WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

Feyen's Arcade Pumping Service

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at
15811 Bridge Street, Ettrick, WI
to
Groundwater of the State primarily in Beaver Creek and Lake Marinuka Watershed, located in the Black River Basin in Trempealeau 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 _____
Amy Garbe, Acting Wastewater Section Manager
Bureau of Water Quality

_____
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - September 01, 2022 **EXPIRATION DATE – August 31, 2027**

MODIFICATION #1: EFFECTIVE DATE - May 01, 2025

TABLE OF CONTENTS

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	Inflow to storage of septic tank waste (Septage).
702	Inflow to storage of sewage liquid sludge from Black River Falls WWTP (Sewage Liquid Sludge).
703	Inflow to storage of sewage liquid sludge from Village of Ettrick (Sewage Liquid Sludge).
704	Inflow to storage of industrial liquid waste from Land O Lakes - Black River Falls (Industrial Liquid Waste).
705	Inflow to storage of sewage liquid sludge from Village of Alma (Sewage Liquid Sludge).
706	Inflow to storage of sewage liquid sludge from Village of Trempealeau (Sewage Liquid Sludge).
707	Inflow to storage of sewage liquid sludge from Village of Holmen (Sewage Liquid Sludge).
711	Inflow to storage of industrial liquid waste from City Brewing (Industrial Liquid Waste).
712	Inflow to storage of sewage liquid sludge from City of Osseo (Sewage Liquid Sludge).
713	Inflow to storage of holding tank waste (Septage).
714	Inflow to storage of grease trap waste (Septage).
715	Inflow to storage of portable restroom waste (Septage).
716	Inflow to storage of industrial liquid waste from Coulee Region Biofuels LLC (Industrial Liquid waste).
717	Inflow to storage of industrial liquid waste from AMPI Blair (Industrial Liquid Waste).
718	Inflow to storage of industrial liquid waste from VPP Group (Industrial Liquid Waste).
719	Inflow to storage of non-CAFO manure (non-CAFO manure).
720	Inflow to storage of industrial liquid sludge from an approved client. PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
721	Inflow to storage of industrial liquid waste from Lallemand Inc.

1.2 New Waste Stream Requirements

This section applies to any new client waste stream requested during the term of the permit. The requirements of this section do not apply to new septage wastes. In addition, the requirements of this section do not apply to new industrial waste streams which are directly land applied (no storage) because this permit does not authorize the direct land application of any industrial wastes. For each new waste material that was not previously identified with the permit reissuance application and approved as either a sampling point or direct outfall (or both) in this permit, the permittee shall provide to the department the information required in this subsection to identify the source and characteristics of the new waste material. Except as provided in ss. 1.2.1, the permittee shall not accept, handle, discharge to a storage structure, or land apply any new waste material until department written approval has been granted and the waste has been assigned a sampling point or outfall number (or both) by the department.

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

1. The proposed confidential client number or name, for each new client, customer, or waste generator. If an independent trucking company is transporting waste material to the permittee' s facility, then the name of this company must also be submitted. A supplement to the client confidential list, which includes client number, name, address and contact person information (email and phone number), and waste profile sheet shall be provided under separate cover.

2. The type(s) of waste material (e.g., treatment plant sewage sludge, industrial liquid waste, industrial sludge, by-product solids, septage etc.) and industrial category (including SIC code, if applicable), along with a certification signed by the generator's representative indicating the waste is as described.

3. Potential sources of domestic waste within industrial waste stream (if applicable).

4. A detailed description of the treatment system, industrial process from which each individual waste material originates (if applicable), regardless of the volume of the material. Also include, if applicable: if the client has a WPDES Permit, whether or not it is a unique, short-term project (such as lagoon desludging, digester cleanout), and any other relevant information which will aid the DNR in reviewing the new clients in a timely manner.

5. SDS sheets for any specific chemicals that could be present in their original state in the waste material.

6. 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.

7. 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 whether the waste will be applied directly on land under this permit, or if it will be co-mingled with other wastes in a storage facility(s), and which storage facility(s) the waste may be stored in.

8. 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, and Potassium. Include 'Total Solids' for sludge and other solid or semi-solid material.

   For industrial cake sludge, and all types of sewage sludge waste streams, also include monitoring results for: Arsenic, Cadmium, Copper, Fecal Coliform (sewage sludges only), Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc.

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, and Radium-226

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.

9. 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.

10. Verification that the new waste is not hazardous under NR 518, Wis. Adm. Code.

Based on the information provided, the department may request additional information on the quality or content of the material being proposed for storage or direct land application under this permit. Upon written approval of a new waste, the department will assign a sampling point number or outfall number (or both) for the type of waste.

Prior to land applying any new waste material from storage or direct land application, the permittee shall submit and obtain department approval of an amended management plan. The amended plan shall include the department sampling point number or outfall number (or both) that was assigned to the newly approved waste. 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 protect groundwater. If additional monitoring is required by the department, the permittee shall request a permit modification.

When reporting the volume of waste received for any new clients that have not yet been added to that month's eDMR, the permittee shall report this volume in the 'comments' section. In addition to the volume, the permittee shall provide the proposed client number and the storage unit in which the waste was stored (if applicable).

1.2.1 New Food Processing Wastes

The permittee may discharge new food processing wastes to a storage structure or pad and land apply these wastes from the structure without department pre-approval if the wastes are not hazardous as defined in Chapter NR 214. The permittee shall submit a request for approval for storage and land application of new food processing wastes within 30 days of the date the wastes were discharged to the storage structure. The request for approval shall contain the sample analysis and analytical report specified below, a record of the total volume of the new food processing wastes, and the specific storage structure or pad containing the wastes. If a food processing waste is not subsequently approved by the department in accordance with ch. NR 214, future volumes of the waste may not be stored or land applied under this permit.

Immediately prior to discharge of any new food processing wastes into a storage structure or pad, the permittee shall take a representative sample of the material. The sample shall be analyzed in accordance with the requirements in s. 1.2 and the analysis of the new material shall be submitted to the department within 30 days from the date the sample was taken. The sample and analytical report shall identify the client name and number and specific storage structure or pad that received the waste as well as the volume of waste received.

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.** If the permittee is uncertain as to whether a waste is a food processing waste, the permittee shall contact department staff for clarification.

1.3 Updated Characteristic Sampling Data

1.3.1 With Permit Application

The permittee shall submit updated characteristic sampling data with the next permit reissuance application for any industrial influent waste stream client that only has sampling data that is older than the effective date of this WPDES permit. A reissuance application is due 180 days prior to the expiration date of this permit. See section 1.2 above for the sampling parameters that would need to be submitted.

1.3.2 Changes to Existing Clients

The permittee shall notify the department in writing within 30 days of becoming aware of changes in the quality of waste from an approved client that may impact the type and/or characteristics of the waste that is received. Changes that may affect the quality of the client's waste include but are not limited to: operational/process changes that affect the pollutants present in the waste, problems with the client's treatment technologies, updated treatment technologies, or changes that affect the type of waste produced. After receiving notification, the department will evaluate the change in characteristics and may require further sampling of the influent if warranted.

