written request to the Department for approval of such amendments.	12/31/2025

5.2 Groundwater Monitoring Well Abandonment/Inspection

Required Action	Due Date
Abandonment or Annual Inspection: Groundwater monitoring wells 810, 811 and 813 shall either be abandoned or annually inspected in accordance with s. NR 141.25, Wis. Adm Code. The permittee shall notify the department by the due date of their intended direction for these wells.	10/31/2025
Abandonment of Wells 810, 811 and 813: If the permittee decides that abandonment is the chosen method to address groundwater monitoring wells 810, 811 and 813, the wells shall be abandoned in accordance with s. NR 141.25 Wis. Adm. Code by the due date and documentation of the well abandonment must be submitted to the Department within 60 days of the well abandonment.	12/31/2025
Annual Inspection of Wells 810, 811 and 813: If the permittee decides to forgo abandonment of groundwater monitoring wells 810, 811 & 813, and instead chooses to annually inspect the wells in accordance with s. NR 141.25 Wis. Adm. Code, the permittee shall submit an annual report detailing the inspection and its findings. The first report is due by the due date and annually on December 31 of subsequent years. In the event this permit is not reissued by the expiration date, the permittee shall continue to submit annual well inspection reports by December 31 each year.	12/31/2025

5.3 Nitrite + Nitrate Investigation and Report

Required Action	Due Date
Investigation & Nitrite + Nitrate Reduction: The permittee shall investigate potential nitrite + nitrate nitrogen concentration reduction possibilities in the groundwater. A report shall be submitted to the department by the due date listing potential reduction activities and the feasibility of	09/30/2026

implementation. Possibilities could include, but are not limited to, reduction of nitrite + nitrate in the effluent and optimization of the facility's load and rest cycles. Also included in the report shall be potential sources of the high levels of nitrite + nitrate in groundwater monitoring wells 812 & 815.	
Submit Annual NO2 + NO3 Reduction Progress Report #1: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2027
Submit Annual NO2 + NO3 Reduction Progress Report #3: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2028
Submit Annual NO2 + NO3 Reduction Progress Report #3: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2029
Submit Annual NO2 + NO3 Reduction Progress Report #4: Submit a report outlining actions taken in the previous year to reduce nitrite + nitrate concentrations in the groundwater.	09/30/2030

5.4 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan: Submit a management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214. The plan shall specify information on pretreatment processes, site identification on plat and soil maps, aerial photographs, if available, description of all site limitations, vegetative cover management and removal, availability of storage, type of transporting and spreading vehicle, load and rest schedules, monitoring procedures, contingency plans for periods of adverse weather or odor or nuisance abatement and any other pertinent information. If operational changes are needed, the Land Application Management Plan shall be amended by submitting a written request to the Department for approval of such amendments.	12/31/2025

6 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.

6.1 Reporting and Monitoring Requirements

6.1.1 Monitoring Results

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

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

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

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

6.1.2 Sampling and Testing Procedures

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

6.1.3 Recording of Results

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

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

6.1.4 Reporting of Monitoring Results

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating fees under ch. NR 101, Wis. Adm. Code, a reporting limit of 2.0 mg/L for BOD_5 and 2.5 mg/L Total Suspended Solids shall be considered to be limits of quantitation.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as "0" (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, "0" would be reported for any day during the month that no discharge occurred.

6.1.5 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.

6.1.6 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.

6.1.7 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.

6.2 System Operating Requirements

6.2.1 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.**

6.2.2 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.

6.2.3 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.

6.2.4 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.

6.2.5 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.

6.2.6 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).

6.2.7 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.

6.2.8 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.

6.2.9 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.

6.3 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.

6.3.1 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.

6.3.1.1 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.

6.3.1.2 Annual Total Nitrogen per Cell or per Zone

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

6.3.1.3 Annual Total Chloride per Cell or per Zone

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

6.3.2 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.

6.3.3 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 monitoring requirements and limitations for that sampling point. 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.

