



WPDES PERMIT

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

NLC Energy Denmark LLC

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

6601 County Rd R, Denmark, WI
to

**unnamed tributaries to the Neshota River, in the West Twin River Watershed, in the Twin-Door-Kewaunee
Basin, and groundwaters of the State via land application on 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 _____
Heidi Schmitt Marquez
Wastewater Field Supervisor

Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - January 01, 2024

EXPIRATION DATE - December 31, 2028

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1 Influent Requirements

1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
701	American Foods Group (Green Bay) - Packing Plant: Paunch manure and pretreatment sludge discharged to the NLC Energy Denmark digester 1.
702	Johnsonville Sausage (Sheboygan) - Meat Processor: Lime slurry and spent liquid smoke product discharged to the NLC Energy Denmark digester 1.
703	Bradley Trucking (Denmark) - Cattle truck washwater from pit to the NLC Energy Denmark digester 1.
704	Agropur Inc (Luxemburg) - Dairy: High strength cooker water/permeate and emergency untreated process water discharged to the NLC Energy Denmark digester 1.
705	JBS Green Bay Inc (Green Bay) - Meat Packing Plant: Paunch manure, liquid leachate ("Green Water") and wastewater sludge discharged to the NLC Energy Denmark digester 1.
706	Sandy Bay Mink Ranch (Mishicot) - Mink Farm: Paunch manure and blood from the mink slaughter operation discharged to the NLC Energy Denmark digester 1.
707	Sanimax Corporation (Green Bay) - Rendering Plant: Dissolved Air Flotation thickener waste from the wastewater treatment plant and non-renderable organics discharged to the NLC Energy Denmark digester 1.
708	Bay Valley Foods (Green Bay) - Food Processor: Vegetable waste (pickles and banana peppers) discharged to the NLC Energy Denmark digester 1.
709	Agropur Inc (Little Chute) - Dairy: Waste Activated Dissolved Air Flotation thickener sludge discharged to the NLC Energy Denmark digester 1.
710	Sensient Flavors (Juneau) - Food Processors: Yeast extracts and other by-product solid waste generated from yeast extraction process discharged to the NLC Energy Denmark digester 1.
711	Salm Partners LLC (Denmark) - Secondary Meat Processors: Grease trap waste from washdown process and production areas contains FOG and some solids discharged to the NLC Energy Denmark digester 1.
712	SC Johnson (Racine) - Process wash water: Wash water waste from washdown process and production areas of shaving gel production discharged to the NLC Energy Denmark digester 1.
713	Galloway Company (Neenah) - Dairy: Cream product waste discharged to the NLC Energy Denmark digester 1.
714	Mars Petcare (Mattoon, IL) - Pet food plant: Meat based pet food additive wastes discharged to the NLC Energy Denmark digester 1.
715	Sanimax Corporation (DeForest) - Rendering Plant: Washdown water and FOGs from cooking operations discharged to the NLC Energy Denmark digester 1.
716	Foremost Farms (Appleton) - Dairy: 40% whey permeate remaining after cheese making discharged to the NLC Energy Denmark digester 1.
717	Bay Valley Foods (Green Bay) - Pickling Brine: sweet brine water comprised of vinegar, sugar, and salt discharged to the NLC Energy Denmark digester 1.
718	Sanimax Corporation (DeForest) - Rendering Plant: Grease stick water (mid level float) discharged to the NLC Energy Denmark digester 1.
719	Northstar Recycling (Longmeadow, MA) - Recycling Entity for Mars Chocolate of North America: Confectionary wastes from overproduction or expired product discharged to the NLC Energy Denmark digester 1.
720	Clasen Quality Chocolate (Watertown) - Chocolate Producer: Chocolate and related ingredients not suitable for production discharged to the NLC Energy Denmark digester 1.