1.4 Influent Monitoring Requirements

This section contains requirements for tracking all waste placed in storage. When waste from a client is received or collected and placed in a storage structure, the permittee shall monitor and record the volume of waste, the type of waste received, the storage structure or pad that received the waste, and maintain logs as required below. On a monthly basis, the permittee shall report the volume of each type of waste that has been accepted as well as the approved sampling point number on the electronic Discharge Monitoring Report. The permittee shall comply with the following monitoring requirements.

1.4.1 Sampling Point 704 - Land O Lakes - BRF; 711- City Brewing; 716- Coulee Region Biofuels; 717- AMPI Blair; 718- VPP Group; 721- Lallemand Inc

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Industrial Liquid Waste		gal/month	Monthly	Estimated	

1.4.2 Sampling Point 720 - PH: Ind. Liquid Sludge Client

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Industrial Liquid Sludge		gal/month	Monthly	Estimated	

1.4.3 Sampling Point 719 - non-CAFO Manure

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Estimated	

1.4.4 Sampling Point 702 - Black River Falls WWTP; 703- Village of Ettrick; 705- Village of Alma Center; 706- Village of Trempealeau; 707- Village of Holmen; 712- City of Osseo

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Sewage Liquid Sludge		gal/month	Monthly	Estimated	

1.4.5 Sampling Point 701 - Septic Tank Waste; 713- Holding Tank Waste; 714- Grease Trap Waste; 715- Portable Restroom Waste

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Estimated	

1.4.5.1 Operational Records for Septage

The permittee shall record the following information in the daily inflow log for each load of septage hauled to the storage facility:

- pick-up date and time
- waste type and quantity
- location and name of owner, and
- other information specified in s. NR 113.11(3)(c), Wis. Adm. Code.

1.4.6 Influent Volume Monitoring

Volume monitoring and reporting on monthly eDMRs is only required during months when wastes from a sampling point are discharged into any of the storage structures or pads. Domestic (Septage, Liquid Sewage Sludge) liquid wastes may only be discharged into the following storage structures: Berg Slurrystore and Hwy D Slurrystore.

1.4.7 Influent Monitoring Requirements – Discharge to Storage

The permittee shall record and maintain a daily log of the volume of waste material received for each sampling point identified in this permit, and all subsequent sampling points approved during this permit term and discharged to a storage or treatment unit. The log shall include a record of the client name, the type of waste, the volume and any characterization of the waste, the date of addition and to which storage or treatment unit it was discharged. 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 type shall be noted. These logs shall be retained in accordance with 2.4.3 of this permit.

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)**
002	Land application of mixed industrial liquid waste and industrial liquid sludge from the 725,000-gallon concrete-lined Tjoflat Pit, located in the SW 1/4 of SW 1/4 of Section 17, R7W, T20N. No sewage sludge or septage is permitted to be stored in this storage structure. Representative samples shall be taken as specified in the approved management plan (Industrial Liquid Waste, Industrial Liquid Sludge, non-CAFO manure).
003	Land application of commingled sewage liquid sludge, septage (holding tank waste, grease trap waste, septic tank waste), industrial liquid waste and industrial liquid sludge from the 1.5-million-gallon steel, glass-lined Berg Farm Slurrystore, located in the SE 1/4, SW 1/4, Section 18, R7W, T21N. Representative samples shall be taken as specified in the approved management plan (Sewage Liquid Sludge, Septage, Industrial Liquid Waste, Industrial Liquid Sludge, non-CAFO manure).
004	Land application of commingled sewage liquid sludge, septage (holding tank waste, grease trap waste, septic tank waste), industrial liquid waste and industrial liquid sludge from the 0.4-million-gallon steel, glass-lined Hwy D Slurrystore located in the SW 1/4, SW 1/4, Section 32, R7W, T20N. Representative samples shall be taken as specified in the approved management plan (Sewage Liquid Sludge, Septage, Industrial Liquid Waste, Industrial Liquid Sludge, non-CAFO manure).
201	Direct land application of sewage liquid sludge from the Village of Wilton (Sewage Liquid Sludge).
202	Direct land application of sewage cake sludge from an approved client (Sewage Cake Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
203	Direct land application of industrial liquid sludge from an approved client (Industrial Liquid Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
204	Direct land application of liquid industrial waste from an approved client (Industrial Liquid Waste). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
205	Direct land application of industrial cake sludge from an approved client (Industrial Cake Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
206	Direct land application of industrial by-product solids from an approved client (Industrial By-Product Solids). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.

2.2 Monitoring Requirements and Limitations

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

2.2.1 Sampling Point (Outfall) 002 - Tjoflat Pit (I)

The permittee shall comply with the following monitoring requirements and limitations for this liquid industrial sludge and industrial liquid waste outfalls. The permittee may only land apply the type of waste approved for these outfalls on approved sites. Additional requirements for this outfall are included in this section and other sections below. Sampling is only required during periods of active discharge.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Estimated	Industrial Liquid Waste, Industrial Liquid Sludge
Solids, Total		Percent	Weekly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Weekly	Composite	
Nitrogen, Ammonia (NH_3-N) Total		mg/L	Weekly	Composite	
Phosphorus, Total		mg/L	Weekly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Weekly	Composite	
pH Field		su	Weekly	Grab	
COD		mg/L	Weekly	Composite	
Chloride		mg/L	Weekly	Composite	

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**
Date	-	Date	-	Log
Outfall Number	-	-	Daily	Log
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	-	Cubic Yards	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
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	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 Manure Mixed with Stored Waste

This permit does not authorize acceptance to storage of manure from a CAFO (Concentrated Animal Feeding Operation) as defined in ch. NR 243, Wis. Adm. Code. When non-CAFO farm manure is mixed with industrial waste, the mixture is regulated under ch. NR 214, Wis. Adm. Code if the industrial waste is grater than 50% of the total mixture. When non-CAFO farm manure is mixed with industrial waste, the industrial waste may be subject to an NRCS 590 nutrient management plan pursuant to local requirements if manure is greater than 50% of the mixture or the land on which the mixture is spread upon receives primary nutrients from sources other than domestic waste in that year or within the crop rotation.

2.2.1.4 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for these outfalls.

2.2.2 Sampling Point (Outfall) 003 - Berg Slurrystore (M+I+S); 004- Hwy D Slurrystore (M+I+S)

The permittee shall comply with the following monitoring requirements and limitations for this combined waste outfall. The permittee may only land apply the type of waste approved for this outfall on approved sites. Additional requirements for this outfall are included in this section and other sections below. Sampling is only required during periods of active discharge.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Estimated	Septage, Sewage Liquid Sludge, Industrial Liquid Waste, Industrial Liquid Sludge.
Solids, Total		Percent	Weekly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Weekly	Composite	
Nitrogen, Ammonia (NH_3-N) Total		mg/L	Weekly	Composite	
Phosphorus, Total		mg/L	Weekly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Weekly	Composite	
pH Field		su	Weekly	Grab	
COD		mg/L	Weekly	Composite	
Chloride		mg/L	Weekly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab	

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations The permittee shall maintain a daily land application log for mixed wastes land applied each day when land application occurs. Mixed wastes may include septage, liquid sewage sludge, liquid industrial sludge and industrial liquid wastes. The following minimum records must be kept, in addition to all analytical results for the mixed wastes land applied. The log book records shall form the basis for the annual land application report requirements.		
Parameters	**Units**	**Sample Frequency**
Date	Date	Daily as used
DNR Site Number(s)	Number	Daily as used
Outfall number applied	Number	Daily as used
Acres applied	Acres	Daily as used
Amount applied	As appropriate * /day	Daily as used
Application rate per acre	unit */acre	Daily as used
Nitrogen applied per acre	lb/acre	Daily as used
Method of Application	Injection, Incorporation, or surface applied	Daily as used

*gallons, cubic yards, dry US Tons or dry Metric Tons

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	-	Cubic Yards	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
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.2.2.1 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.