6.3.4 Ponding

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

6.3.5 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.

6.3.6 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.

6.3.7 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.

6.3.8 Nitrogen Loading Requirements for Absorption Ponds

Since all forms of nitrogen in wastewater can be converted to nitrate nitrogen in the groundwater in the vicinity of an absorption pond, the average concentration of the sum of all nitrogen species in the absorption pond discharge shall be limited to minimize the concentration of nitrate+nitrite nitrogen in the groundwater to the extent that is technically and economically feasible and will prevent exceedance of the 2 mg/L groundwater preventive action limit.

6.3.9 Absorption Pond Discharge Restrictions

The volume of discharge to the absorption pond system shall be limited so that the discharge volume combined with the precipitation from a 10-year frequency, 24-hour duration rainfall event does not reduce the available freeboard to less than 1 foot below the top of the dike.

6.3.10 Discharges to the Absorption Pond System

No discharge to the absorption pond system may have physical or chemical characteristics which prevent the proper operation of the system.

6.3.11 Absorption Pond Management Plan

The absorption pond 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 214.12(5), Wis. Adm. Code which requires a load/rest schedule, weed control and removal, etc. If operational changes are needed, the management plan shall be amended by submitting a written request to the Department for approval.

6.4 Groundwater Standard Requirements

6.4.1 Application of NR 140 to Substances Discharged

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

6.4.2 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).

6.4.3 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 "Calculating Preventive Action Limits and Evaluating Groundwater Quality Exemptions for Groundwater Discharges (3400-2024-04).

6.4.4 Groundwater Monitoring Forms

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

6.4.5 Notification of Attaining or Exceeding Groundwater Quality Standards

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

6.4.6 Preventive Action Limit (PAL) Exceedance

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

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

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

6.4.8 Enforcement Standard Exceedance Outside the Design Management Zone

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

6.4.9 New Monitoring Wells Installed During the Current Permit-Term

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

6.5 Land Application Requirements

6.5.1 General Sludge Management Information

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

6.5.2 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.

6.5.3 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.

6.5.4 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.

6.5.5 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.

6.5.6 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.

6.5.7 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:

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

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

6.5.8 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"):

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

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

6.5.9 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.

6.5.10 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.

6.5.11 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.

6.5.12 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.

6.5.13 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.

6.5.14 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

6.5.15 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.

7 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Treatment Management Plan -Land Treatment Management Plan	December 31, 2025	13
Groundwater Monitoring Well Abandonment/Inspection -Abandonment or Annual Inspection	October 31, 2025	13
Groundwater Monitoring Well Abandonment/Inspection -Abandonment of Wells 810, 811 and 813	December 31, 2025	13
Groundwater Monitoring Well Abandonment/Inspection -Annual Inspection of Wells 810, 811 and 813	December 31, 2025	13
Nitrite + Nitrate Investigation and Report -Investigation & Nitrite + Nitrate Reduction	September 30, 2026	14
Nitrite + Nitrate Investigation and Report -Submit Annual NO2 + NO3 Reduction Progress Report #1	September 30, 2027	14
Nitrite + Nitrate Investigation and Report -Submit Annual NO2 + NO3 Reduction Progress Report #3	September 30, 2028	14
Nitrite + Nitrate Investigation and Report -Submit Annual NO2 + NO3 Reduction Progress Report #3	September 30, 2029	14
Nitrite + Nitrate Investigation and Report -Submit Annual NO2 + NO3 Reduction Progress Report #4	September 30, 2030	14
Land Application Management Plan -Land Application Management Plan	December 31, 2025	14
General Sludge Management Form 3400-48	prior to any significant sludge management changes	22
Characteristic Report Form 3400-49	no later than the date indicated on the form	22
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	22
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	23
Groundwater Monitoring Form	no later than the date indicated on the form	21
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	15

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: West Central Region, 1300 W. Clairemont Ave, Eau Claire, WI 54701.