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
721	GLK Foods (Bear Creek) - Vegetable Processor: Waste (excess or off spec solid) sauerkraut discharged to the NLC Energy Denmark digester 1.
723	Sturm Foods (Manawa) - Food & Beverage Co.: Dry bulk food waste and material from dust collection system discharged to the NLC Energy Denmark digester 1.
724	Cargill, Inc. (West Fargo, ND) - Ag Business: Fats, Oils, and Greases from edible oil seed processing plant discharged to the NLC Energy Denmark digester 1.
725	D.R. Diedrich (Milwaukee) - Tannery: Lime fleshings from hide tanning process discharged to the NLC Energy Denmark digester 1.
727	McCain Foods USA, Inc. (Appleton, WI) - Food Processor: food waste (cheese, batter/breading, vegetables) discharged to the NLC Energy Denmark digester 1.
728	Clasen Quality Chocolate (Middleton) - Chocolate Producer: Chocolate and related ingredients not suitable for production discharged to the NLC Energy Denmark digester 1.
729	Chamness Technology Inc. (Blairsville, IA) - Dry Pet Food: Off-spec product, over runs, line clean outs, floor sweepings, and expired product discharged to the NLC Energy Denmark digester 1.
730	Chamness Technology Inc. (Blairsville, IA) - Molasses: Off-spec product, over runs, line clean outs, floor sweepings, and expired product discharged to the NLC Energy Denmark digester 1.
731	Emmi Roth (Seymour) - Cheese processing plant: Whey cream generated from curd and whey processing discharged to the NLC Energy Denmark digester 1.
732	Kalle USA (Gurnee, IL), a client of Certified Environmental Solutions (Brookfield, WI) - By-product gelatin from casings that cover meat products discharged to the NLC Energy Denmark digester 1.
733	Horseshoe Beverage (Neenah, WI) - off-spec dairy blend (includes milk, whey creams, ultra-filtered skim milk, and 'dairy base' ingredients for lattes that do meet specifications) discharged to the NLC Energy Denmark digester 1.
801	Liquid manure from WPDES (CAFO) permitted farms, discharged to the NLC Energy Denmark digester 2A, 2B and/or 3, dedicated to manure processing.
802	Liquid manure from farms without WPDES permits (non-CAFO), discharged to the NLC Energy Denmark digester 2A, 2B and/or 3, dedicated to manure processing.

1.2 Monitoring Requirements

The permittee shall comply with the following monitoring requirements.

1.2.1 Sampling Point 701 - American Foods Group; 702- Johnsonville Sausage; 703- Bradley Trucking; 704- Agropur Inc Luxemburg; 705- JBS Green Bay; 706- Sandy Bay Mink Ranch; 707- Sanimax; 708- Bay Valley Foods; 709- Agropur Inc Little Chute; 710- Sensient Flavors; 711- Salms Partners LLC; 712- SC Johnson; 713- Galloway Company; 714- Mars Petcare; 715- Sanimax Grease; 716- Foremost Farms; 717- Bay Valley Foods; 718- Sanimax Grease Stick Water; 719- Northstar Recycling; 720- Clasen Quality Chocolate; 721- GLK Foods; 723- Sturm Foods Inc.; 724- Cargill, Inc.; 725- D.R. Diedrich & Co Ltd; 727- McCain Foods USA; 728- Clasen Middleton; 729- Chamness Pet Food; 730- Chamness Molasses; 731- Emmi Roth; 732- Kalle USA; 733- Horseshoe Beverage

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Volume		gpd	Daily	Measure	The volume for each sample point shall be monitored & reported separately on the Discharge Monitoring Report.
Solids, Total		Percent	Annual	Grab	
COD		mg/kg	Annual	Grab	Shall be reported on a dry weight basis.
pH Field		su	Annual	Grab	
Nitrogen, Total Kjeldahl		mg/kg	Annual	Grab	Shall be reported on a dry weight basis.
Nitrogen, Ammonia (NH ₃ -N) Total		mg/kg	Annual	Grab	Shall be reported on a dry weight basis.
Chloride		mg/kg	Annual	Grab	Shall be reported on a dry weight basis.
Phosphorus, Total		mg/kg	Annual	Grab	Shall be reported on a dry weight basis.
Potassium, Total Recoverable		mg/kg	Annual	Grab	Shall be reported on a dry weight basis.