2.2.2.2 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.

2.2.3 Manure Mixed with Stored Waste

This permit does not authorize acceptance to storage of manure from a CAFO (Concentrated Animal Feeding Operation) as defined in ch. NR 243, Wis. Adm. Code.

When non-CAFO farm manure is mixed with industrial, sewage sludge, and/or septage waste, the mixture is regulated under chs. NR 214, NR 204, and NR 113, Wis. Adm. Code if the industrial, sewage sludge, and septage waste is greater than 50% of the total mixture.

When non-CAFO farm manure is mixed with industrial and/or septage waste, the industrial and septage waste may be subject to a NRCS 590 nutrient management plan pursuant to local requirements if manure is greater than 50% of the total mixture or the land on which the mixture is spread upon receives primary nutrients from sources other than industrial/septage waste in that year or within the crop rotation.

2.2.3.1 Other Sewage Sludge Land Application Requirements

Refer to s. 2.4 below and the standard requirements for other applicable sewage sludge requirements for this outfall.

2.2.3.2 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for this outfall.

2.3 Direct Land Application Outfalls

2.3.1 Sampling Point (Outfall) 201 - DLA: Village of Wilton Sewage Liq

The permittee shall comply with the monitoring requirements and limitations and other applicable sections below for the listed outfalls and for other direct land application outfalls approved by the department during the term of the permit. The permittee shall not directly land apply any waste under this permit unless department approval has been granted with a designated outfall.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Estimated	
Solids, Total		Percent	Quarterly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Quarterly	Grab	
Nitrogen, Ammonia (NH_3-N) Total		mg/L	Quarterly	Grab	
Phosphorus, Total		mg/L	Quarterly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Potassium, Total Recoverable		mg/L	Quarterly	Grab	
pH Field		su	Quarterly	Grab	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Grab	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Grab	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Grab	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Grab	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Grab	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Grab	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Grab	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Grab	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Grab	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Grab	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Grab	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Grab	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Grab	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Grab	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Grab	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Grab	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Grab	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab	

2.3.1.1 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least quarterly during which land application occurs. The samples shall be analyzed for the parameters at the frequency specified in Table 2.3.1. Prior to discharge of waste to approved sites, the permittee shall provide in writing to the owner of the site the most recent data from any required monitoring and the volume of waste to be discharged.

2.3.1.2 Other Sewage Sludge Land Application Requirements

Refer to s. 2.4 below and the standard requirements for other applicable sewage sludge requirements for this outfall.

2.3.1.3 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for this outfall.

2.3.2 Sampling Point (Outfall) 202 - PH: DLA: Sewage Cake Client

The permittee shall comply with the monitoring requirements and limitations and other applicable sections below for the listed outfalls and for other direct land application outfalls approved by the department during the term of the permit. The permittee shall not directly land apply any waste under this permit unless department approval has been granted with a designated outfall.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		lbs/month	Monthly	Estimated	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Solids, Total		Percent	Quarterly	Grab	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Grab	
Nitrogen, Ammonia (NH_3-N) Total		Percent	Quarterly	Grab	
Phosphorus, Total		Percent	Quarterly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		Percent	Quarterly	Grab	
pH Field		su	Quarterly	Grab	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Grab	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Grab	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Grab	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Grab	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Grab	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Grab	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Grab	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Grab	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Grab	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Grab	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Grab	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Grab	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Grab	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Grab	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Grab	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Grab	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Grab	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab	

Daily Land Application Log

Discharge Monitoring Requirements and Limitations

The permittee shall maintain a daily land application log for mixed wastes land applied each day when land application occurs. Mixed wastes may include septage, liquid sewage sludge, liquid industrial sludge and industrial liquid wastes. The following minimum records must be kept, in addition to all analytical results for the mixed wastes land applied. The log book records shall form the basis for the annual land application report requirements.

Parameters	**Units**	**Sample Frequency**
Date	Date	Daily as used
DNR Site Number(s)	Number	Daily as used

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations The permittee shall maintain a daily land application log for mixed wastes land applied each day when land application occurs. Mixed wastes may include septage, liquid sewage sludge, liquid industrial sludge and industrial liquid wastes. The following minimum records must be kept, in addition to all analytical results for the mixed wastes land applied. The log book records shall form the basis for the annual land application report requirements.		
Parameters	**Units**	**Sample Frequency**
Outfall number applied	Number	Daily as used
Acres applied	Acres	Daily as used
Amount applied	As appropriate * /day	Daily as used
Application rate per acre	unit */acre	Daily as used
Nitrogen applied per acre	lb/acre	Daily as used
Method of Application	Injection, Incorporation, or surface applied	Daily as used

*gallons, cubic yards, dry US Tons or dry Metric Tons

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	-	Cubic Yards	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
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.3.2.1 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least quarterly during which land application occurs. The samples shall be analyzed for the parameters at the frequency specified in Table 2.3.2. Prior to discharge of waste to approved sites, the permittee shall provide in writing to the owner of the

site the most recent data from any required monitoring and the volume of waste to be discharged.

2.3.2.2 Other Sewage Sludge Land Application Requirements

Refer to s. 2.4 below and the standard requirements for other applicable sewage sludge requirements for this outfall.

2.3.2.3 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for this outfall.

2.3.3 Sampling Point (Outfall) 203 - PH: DLA: Ind Liq Sludge Client; 204 - PH: DLA: Industrial Liquid Waste Client

The permittee shall comply with the monitoring requirements and limitations and other applicable sections below for the listed outfalls and for other direct land application outfalls approved by the department during the term of the permit. The permittee shall not directly land apply any waste under this permit unless department approval has been granted with a designated outfall.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Estimated	
Solids, Total		Percent	Quarterly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Quarterly	Grab	
Nitrogen, Ammonia (NH_3-N) Total		mg/L	Quarterly	Grab	
Phosphorus, Total		mg/L	Quarterly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		mg/L	Quarterly	Grab	
pH Field		su	Quarterly	Grab	
COD		mg/L	Quarterly	Grab	
Chloride		mg/L	Quarterly	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**
Date	-	Date	-	Log
Outfall Number	-	-	Daily	Log
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	-	Cubic Yards	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
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.3.3.1 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.

2.3.3.2 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.

2.3.3.3 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least quarterly during which land application occurs. The samples shall be analyzed for the parameters at the frequency specified in Table 2.3.3. Prior to discharge of waste to approved sites, the permittee shall provide in writing to the owner of the site the most recent data from any required monitoring and the volume of waste to be discharged.

2.3.3.4 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for this outfall.

2.3.4 Sampling Point (Outfall) 205 - PH: DLA: Ind. Cake Client

The permittee shall comply with the monitoring requirements and limitations and other applicable sections below for

the listed outfalls and for other direct land application outfalls approved by the department during the term of the permit. The permittee shall not directly land apply any waste under this permit unless department approval has been granted with a designated outfall.