1.2.1.1 Volume Monitoring

Volume monitoring is only required on days when wastes from a sampling point are discharged into the digester.

1.2.1.2 Monitoring Requirements – Discharge to Digester

The permittee shall maintain a daily log of the volume of waste material received for each sampling point. The log shall include a record of the client's name, the type of waste, the volume and any characterization of the waste, and the date of addition. For each truck load received from a new waste generator that does not have an established contract with the permittee, the permittee shall obtain from its client a written verification of the waste type and maintain this as part of the records. If an independent trucking company is transporting the waste to the permittee's facility, the name of the trucking company must also be recorded. When a truckload contains more than one type of waste, the volume of each waste shall be noted.

1.2.1.3 New Waste Stream Requirements

For each new waste material that has not been identified in the permit application, the permittee shall provide to the Department the information required in this subsection to identify the source and characteristics of the new waste material. The permittee shall not accept, handle, discharge to the digester or land apply any new waste material until Department approval has been granted.

The permittee may not accept, handle, or discharge municipal bio-solids under this permit unless the permit specifically authorizes discharge of this material. If this permit does not specifically contain such authorization, the permittee shall submit an application for modification of this permit requesting such authorization. The permittee may not accept this material until the permit is modified in accordance with the procedures in NR 203, Wis. Adm. Code.

The following shall be submitted to characterize each new waste material and source that has not been identified in the permit application.

1. The name, address, and contact person for each new client, customer or generator. If an independent trucking company is transporting waste material to the permittee's facility, the name of this company must also be submitted.
2. The type of waste material (e.g., treatment plant sludge, dairy permeate, off-spec or dated product, etc.) and industrial category (including SIC code, if applicable).
3. A detailed description of the industrial process or treatment system from which each individual waste material originates, regardless of the volume of the material.
4. MSDS sheets for any specific chemicals that could be present in their original state in the waste material.
5. For each client, customer or generator, the annual volume of each waste material type anticipated to be received, the expected frequency received, volume per receipt event, and period of the year it will be received.
6. A description of the manner in which each waste material from each client, customer or waste generator will be processed and discharged under this permit, including if the waste is applied directly on land under this permit or if it is co-mingled with other wastes in a storage facility(s).
7. Laboratory analyses (from a certified or registered laboratory) shall be performed to characterize the chemical composition of the material. An analysis shall be performed on every waste material from each waste generator for the following:

COD, pH, TKN, Organic Nitrogen, Ammonia Nitrogen, Total Phosphorus, Chloride, Potassium. Include 'Total Solids' for sludge and other solid or semi-solid material.

Where it is believed that waste material may contain any of the substances shown immediately below or listed in Attachment 1 of this permit analyses shall be submitted for those substances.

Arsenic, Cadmium, Copper, Fecal Coliform, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc

In addition, if any waste material is received from a Primary Industry listed in Attachment 2 of this permit the results of a pollutant scan of that waste material for the applicable pollutant group shown in Attachment 2 shall be submitted. Analytical results shall be provided on a wet weight basis for liquid wastes and on a dry weight basis for sludge and other solid or semi-solid material.

8. Information that demonstrates that the land application of the waste material or the mixture of waste materials from a storage or treatment unit will be beneficial as a source of nutrients or a soil amendment or conditioner and not be detrimental to soils, crops or groundwater.
9. Verification that the new waste is not hazardous under NR 518.

Based on the information provided, the Department may request additional information on the quality or content of the material being proposed for digestion or land application under this permit.

1.2.1.4 New Food Processing Wastes

The permittee may accept and treat and thereafter land apply new food processing wastes without Department pre-approval if the wastes are not hazardous as defined in Chapter NR 214. Immediately prior to discharge of any food processing wastes into the digester, the permittee shall take a representative sample of the material. The sample shall be analyzed in accordance with the terms of this section and the analysis of the new material shall be submitted to the Department within 30 days from the date the sample was taken. If the food processing waste is not approved by the Department in accordance with ch. NR 214 the material may not be digested or land applied again under this permit.

For the purposes of this section, food processing wastes means wastes associated with processing grains, dairy, fruits, vegetables, sugars, meats (except slaughtering), food flavorings and beverages. **Food processing wastes does not include any waste associated with ethanol production. The permittee shall obtain Department pre-approval for any new food processing waste that will be directly land applied under this permit.**

Prior to initiating land application of any new waste material, the permittee shall submit and obtain Department approval of an amended management plan. The Department's approval of the amended management plan may designate an outfall number for the land application of the waste material and require additional monitoring to reflect the characteristics of the material.

ATTACHMENTS 1 AND 2

ATTACHMENT 1

TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES TO BE IDENTIFIED (if Believed Present)

Asbestos	Dimethyl amine	Nitrotoluene
Acetaldehyde	Dinitrobenzene	Parathion
Allyl alcohol	Diquat	Phenolsulfonate
Allyl chloride	Disulfoton	Phosgene
Amyl acetate	Diuron	Propargite
Aniline	Epichlorohydrin	Propylene oxide
Benzonitrile	Ethion	Pyrethrins
Benzyl chloride	Ethylene diamine	Quinoline
Butyl acetate	Ethylene dibromide	Resorcinol
Butylamine	Formaldehyde	Strontium
Captan	Furfural	Strychnine
Carbaryl	Guthion	Styrene
Carbofuran	Isoprene	2,4,5-T (2,4,5-Trichloro- phenoxy acetic acid)
Carbon disulfide	Isopropanolamine	TDE (Tetrachloro- Diphenylethane)
Chlorpyrifos	Dodecylbenzenesulfonate	2,4,5-TP [2-(2,4,5-Trichloro- phenoxy) propanoic acid]
Coumaphos	Kelthane	Trichlorofan
Cresol	Kepone	Triethanolamine dodecyl- Benzenesulfonate
Crotonaldehyde	Malathion	Triethylamine
Cyclohexane	Mercaptodimethur	Trimethylamine
2,4-D (2,4-Dichlorophenoxy acetic acid)	Methoxychlor	Uranium
Diazinon	Methyl mercaptan	Vanadium
Dicamba	Methyl methacrylate	Vinyl acetate
Dichlobenil	Methyl parathion	Xylene
Dichlone	Mevinphos	Xylenol
2,2-Dichloropropionic acid	Mexacarbate	Zirconium
Dichlorvos	Monoethyl amine	
Diethyl amine	Monomethyl amine	
	Naled	
	Napthenic acid	

ATTACHMENT 2

PRIMARY INDUSTRIES AND POLLUTANT GROUPS REQUIRING TESTING

INDUSTRIAL CATEGORY	POLLUTANT GROUPS			
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Dioxins and Furans
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	
Auto and other laundries	X	X	X	X
Battery manufacturing	X		X	
Coal mining	X	X	X	X
Coil coating	X	X	X	
Copper forming	X	X	X	
Electric and electronic compounds	X	X	X	X
Electroplating	X	X	X	
Explosives manufacturing	X	X	X	
Foundries	X	X	X	
Gum and wood chemicals				

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	Dioxins and Furans
All subparts except D and F	X	X			
Subpart D	X	X	X		
Subpart F	X	X	X		
Inorganic chemicals manufacturing	X	X	X		
Iron and steel manufacturing	X	X	X		
Leather tanning and finishing	X	X	X		X
Mechanical products manufacturing	X	X	X		
Nonferrous metals manufacturing	X	X	X	X	
Ore mining (applies to Subpart B)		X			
Organic chemicals manufacturing	X	X	X	X	X
Paint and ink forming	X	X	X		
Pesticides	X	X	X	X	
Petroleum refining	X				X
Pharmaceutical preparations	X	X	X		
Photographic equipment and supplies	X	X	X		
Plastic and synthetic materials manufacturing	X	X	X	X	
Plastic processing	X				
Porcelain enameling					
Printing and publishing	X	X	X	X	
Pulp, paper and paperboard mills					
Subpart A - Dissolving Kraft	X	X			X
Subpart B - Bleached Papergrade Kraft and Soda	X	X			X
Subpart C - Unbleached Kraft		X		X	X
Subpart D - Dissolving Sulfite	X	X			X
Subpart E - Papergrade Sulfite	X	X	X		X
Subpart F - Semi-chemical		X			X
Subpart G - Mechanical Pulp	X	X			X
Subpart H - Non-Wood Chemical Pulp	?	?	?	?	X
Subpart I - Secondary Fiber Deink	X	X		X	X
Subpart J - Secondary Fiber Non-Deink	X	X		X	X
Subpart K - Fine and					