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		lbs/month	Monthly	Estimated	
Solids, Total		Percent	Quarterly	Grab	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Grab	
Nitrogen, Ammonia (NH_3-N) Total		Percent	Quarterly	Grab	
Phosphorus, Total		Percent	Quarterly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		Percent	Quarterly	Grab	
pH Field		su	Quarterly	Grab	
Chloride		Percent	Quarterly	Grab	
Arsenic Dry Wt		mg/kg	Quarterly	Grab	
Cadmium Dry Wt		mg/kg	Quarterly	Grab	
Copper Dry Wt		mg/kg	Quarterly	Grab	
Lead Dry Wt		mg/kg	Quarterly	Grab	
Mercury Dry Wt		mg/kg	Quarterly	Grab	
Molybdenum Dry Wt		mg/kg	Quarterly	Grab	
Nickel Dry Wt		mg/kg	Quarterly	Grab	
Selenium Dry Wt		mg/kg	Quarterly	Grab	
Zinc Dry Wt		mg/kg	Quarterly	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**
Date	-	Date	-	Log
Outfall Number	-	-	Daily	Log
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	-	Cubic Yards	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
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.3.4.1 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.

2.3.4.2 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.

2.3.4.3 Soil Incorporation Requirements

Cake Sludge and By-Product Solids 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.

2.3.4.4 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least quarterly during which land application occurs. The samples shall be analyzed for the parameters at the frequency specified in Table 2.3.4. Prior to discharge of waste to approved sites, the permittee shall provide in writing to the owner of the site the most recent data from any required monitoring and the volume of waste to be discharged.

2.3.4.5 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for this outfall.

2.3.5 Sampling Point (Outfall) 206 - PH: DLA: By-Prod Solid Client

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		lbs/month	Monthly	Estimated	
Solids, Total		Percent	Quarterly	Grab	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Grab	
Nitrogen, Ammonia (NH_3-N) Total		Percent	Quarterly	Grab	
Phosphorus, Total		Percent	Quarterly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		Percent	Quarterly	Grab	
pH Field		su	Quarterly	Grab	
Chloride		Percent	Quarterly	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**
Date	-	Date	-	Log
Outfall Number	-	-	Daily	Log
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	-	Cubic Yards	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
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.3.5.1 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.

2.3.5.2 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.

2.3.5.3 Soil Incorporation Requirements

Cake Sludge and By-Product Solids 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.

2.3.5.4 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least quarterly during which land application occurs. The samples shall be analyzed for the parameters at the frequency specified in Table 2.3.5. Prior to discharge of waste to approved sites, the permittee shall provide in writing to the owner of the site the most recent data from any required monitoring and the volume of waste to be discharged.

2.3.5.5 Other Sewage Sludge Land Application Requirements

Refer to s. 2.4 below and the standard requirements for other applicable sewage sludge requirements for this outfall.

2.3.5.6 Other Land Application Requirements

Refer to s. 2.5 below and the standard requirements for other applicable requirements for this outfall.

2.4 Sewage Sludge Land Application Requirements

The requirements of this section are applicable to any outfall that contains liquid sewage sludge or sewage cake sludge.

2.4.1 Fecal Coliform Density

Pursuant to s. NR 204.07(6)(b)1., Wis. Adm. Code, the sludge shall have a fecal coliform density of less than or equal to 2,000,000 most probable number (MPN) or colony forming units (CFU) per gram of total solids on a dry weight

basis. Compliance with this requirement shall be demonstrated by calculating the geometric mean of at least 7 separate samples. Land application of sewage sludge that exceeds this limitation is prohibited.

2.4.2 Sludge Management

All sludge management activities shall be conducted in compliance with Ch. NR 204 "Domestic Sewage Sludge Management", Wis. Adm. Code.

2.4.3 Winter Land Application Prohibition

Land application of material containing sewage sludge on frozen or snow-covered soils is prohibited.

2.4.4 Sludge Which Exceeds the Ceiling Limit

Land application is not permitted if any of the Ceiling limits shown in the 'Monitoring Requirements and Limitations' table are exceeded.

2.4.5 Sludge Which Exceeds the High-Quality Limit

If the High-Quality Limit is exceeded for any parameter, the permittee shall not exceed the Lifetime Cumulative Metal Loading Limit for the parameters shown in the 'Lifetime Cumulative Metal Loadings' table below. Cumulative pollutant loading records shall be kept for all land application of sludge which does not meet the High-Quality Limit for any parameter. This requirement applies for the entire calendar year in which any exceedance of the High-Quality Limit occurs. Such loading records shall be kept for all parameters shown in the 'Lifetime Cumulative Metal Loadings' table for each site on which land application occurs in that calendar year. The formula to be used for calculating cumulative loading is as follows:

[(Pollutant concentration (mg/kg) x dry tons applied/ac) ÷ 500] + previous loading (lbs/acre) = cumulative lbs pollutant per acre

When a site reaches 90% of the allowable cumulative loading for any metal shown in the 'Lifetime Cumulative Metal Loadings' table, the department shall be so notified through letter or in the comment section of the annual land application report (3400-55).

Lifetime Cumulative Metal Loadings (for Sewage Sludge)	
Metal	**Limit (lbs/Acre)**
Arsenic	36
Cadmium	34
Copper	1339
Lead	268
Mercury	15
Nickel	375
Selenium	89

2.4.6 Lists 1, 2, 3, and 4

List 1 **TOTAL SOLIDS AND METALS** See the Monitoring Requirements and Limitations table above for monitoring frequency and limitations for the List 1 parameters
Solids, Total (percent)
Arsenic, mg/kg (dry weight)
Cadmium, mg/kg (dry weight)
Copper, mg/kg (dry weight)
Lead, mg/kg (dry weight)
Mercury, mg/kg (dry weight)
Molybdenum, mg/kg (dry weight)
Nickel, mg/kg (dry weight)
Selenium, mg/kg (dry weight)
Zinc, mg/kg (dry weight)

List 2 **NUTRIENTS** See the Monitoring Requirements and Limitations table above for monitoring frequency for the List 2 parameters
Solids, Total (percent)
Nitrogen Total Kjeldahl (percent)
Nitrogen, Ammonia (NH_3-N) Total (percent)
Phosphorus Total as P (percent)
Phosphorus, Water Extractable (as percent of Total P)
Potassium Total Recoverable (percent)

List 3
PATHOGEN CONTROL FOR CLASS B SLUDGE

The permittee shall implement pathogen control as listed in List 3. The Department shall be notified of the pathogen control utilized and shall be notified when the permittee decides to utilize alternative pathogen control.

The following requirements shall be met prior to land application of sludge.

Parameter	**Unit**	**Limit**
Fecal Coliform*	MPN/gTS or CFU/gTS	2,000,000
OR, ONE OF THE FOLLOWING PROCESS OPTIONS		
Aerobic Digestion	Air Drying	
Anaerobic Digestion	Composting	
Alkaline Stabilization	PSRP Equivalent Process	

***** The Fecal Coliform limit shall be reported as the geometric mean of 7 discrete samples on a dry weight basis.

List 4
VECTOR ATTRACTION REDUCTION

The permittee shall implement any one of the vector attraction reduction options specified in List 4. The Department shall be notified of the option utilized and shall be notified when the permittee decides to utilize an alternative option.