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	Dioxins and Furans
Lightweight Papers from Purchased Pulp		X			X
Nonintegrated Fine					
Nonintegrated Lightweight	X	X		X	X
Subpart L - Tissue, Filter, Non-Woven and Paperboard from Purchased Pulp	X	X		X	X
Rubber processing	X	X	X		
Soap and detergent manufacturing	X	X	X		
Steam electric power plants	X	X			
Textile mills (excluding Subpart C)	X	X	X		
Timber products processing	X	X	X	X	

1.2.2 Sampling Point 801 - Liquid Manure (Permitted) and 802- Liquid Manure (Unpermitted)

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Volume		gpd	Daily	Total Daily	

1.2.2.1 Volume Monitoring

Volume monitoring is only required on days when wastes from a sampling point are discharged into the digester. Days without discharge shall be recorded and reported on the Wastewater Discharge Monitoring Report (eDMR) as a “0.”

1.2.2.2 Monitoring Requirements – Discharge to Digester

The permittee shall maintain a daily log of the volume of animal waste material received for each sampling point. The log shall include a record of the client’s name, the type of waste, the volume and any updated characterization of the waste, and the date added to digester. If an independent trucking company is transporting the waste to the permittee’s facility, the name of the trucking company must also be recorded. When a truckload contains more than one type of waste or waste from multiple clients, the volume of each generator source shall be noted.

1.2.2.3 New Waste Stream Requirements

For each new manure generator that has not been identified in the permit application, the permittee shall provide to the Department the information required in this subsection to identify the source and characteristics of the new waste material. The permittee shall not accept, handle, discharge to the digester or land apply any new waste material until Department approval has been granted.

The permittee may not accept, handle, or discharge municipal bio-solids or domestic septage under this permit unless the permit specifically authorizes discharge of this material.

The following shall be submitted **via an amendment to the management plan** to characterize each new manure generator that has not been identified in the permit application.

1. The name, address, and contact person for each new client, customer or generator. If an independent trucking company is transporting waste material to the permittee's facility, the name of this company must also be submitted.
2. The type of waste material (e.g., type of animal manure, cake or liquid manure, process washwater, etc.) and WPDES Permit status of the generating farm (i.e. WPDES permitted farm or nonpermitted farm).
3. Identification of the storage structure from which manure will be transferred, including but not limited to aerial photograph and client, customer or generator's name for the storage unit.
4. For each client, customer or generator, the annual volume of manure anticipated to be received, the expected frequency received, volume per receipt event, and period of the year it will be received.
5. Information that demonstrates that the land application of the waste material or the mixture of waste materials from the digester will be transferred to a farm operating under a department or county conservation office approved nutrient management plan in accordance with ATCP 50, Wis. Adm. Code and NRCS 590 Standards, and managed as a source of nutrients or a soil amendment or conditioner and not be detrimental to soils, crops or groundwater. See permit section 2.2.2.1 for further information.

Based on the information provided, the Department may request additional information on the quality or content of the material being proposed for digestion under this permit. **Prior to acceptance of any new waste material, the permittee shall submit and obtain Department approval of an amended management plan.**

2 Land Application Requirements

2.1 Sampling Point(s)

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

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
001	Anaerobically digested industrial liquid sludge transferred to onsite storage structures and applied to approved land application sites. Monitoring is only required when wastes are direct land applied under this permit. Storage units shall be adequately mixed prior to sample collection.
002	Anaerobically digested sludge pressed (screw) to approximately 35% solids that is sold as bedding material. Report solids sold as bedding (or disposed of by other methods) on Form 3400-52, "Other Methods of Disposal." Direct land application of cake sludge shall be approved by the department prior to spreading.
003	Anaerobically digested sludge pressed (screw) and dried to approximately 80% solids. Report solids sold shipped as dried solids on Form 3400-52, "Other Methods of Disposal." Direct land application of cake sludge shall be approved by the department prior to spreading.
004	Anaerobically digested liquid manure transferred to WPDES permitted participating farms (CAFOs). The permittee shall not direct land apply digested manure. Report digested manure volumes transferred back to permitted participating farms on Form 3400-52, "Other Methods of Disposal."
005	Anaerobically digested liquid manure transferred to participating farms without WPDES permits (non-CAFOs). The permittee shall not direct land apply digested manure. Report digested manure volumes transferred back to unpermitted participating farms on Form 3400-52, "Other Methods of Disposal."

2.2 Monitoring Requirements and Limitations

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

Monitoring is only required if direct land applied under this permit.

2.2.1 Sampling Point (Outfall) 001 - SLUDGE; 002- SLUDGE SOLD AS BEDDING; 003- SLUDGE SHIPPED AS DRIED SOLIDS

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Solids, Total		Percent	Monthly	Grab	
COD		Percent	Monthly	Grab	Dry Weight Basis
pH Field		su	Monthly	Grab	
Nitrogen, Total Kjeldahl		Percent	Monthly	Grab	Dry Weight Basis
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Monthly	Grab	Dry Weight Basis
Chloride		Percent	Monthly	Grab	Dry Weight Basis
Phosphorus, Total		Percent	Monthly	Grab	Dry Weight Basis

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Potassium, Total Recoverable		Percent	Monthly	Grab	Dry Weight Basis
PFOA + PFOS		µg/kg	Annual	Calculated	Report the sum of PFOA and PFOS. See PFAS Permit Sections for more information.
PFAS Dry Wt			Annual	Grab	Perfluoroalkyl and Polyfluoroalkyl Substances based on updated DNR PFAS List. See PFAS Permit Sections for more information.

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)	-	DNR ID #	Daily	Log
Acres Applied	-	Acres	Daily	Log
Volume Land Applied per Site	-	Gals/Acre/Day	Daily	Log (Calculated)
Volume to Approved Storage	-	Gals/Day	Daily	Log

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st 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	-	Gallons	Annual	Total Annual
Total Kjeldahl Nitrogen per Site	Per Approved Management Plan	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340	Pounds/Acre per 2 Years	Annual	Calculated

Annual Report – Summary of Monitoring Requirements and Limitations The Annual Report is due by January 31 st 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 Volume to Approved Storage	-	Gallons	Annual	Total Annual

2.2.1.1 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.

2.2.1.2 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.

2.2.1.3 Discharge to Approved Storage Structures

Pursuant to s. NR 214.18(3)b, Wisconsin Administrative Code, any system used for storage or stacking of sludge prior to spreading shall be designed and constructed in accordance with NR 213, or other design criteria approved in the sludge management plan. Plans and specifications shall be submitted to the department for approval of such storage or stacking systems.

2.2.1.4 Land Application from Storage Structures or Post-Digestion Separator

Prior to any land application from a storage or treatment unit representative sample results shall be available from the storage or treatment unit for the parameters shown in Table 3.2.1. During land application, samples shall be collected and analyzed for the parameters at the frequency shown in Table 3.2.1, or as modified for new waste material in an approved management plan. The most recent analytical data shall be used to establish land application rates to ensure compliance with permit limits. Sampling procedures shall be addressed in the approved management plan.