One of the following shall be satisfied prior to, or at the time of land application as specified in List 4.

Option	Limit	Where/When it Shall be Met
Volatile Solids Reduction	≥38%	Across the process
Specific Oxygen Uptake Rate	≤1.5 mg O_2/hr/g TS	On aerobic stabilized sludge
Anaerobic bench-scale test	<17 % VS reduction	On anaerobic digested sludge
Aerobic bench-scale test	<15 % VS reduction	On aerobic digested sludge
Aerobic Process	>14 days, Temp >40°C and Avg. Temp > 45°C	On composted sludge
pH adjustment	>12 S.U. (for 2 hours) and >11.5 (for an additional 22 hours)	During the process
Drying without primary solids	>75 % TS	When applied or bagged
Drying with primary solids	>90 % TS	When applied or bagged
Equivalent Process	Approved by the Department	Varies with process
Injection	-	When applied
Incorporation	-	Within 6 hours of application

2.4.7 Designated Landspreading Sites for Sewage Sludge

The permittee shall request approval of designated landspreading sites for land application of sewage sludge. The sewage sludge shall only be landspread on designated sites as approved. Sewage sludge from only one outfall may be landspread on each approved site. For direct land application outfalls, no industrial waste or mixed waste may be landspread on sites used for sewage sludge.

2.5 General Land Application Requirements

This section applies to the management, storage, and application of all land application outfalls (industrial, sewage sludge, and comingled waste code outfalls).

2.5.1 Reauthorization of Land Application Sites

Prior to the first use during the term of the reissued permit of a previously-approved site, the permittee shall notify the Department Basin Representative of its intent to apply wastes to the site. The permittee shall provide information on any changes in the site characteristics since the previous approval. The permittee shall not use the site until an updated approval is provided by the department. In the event the department does not approve or deny the use of the site within 7 business days after notification of its intent to use the site, the permittee may apply waste to the site under the conditions of its previous approval, pending further action by the department. Upon notification by department staff of the unacceptability of a site, the permittee shall immediately discontinue use of the site.

2.5.2 Land Application from Storage

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 the monitoring table for the respective outfalls. During land

application, samples shall be collected and analyzed for the parameters at the frequency shown in the monitoring table for the respective outfalls, 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.

2.5.3 Record Keeping and Reporting

The permittee shall maintain records consisting of the volume, application rate, date of application and any characterizations of waste land applied to each approved land application site (by Outfall and site number) and land application daily logs. With the exception of wastes containing sewage sludge for which records must be retained for a minimum of 5 years, the permittee shall retain the original daily logs and sample results for a period of at least 3 years. This information shall be made available to department staff for inspection upon request. These requirements also apply to influent waste logs.

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

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

Land application monitoring results shall be provided to the department by submitting a Form 3400-49 for each designated approved outfall no later than the 21 days after the end of the specified reporting period during which the samples were taken. These forms shall be submitted electronically in accordance with the e-reporting instructions at http://dnr.wi.gov/topic/wastewater/documents/3400-049instructions.pdf . If no discharge occurs during a specified reporting period, the permittee shall indicate on the reporting form that no land application occurred during that period.

Annual 3400-55 forms shall be submitted electronically by January 31st in accordance with the e-reporting instructions at http://dnr.wi.gov/topic/wastewater/documents/3400-055instructions.pdf and include the sum of each month's activity. Loading rates reported on the 3400-55 form shall be calculated based on the results of the sampling of the waste that was land applied.

2.5.4 Operating Requirements And Management Plan

All land application sites used for treatment of liquid wastes, by-product solids and sludge 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. The management plan shall also be consistent with the municipal requirements of s. NR 204.11(1), Wis. Adm. Code, as applicable. To ensure this consistency, the management plan shall address:

- the information identified in NR 214.17 (6) and NR 214.18 (6), Wis. Adm. Code, as well as s. NR 204.07 and s. NR 113.07 as applicable;
- record keeping and maintenance, including responsible individuals;
- a full description of calculations used to determine appropriate application rates and loadings delivered to land application sites;
- tracking of site loading;
- the method for reporting monthly land application loadings from each outfall;
- notification and mitigation procedures for handling wastes that deviate from those anticipated;

- spill mitigation and notification procedures;
- odor control;
- sampling methods, procedures, and locations;
- and other information determined relevant to protect public health and the waters of the State

The management plan shall also describe waste acceptance procedures which ensure that waste material placed in storage 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 cause noncompliance 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 department shall be notified prior to any land application of waste material from a storage tank, lagoon or pad. The department shall also be notified prior to any direct land application of sewage sludge or sewage cake. The management plan shall contain a description of the manner by which this notification will occur. All such notifications shall occur at a reasonable time prior to the land application event and shall include a list of sites anticipated for use during those events. Similar procedures shall be described for direct land application events so department staff are aware of what will be applied and when it will be applied.

A new or updated land application management plan shall be submitted for approval at least 60 days prior to land application for new permits and within 60 days after reissuance for existing permits. 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.

2.5.5 Composite Sampling

A composite sample is a combination of individual samples of equal volume taken at approximately equal intervals not exceeding one hour over a specified period of time. The permittee is required to update the Land Management Plan as specified in the "Schedules" section of this permit to specify the detailed composite sampling procedure in which samples are taken.

2.5.6 Reporting – Monthly & Quarterly Form 3400-49

The monitoring results shall be provided quarterly for quarterly monitoring. These monitoring results shall also be provided monthly when the sampling frequency is monthly or more frequently than monthly to the department by submitting a Form 3400-49 by no later than the 21st of the month following the calendar month or calendar quarter during which the samples were taken. These forms shall be submitted electronically. If no discharge occurs during a calendar month, the permittee shall indicate on the reporting form that no discharge occurred during that month and no sampling is required.

2.5.7 Operational Changes

The department may modify this permit if the volume of waste discharged through any of the outfalls substantially increases to a point at which more frequent monitoring is deemed necessary by the department to obtain representative samples of the discharge.

3 Schedules

3.1 Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Management Plan Update Submittal: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with chs. NR 113, NR 204, NR 214, Wis. Adm. Code, by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify monitoring procedures; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; and 10) include any other pertinent information. Once approved, all landspreading activities shall be conducted in accordance with the plan. Any changes to the plan must be approved by the Department prior to implementing the changes.	11/01/2022
Ongoing Management Plan Updates : Updates are to be submitted and approved by the Department when changes are made in land application practices. All updates should contain the latest colored aerial photos available.	

3.2 Tjoflat Pit Drawdown

A condition of the letter of no objection for the Tjoflat Pit is to have it drawn down to where the base can be evaluated.

Required Action	Due Date
Inspection Concurrence: The permittee shall draw down the Tjoflat Pit completely to where the bottom of the structure is visible and have a professional engineer submit a concurrence to the department (with images) that the structure is watertight and suitable for storage of industrial waste as determined in the original inspection report dated 06/26/2022.	11/01/2022
Repairs: If the engineer submitting the concurrence has any repair recommendations, the permittee shall complete those repairs by the due date. If no repair recommendations are made, no action is required.	12/01/2022

4 Standard Requirements

NR 205, Wisconsin Administrative Code: The conditions in ss. NR 205.07(1) and NR 205.07(2), 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(2).