2.2.1.5 Sludge Monitoring for PFAS

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

PERFLUOROALKYLCARBOXILIC Acids (PFCAs)	
PFBA	Perfluorobutanoic acid
PFPeA	Perfluroropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluroundecanoic acid
PFDoA	Perfluorododecanoic acid

PFTriA	Perfluorotridecanoic acid
PFTeDA	Perfluorotetradecanoic acid
PERFLUOROALKYLSULFONIC Acids (PFSAs)	
PFBS	Perfluorobutane sulfonic acid
PFPeS	Perfluroropentane sulfonic acid
PFHxS	Perfluorohexane sulfonic acid
PFHpS	Perfluoroheptane sulfonic acid
PFOS	Perfluorooctane sulfonic acid
PFNS	Perfluorononane sulfonic acid
PFDS	Perfluorodecane sulfonic acid
PFDoS	Perfluorododecane sulfonic acid
TELOMER SULFONIC Acids	
4:2 FTSA	4:2 fluorotelomersulfonic acid
6:2 FTSA	6:2 fluorotelomersulfonic acid
8:2 FTSA	8:2 fluorotelomersulfonic acid
PERFLUOROOCETANCESULFONAMIDES (FOSAs)	
PFOSA	Perflurorooctane sulfonamide
N-MeFOSA	N-Methyl perfluorooctane sulfonamide
N-EtFOSA	N-Ethyl perfluorooctane sulfonamide
PERFLUOROOCETANCESULFONAMIDOACETIC Acids	
N-MeFOSAA	N-Methyl perfluorooctane sulfonamidoacetic acid
N-EtFOSAA	N-Ethyl perfluorooctane sulfonamidoacetic acid
NATIVE PERFLUOROOCETANCESULFONAMIDOETHANOLS (FOSEs)	
N-MeFOSE	N-Methyl perfluorooctane sulfonamideoethanol
N-EtFOSE	N-Ethyl perfluorooctane sulfonamideoethanol
PERFLUOROALKYLETHERCARBOXYLIC Acids (PFECAs)	
HFPO-DA	Hexafluoropropylene oxide dimer acid
DONA	4,8-dioxa-3H-perfluorononanoic acid
CHLORO-PERFLUOROALKYLSULFONATE	
F-53B Major	9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid
F-53B Minor	11-chloroelcosafluoro-3-oxaundecane-1-sulfonic acid

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

2.2.1.6 Sampling and Reporting Sludge Samples for PFAS

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

Note: If additional equipment is used for collecting sludge samples (i.e., shovels, compositing buckets, bottles, etc.), then a one-time equipment blank is recommended to be collected with the first sample. An equipment blank sample is collected by passing laboratory verified PFAS-free water over or through field sampling equipment before the

collection of a representative sludge sample. The equipment blank result shall be reported on the annual Sludge Characteristics Form (3400-49) in the comment section when reporting PFAS concentrations in the sludge.

The permittee shall report each of the PFAS sludge monitoring results on the annual Sludge Characteristics and Monitoring Form (3400-49) as provided by the department. The permittee shall also report the summation of PFOS and PFOA on this same form. All results shall be reported in dry weight. The annual Sludge Characteristics and Monitoring Form (3400-49) are due January 31, of the year following the collection of the sludge samples.

The laboratory performing the analysis on any samples shall be certified for the applicable PFAS compounds in the solids matrix by the Wisconsin Laboratory Certification Program established under s. 299.11, Wis. Stats., and in accordance with s. NR 149.41, Wis. Adm. Code. If the EPA Office of Water publishes a 1600 series isotope dilution method for the analysis of PFAS in solids, the department recommends the use of the EPA method. The department may reject any sample results if results are produced by a laboratory that is not in compliance with certification requirements under ch. NR 149, Wis. Adm. Code.

2.2.1.7 PFAS Land Application Requirements

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

2.2.2 Sampling Point (Outfall) 004 - LIQUID MANURE (PERMITTED) and 005- LIQUID MANURE (UNPERMITTED)

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Volume		gpd	Daily	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
Recipient Farm	-	Gals/Day	-	Log

2.2.2.1 Transfer of Digested Manure to Participating Farms

Any operation receiving digested liquid manure product shall have a department approved nutrient management plan in accordance with ATCP 50, Wis. Adm. Code and NRCS590 Standards. This requirement is imposed to allow manure transfer from WPDES permitted farm operations pursuant to s. NR 243.142, Wis. Adm. Code. Land application by a farm of digested liquid manure shall conform with the farm operation’s approved nutrient management plan and WPDES permit conditions (if applicable). Digested liquid manure product transferred to participating farm operations with WPDES permit coverage shall be stored in accordance with the farm operation’s WPDES permit conditions. Digested liquid manure product transferred back to participating farms without WPDES permit coverage shall be reviewed and approved by the department in accordance with permit section 3.2.2.2.