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 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.

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 shall be performed by a laboratory certified or registered in accordance with the requirements of ch. NR 149, Wis. Adm. Code. Groundwater sample collection and analysis shall be performed in accordance with ch. NR 140, Wis. Adm. Code. The analytical methodologies used shall enable the laboratory to quantitate all substances for which monitoring is required at levels below the effluent limitation. If the required level cannot be met by any of the methods available in 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 NR 101 fees, the 2 mg/l lower reporting limits for BOD_5 and 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. All pertinent sludge information, including permit application information and other documents specified in this permit or s. NR 204.06(9), Wis. Adm. Code shall be retained for a minimum of 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

Sanitary sewer overflows and sewage treatment facility overflows shall be reported according to the 'Sanitary Sewer Overflows and Sewage Treatment Facility Overflows' section of this permit.

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's regional office 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 Flow Meters

Flow meters shall be calibrated annually, as per s. NR 218.06, Wis. Adm. Code.

4.2.3 Raw Grit and Screenings

All raw grit and screenings shall be disposed of at a properly licensed solid waste facility or picked up by a licensed waste hauler. If the facility or hauler are located in Wisconsin, then they shall be licensed under chs. NR 500-555, Wis. Adm. Code.

4.2.4 Sludge Management

All sludge management activities shall be conducted in compliance with ch. NR 204 "Domestic Sewage Sludge Management", Wis. Adm. Code.

4.2.5 Prohibited Wastes

Under no circumstances may the introduction of wastes prohibited by s. NR 211.10, Wis. Adm. Code, be allowed into the waste treatment system. Prohibited wastes include those:

- which create a fire or explosion hazard in the treatment work;
- which will cause corrosive structural damage to the treatment work;
- solid or viscous substances in amounts which cause obstructions to the flow in sewers or interference with the proper operation of the treatment work;
- wastewaters at a flow rate or pollutant loading which are excessive over relatively short time periods so as to cause a loss of treatment efficiency; and
- changes in discharge volume or composition from contributing industries which overload the treatment works or cause a loss of treatment efficiency.

4.2.6 Bypass

This condition applies only to bypassing at a sewage treatment facility that is not a scheduled bypass, approved blending as a specific condition of this permit, a sewage treatment facility overflow or a controlled diversion as provided in the sections titled 'Scheduled Bypass', 'Blending' (if approved), 'SSO's and Sewage Treatment Facility Overflows' and 'Controlled Diversions' of this permit. Any other bypass at the sewage treatment facility 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 preventative 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.

4.2.7 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 bypassing specified in the above section titled 'Bypass' 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.

4.2.8 Controlled Diversions

Controlled diversions are allowed only when necessary for essential maintenance to assure efficient operation. Sewage treatment facilities that have multiple treatment units to treat variable or seasonal loading conditions may shut down redundant treatment units when necessary for efficient operation. The following requirements shall be met during controlled diversions:

- Effluent from the sewage 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 does not include blending as defined in s. NR 210.03(2e), Wis. Adm. Code, and as may only be approved under s. NR 210.12. 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 sewage treatment facility records and such records shall be available to the department on request.

4.2.9 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.

4.2.10 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).

4.3 Sewage Collection Systems

4.3.1 Sanitary Sewage Overflows and Sewage Treatment Facility Overflows

4.3.1.1 Overflows Prohibited

Any overflow or discharge of wastewater from the sewage collection system or at the sewage treatment facility, other than from permitted outfalls, is prohibited. The permittee shall provide information on whether any of the following conditions existed when an overflow occurred:

- The sanitary sewer overflow or sewage treatment facility overflow was unavoidable to prevent loss of life, personal injury or severe property damage;
- There were no feasible alternatives to the sanitary sewer overflow or sewage treatment facility overflow such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or preventative maintenance activities;
- The sanitary sewer overflow or the sewage treatment facility overflow was caused by unusual or severe weather related conditions such as large or successive precipitation events, snowmelt, saturated soil conditions, or severe weather occurring in the area served by the sewage collection system or sewage treatment facility; and
- The sanitary sewer overflow or the sewage treatment facility overflow was unintentional, temporary, and caused by an accident or other factors beyond the reasonable control of the permittee.

4.3.1.2 Permittee Response to Overflows

Whenever a sanitary sewer overflow or sewage treatment facility overflow occurs, the permittee shall take all feasible steps to control or limit the volume of untreated or partially treated wastewater discharged, and terminate the discharge as soon as practicable. Remedial actions, including those in NR 210.21 (3), Wis. Adm. Code, shall be implemented consistent with an emergency response plan developed under the CMOM program.

4.3.1.3 Permittee Reporting

Permittees shall report all sanitary sewer overflows and sewage treatment overflows as follows:

- The permittee shall notify the department by telephone, fax or email as soon as practicable, but no later than 24 hours from the time the permittee becomes aware of the overflow;
- The permittee shall, no later than five days from the time the permittee becomes aware of the overflow, provide to the department the information identified in this paragraph using department form number 3400-184. If an overflow lasts for more than five days, an initial report shall be submitted within 5 days as required in this paragraph and an updated report submitted following cessation of the overflow. At a minimum, the following information shall be included in the report:

  ◦The date and location of the overflow;
  ◦The surface water to which the discharge occurred, if any;
  ◦The duration of the overflow and an estimate of the volume of the overflow;
  ◦A description of the sewer system or treatment facility component from which the discharge occurred such as manhole, lift station, constructed overflow pipe, or crack or other opening in a pipe;
  ◦The estimated date and time when the overflow began and stopped or will be stopped;
  ◦The cause or suspected cause of the overflow including, if appropriate, precipitation, runoff conditions, areas of flooding, soil moisture and other relevant information;
  ◦Steps taken or planned to reduce, eliminate and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
  ◦A description of the actual or potential for human exposure and contact with the wastewater from the overflow;
  ◦Steps taken or planned to mitigate the impacts of the overflow and a schedule of major milestones for those steps;
  ◦To the extent known at the time of reporting, the number and location of building backups caused by excessive flow or other hydraulic constraints in the sewage collection system that occurred concurrently with the sanitary sewer overflow and that were within the same area of the sewage collection system as the sanitary sewer overflow; and
  ◦The reason the overflow occurred or explanation of other contributing circumstances that resulted in the overflow event. This includes any information available including whether the overflow was unavoidable to prevent loss of life, personal injury, or severe property damage and whether there were feasible alternatives to the overflow.

  NOTE: A copy of form 3400-184 for reporting sanitary sewer overflows and sewage treatment facility overflows may be obtained from the department or accessed on the department's web site at http://dnr.wi.gov/topic/wastewater/SSOreport.html. As indicated on the form, additional information may be submitted to supplement the information required by the form.