2.2.2.2 Discharge to Approved Storage Structures

Pursuant to s. NR 214.18(3)b, Wisconsin Administrative Code, any system used for storage or stacking of sludge prior to spreading shall be designed and constructed in accordance with NR 213, or other applicable design criteria, and approved in the sludge management plan. Plans and specifications shall be submitted to the department for approval of such storage or stacking systems.

2.2.2.3 Land Application from Storage Structures or Post-Digestion Separator

Prior to any land application from a storage or treatment unit representative sample results shall be available from the storage or treatment unit for the parameters shown in Table 3.2.1. During land application, samples shall be collected and analyzed for the parameters at the frequency shown in Table 3.2.1, or as modified for new waste material in an approved management plan. The most recent analytical data shall be used to establish land application rates to ensure compliance with permit limits. Sampling procedures shall be addressed in the approved management plan.

2.3 Record Keeping and Reporting

The permittee shall retain the original daily logs for a period of at least 3 years. This information shall be made available to Department staff for inspection upon request.

The permittee shall maintain as part of the records any written waste verification required pursuant to the subsection titled 'Monitoring Requirements – Discharge to Digester'.

For each load, the permittee shall obtain from its client a written certification of the waste type discharged to the digester and maintain this as part of the records.

2.4 Operating Requirements/Management Plan

The management plan shall describe waste acceptance procedures which ensure that waste material accepted have characteristics and volume similar to those contained in the permit application and authorized by this permit and that such waste materials contain no characteristics that could be reasonably expected to prevent compliance with this permit. These procedures may include representative sampling and analysis for COD, pH, TKN, total phosphorus, chloride or other pollutant parameters as necessary.

The management plan shall describe procedures for manure transfer from participating farms to liquid manure digester cells as well as the return process of manure from the digester cells to the participating farms. The permit conditions shall not be construed as approval for comingling of industrial hauled wastes and manure products at any point in the process of transferring, treating, or disposal of material. Procedures for maintaining separation of products shall be explicit in the management plan. Procedures for verification and development (if necessary) of nutrient management plans in accordance with ATCP 50, Wis. Adm. Code and NRCS 590 Standards at participating farms shall be included in the land management plan.

A new or updated management plan shall be submitted for approval within 60 days after permit reissuance. If operational changes are needed, the management plan shall be amended by submitting a written request to the Department for approval of such amendments. Amendments to the management plan are required prior to acceptance of liquid manure from a new source.

3 Schedules

3.1 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with Wisconsin Administrative Code NR 214.	03/31/2025

4 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.

4.1 Reporting and Monitoring Requirements

4.1.1 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.

4.1.2 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.

4.1.3 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.

4.1.4 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 BOD₅ 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.

4.1.5 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.

4.1.6 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.

4.1.7 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.

4.2 System Operating Requirements

4.2.1 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.**

4.2.2 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.

4.2.3 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.

4.2.4 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.

4.2.5 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.

4.2.6 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).

4.2.7 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.

4.2.8 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.

4.2.9 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.

4.3 Land Application Requirements

4.3.1 General Sludge Management Information

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

4.3.2 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.

4.3.3 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.

4.3.4 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.

4.3.5 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.

4.3.6 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.

4.3.7 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:

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

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

4.3.8 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"):

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

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

4.3.9 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.

4.3.10 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.

4.3.11 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.

4.3.12 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.

4.3.13 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.

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Application Management Plan -Land Application Management Plan	March 31, 2025	16
General Sludge Management Form 3400-48	prior to any significant sludge management changes	21
Characteristic Report Form 3400-49	no later than the date indicated on the form	21
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	21
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	21
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	17

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:

Northeast Region, 2984 Shawano Ave, Green Bay, WI 54313-6727