- The permittee shall identify each specific location and each day on which a sanitary sewer overflow or sewage treatment facility overflow occurs as a discrete sanitary sewer overflow or sewage treatment facility overflow occurrence. An occurrence may be more than one day if the circumstances causing the sanitary sewer overflow or sewage treatment facility overflow results in a discharge duration of greater than 24 hours. If there is a stop and restart of the overflow at the same

location within 24 hours and the overflow is caused by the same circumstance, it may be reported as one occurrence. Sanitary sewer overflow occurrences at a specific location that are separated by more than 24 hours shall be reported as separate occurrences; and

- A permittee that is required to submit wastewater discharge monitoring reports under NR 205.07 (1) (r) shall also report all sanitary sewer overflows and sewage treatment facility overflows on that report.

4.3.1.4 Public Notification

The permittee shall notify the public of any sanitary sewer and sewage treatment facility overflows consistent with its emergency response plan required under the CMOM (Capacity, Management, Operation and Maintenance) section of this permit and s. NR 210.23 (4) (f), Wis. Adm. Code. Such public notification shall occur promptly following any overflow event using the most effective and efficient communications available in the community. At minimum, a daily newspaper of general circulation in the county(s) and municipality whose waters may be affected by the overflow shall be notified by written or electronic communication.

4.3.2 Capacity, Management, Operation and Maintenance (CMOM) Program

- The permittee shall have written documentation of the Capacity, Management, Operation and Maintenance (CMOM) program components in accordance with s. NR 210.23(4), Wis. Adm. Code. Such documentation shall be available for Department review upon request. The Department may request that the permittee provide this documentation or prepare a summary of the permittee's CMOM program at the time of application for reissuance of the WPDES permit.
- The permittee shall implement a CMOM program in accordance with s. NR 210.23, Wis. Adm. Code.
- The permittee shall at least annually conduct a self-audit of activities conducted under the permittee's CMOM program to ensure CMOM components are being implemented as necessary to meet the general standards of s. NR 210.23(3), Wis. Adm. Code.

4.4 Land Application Requirements

4.4.1 Sludge Management Program Standards And Requirements Based Upon Federally Promulgated Regulations

In the event that new federal sludge standards or regulations are promulgated, the permittee shall comply with the new sludge requirements by the dates established in the regulations, if required by federal law, even if the permit has not yet been modified to incorporate the new federal regulations.

4.4.2 General Sludge Management Information

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

4.4.3 Sludge Samples

All sludge samples shall be collected at a point and in a manner which will yield sample results which are representative of the sludge being tested, and collected at the time which is appropriate for the specific test.

4.4.4 Land Application Characteristic Report

Each report shall consist of a Characteristic Form 3400-49 and Lab Report. The Characteristic Report Form 3400-49 shall be submitted electronically by the 21st of the month following the reporting period.

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 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 is true, accurate and complete. The Lab Report must be sent directly to the facility's DNR sludge representative or basin engineer unless approval for not submitting the lab reports has been given.

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 results shall be reported on a dry weight basis.

4.4.5 Calculation of Water Extractable Phosphorus

When sludge analysis for Water Extractable Phosphorus is required by this permit, the permittee shall use the following formula to calculate and report Water Extractable Phosphorus:
Water Extractable Phosphorus (% of Total P) =
[Water Extractable Phosphorus (mg/kg, dry wt) ÷ Total Phosphorus (mg/kg, dry wt)] x 100

4.4.6 Annual Land Application Report

Land Application Report Form 3400-55 shall be submitted electronically by January 31, each year whether or not non-exceptional quality sludge is land applied. Non-exceptional quality sludge is defined in s. NR 204.07(4), Wis. Adm. Code. 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 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.

4.4.7 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 sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied. Following submittal of the electronic Report Form 3400-52, this form shall be 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.

4.4.8 Approval to Land Apply

Bulk non-exceptional quality sludge as defined in s. NR 204.07(4), Wis. Adm. Code, may not be applied to land without a written approval letter or Form 3400-122 from the Department unless the Permittee has obtained permission from the Department to self approve sites in accordance with s. NR 204.06 (6), Wis. Adm. Code. Analysis of sludge characteristics is required prior to land application. Application on frozen or snow covered ground is restricted to the extent specified in s. NR 204.07(3) (l), Wis. Adm. Code.

4.4.9 Soil Analysis Requirements

Each site requested for approval for land application must have the soil tested prior to use. Each approved site used for land application must subsequently be soil tested such that there is at least one valid soil test in the four years prior to land application. All soil sampling and submittal of information to the testing laboratory shall be done in

accordance with UW Extension Bulletin A-2100. The testing shall be done by the UW Soils Lab in Madison or Marshfield, WI or at a lab approved by UW. The test results including the crop recommendations shall be submitted to the DNR contact listed for this permit, as they are available. Application rates shall be determined based on the crop nitrogen recommendations and with consideration for other sources of nitrogen applied to the site.

4.4.10 Land Application Site Evaluation

For non-exceptional quality sludge, as defined in s. NR 204.07(4), Wis. Adm. Code, a Land Application Site Request Form 3400-053 shall be submitted to the Department for the proposed land application site. The Department will evaluate the proposed site for acceptability and will either approve or deny use of the proposed site. The permittee may obtain permission to approve their own sites in accordance with s. NR 204.06(6), Wis. Adm. Code.

4.4.11 Class B Sludge: Fecal Coliform Limitation

Compliance with the fecal coliform limitation for Class B sludge shall be demonstrated by calculating the geometric mean of at least 7 separate samples. (Note that a Total Solids analysis must be done on each sample). The geometric mean shall be less than 2,000,000 MPN or CFU/g TS. Calculation of the geometric mean can be done using one of the following 2 methods.
Method 1:
Geometric Mean = $(X_1 \times X_2 \times X_3 \ldots \times X_n)^{1/n}$
Where X = Coliform Density value of the sludge sample, and where n = number of samples (at least 7)

Method 2:
Geometric Mean = antilog$[(X_1 + X_2 + X_3 \ldots + X_n) \div n]$
Where X = $\log_{10}$ of Coliform Density value of the sludge sample, and where n = number of samples (at least 7)
Example for Method 2

Sample Number	Coliform Density of Sludge Sample	$\log_{10}$
1	6.0×10^5	5.78
2	4.2×10^6	6.62
3	1.6×10^6	6.20
4	9.0×10^5	5.95
5	4.0×10^5	5.60
6	1.0×10^6	6.00
7	5.1×10^5	5.71

The geometric mean for the seven samples is determined by averaging the $\log_{10}$ values of the coliform density and taking the antilog of that value.
$(5.78 + 6.62 + 6.20 + 5.95 + 5.60 + 6.00 + 5.71) \div 7 = 5.98$
The antilog of $5.98 = 9.5 \times 10^5$

4.4.12 Class B Sludge: Aerobic Digestion

Agitate the sludge with air or oxygen to maintain an aerobic condition for a mean cell residence time and temperature between 40 days at 20° C and 60 days at 15° C.

4.4.13 Class B Sludge: Anaerobic Digestion

Treat the sludge in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35° C to 55° C and 60 days at 20° C. Straight-line interpolation to calculate mean cell residence time is allowable when the temperature falls between 35° C and 20° C.

4.4.14 Class B Sludge: Alkaline Stabilization

Add sufficient alkali to the sludge to raise the pH to 12 after 2 hours of contact.

4.4.15 Class B Sludge: Air Drying

Dry the sludge on sand beds or on paved or unpaved basins for a minimum of 3 months. During 2 of the 3 months, the ambient average daily temperature shall be above 0° C.

4.4.16 Class B Sludge: Composting

Compost the sludge using either within-vessel, static aerated pile or windrow composting methods and raise the temperature of the sludge to 40° C or higher for 5 days. For 4 hours at some point during each of the 5 days, the temperature in the compost pile shall exceed 55°C.

4.4.17 Class B Sludge: PSRP Equivalent Process

Treat the sludge in a process that is equivalent to a process to significantly reduce pathogens, as approved by the Department.

4.4.18 Vector Control: Volatile Solids Reduction

The mass of volatile solids in the sludge shall be reduced by a minimum of 38% between the time the sludge enters the digestion process and the time it either exits the digester or a storage facility. For calculation of volatile solids reduction, the permittee shall use the Van Kleeck equation or one of the other methods described in "Determination of Volatile Solids Reduction in Digestion" by J.B. Farrell, which is Appendix C of EPA's *Control of Pathogens in Municipal Wastewater Sludge* (EPA/625/R-92/013). The Van Kleeck equation is:

$$VSR\% = \frac{VS_{IN} - VS_{OUT}}{VS_{IN} - (VS_{OUT} \times VS_{IN})} \times 100$$

Where: VS_{IN} = Volatile Solids in Feed Sludge (g VS/g TS)

VS_{OUT} = Volatile Solids in Final Sludge (g VS/g TS)

VSR% = Volatile Solids Reduction, (Percent)

4.4.19 Vector Control: Specific Oxygen Uptake Rate

The specific oxygen uptake rate (SOUR) for aerobic sludge shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids on a dry weight basis, corrected to 20° Celsius. See Municipal Wastewater Sludge Guidance Memo #2 (Guidance Notes for Specific Oxygen Uptake Rates on Aerobically Digested Sludge).

4.4.20 Vector Control: Anaerobic Bench-Scale Test

Demonstrate through additional digestion, in a bench-scale test, that additional volatile solids reduction for anaerobically digested sludge is less than 17%. This shall be demonstrated by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30 and 37 degrees Celsius. This requirement is satisfied when at the end of the test, volatile solids have been reduced by less than 17%, as measured from the beginning to the end of the test. For calculation of volatile solids reduction, the permittee shall use the Van Kleeck equation, the approximate mass balance equation or one of the other methods described in "Determination of Volatile Solids Reduction in Digestion" by J.B. Farrell, which is Appendix C of EPA's *Control of Pathogens in Municipal Wastewater Sludge* (EPA/625/R-92/013). The Van Kleeck equation is:

$$VSR\% = \frac{VS_{IN} - VS_{OUT}}{VS_{IN} - (VS_{OUT} \times VS_{IN})} \times 100$$

Where: VS_{IN} = Volatile Solids in Feed Sludge (g VS/g TS)

VS_{OUT} = Volatile Solids in Final Sludge (g VS/g TS)

VSR% = Volatile Solids Reduction (Percent)

4.4.21 Vector Control: Aerobic Bench-Scale Test

Demonstrate through additional digestion, in a bench-scale test, that additional volatile solids reduction for aerobically digested sludge is less than 15%. This shall be demonstrated by digesting a portion of the previously digested sludge, at a concentration of 2% solids or less, aerobically in the laboratory in a bench-scale unit for 30 additional days at a temperature of 20 degrees Celsius. Sludge with higher percent solids shall be diluted with effluent down to 2% at the start of the test. This requirement is satisfied when at the end of the test, volatile solids have been reduced by less than 15%, as measured from the beginning to the end of the test. Use the following (Approximate Mass Balance) equation for calculating volatile solids reduction:

$$VSR\ (\%) = \frac{TS_{in}VS_{in} - TS_{out}VS_{out}}{TS_{in}VS_{in}} \times 100\ (\%)$$

Where: TS_{in} = Total Solids in Feed Sludge

TS_{out} = Total Solids in Final Sludge

VS_{in} = Volatile Solids in Feed Sludge (g VS/g TS)

VS_{out} = Volatile Solids in Final Sludge (g VS/g TS)

VSR% = Volatile Solids Reduction (Percent)

The Van Kleeck equation may also be used.

4.4.22 Vector Control: pH Adjustment

The pH of the sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 2 hours and then at 11.5 or higher for an additional 22 hours.

4.4.23 Class B Sludge - Vector Control: Injection

No significant amount of the sewage sludge shall be present on the land surface within one hour after the sludge is injected.

4.4.24 Class B Sludge - Vector Control: Incorporation

Class B sludge shall be incorporated within 6 hours of surface application, or as approved by the Department.

4.4.25 Landfilling of Sludge

General: Sewage sludge may not be disposed of in a municipal solid waste landfill unless the landfill meets the requirements of chs. NR 500 to 536, Wis. Adm. Code, and is an approved facility as defined in s. 289.01(3), Wis. Stats. Any facility accepting sewage sludge shall be approved by the Department in writing to accept sewage sludge. Disposal of sewage sludge in a municipal solid waste landfill shall be in accordance with ss. NR 506.13 and 506.14. Sewage sludge may not be disposed of in a surface disposal unit as defined in s. NR 204.03(62).

Approval: The permittee shall obtain approval from the Department prior to the disposal of sludge at a Wisconsin licensed landfill.

4.4.26 Sludge Landfilling Reports

The permittee shall report the volume of sludge disposed of at any landfill facility on Form 3400-52. The permittee shall include the name and address of the landfill, the Department license number or other state's designation or license number for all landfills used during the report period and a letter of acceptability from the landfill owner. In addition, any permittee utilizing landfills as a disposal method shall submit to the Department any test results used to indicate acceptability of the sludge at a landfill. Form 3400-52 shall be submitted annually by January 31, each year whether or not sludge is landfilled.

4.4.27 Sludge Incineration Reports

The permittee shall report the volume of sludge combusted at an on-site incinerator on Form 3400-52. Submittal of Form 3400-52 is required annually by January 31, each year whether or not sludge is incinerated.

4.4.28 Sludge Hauling

The permittee is required to submit Form 3400-52 to the Department. If sludge is hauled to another facility, information shall include the quantity of sludge hauled, the name, address, phone number, contact person, and permit number of the receiving facility. Form 3400-52 shall be submitted annually by January 31 each year whether or not sludge is hauled.

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Management Plan -Management Plan Update Submittal	November 1, 2022	27
Management Plan -Ongoing Management Plan Updates	See Permit	27
Tjoflat Pit Drawdown -Inspection Concurrence	November 1, 2022	27
Tjoflat Pit Drawdown -Repairs	December 1, 2022	27
General Sludge Management Form 3400-48	prior to any significant sludge management changes	34
Characteristic Form 3400-49 and Lab Report	by the 21st of the month following the reporting period	34
Land Application Report Form 3400-55	by January 31, each year whether or not non-exceptional quality sludge is land applied	35
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not sludge is hauled, landfilled, incinerated, or exceptional quality sludge is distributed or land applied	35
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	28

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

ATTACHMENT 1

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

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

ATTACHMENT 2

PRIMARY INDUSTRIES AND POLLUTANT GROUPS REQUIRING TESTING

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	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	

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	Dioxins and Furans
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					
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

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	Dioxins and Furans
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 Lightweight Papers from Purchased Pulp					
Nonintegrated Fine		X			X
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	