WPDES PERMIT

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

PERMIT TO DISCHARGE UNDER THE WISCONSIN POLLUTANT DISCHARGE ELIMINATION SYSTEM

HPC industrial Services

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility located at
1203 Klement St
to
Groundwaters of the State via landspreading on approved sites in Dane, Jefferson, Rock, and Walworth Counties
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 _____
Jason Knutson, P.E.
Wastewater Supervisor

_____
Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE - January 01, 2025 **EXPIRATION DATE – December 31, 2029**

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1 Influent Requirements

1.1 Sampling Point(s)

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
701	Inflow to storage from Custom Culinary of primary settling treatment from salad dressing production (industrial liquid sludge).
702	Inflow to storage from Griffith Labs of primary settling treatment from salad dressing production (industrial liquid sludge).
703	Inflow to storage from HV Manufacturing of primary settling treatment from salad dressing production (industrial liquid sludge).
704	Inflow to storage from Masterson CO of confectionary process wastewater (industrial liquid waste).
705	Inflow to storage from Ocean Spray of juice processing wastewater (industrial liquid waste, waste #1).
706	Inflow to storage from Redi Serve Foods of primary settling treatment from meat processing and rendering (industrial liquid sludge).
707	Inflow to storage from Strass Veal of food production grease trap (grease trap waste).
708	Inflow to storage from V V F LLC of primary settling treatment from soap and detergent production (industrial liquid sludge).
711	Inflow to storage from Milwaukee Secure Detention CTR of food grade grease trap waste (grease trap waste).
712	Inflow to storage from Renewable Energy Group of industrial process wastewater (industrial liquid waste).
713	Inflow to storage from Tyson Foods of primary settling treatment from meat processing and rendering (industrial liquid sludge).
714	Inflow to storage from Vantage Oleochemical of primary settling treatment from pharmaceutical manufacturing (industrial liquid sludge).
715	Inflow to storage from Valero Renewable Fuels of industrial treatment biosolids from ethyl alcohol production (industrial liquid sludge, waste #1).
716	Inflow to storage from Standard Process SP of food grade grease trap waste (grease trap waste).
717	Inflow to storage from Jones Dairy Farm of primary settling treatment from meat processing and rendering (industrial liquid sludge).
718	Inflow to storage from Racine Correctional Facility of food grade grease trap waste (grease trap waste).
719	Inflow to storage from Johnsonville Sausage of food grade grease trap waste (grease trap waste).
721	Inflow to storage from Blue Mound Country Club & Golf of food grade grease trap waste (grease trap waste).
722	Inflow to storage from Bel Brands of food grade grease trap waste (grease trap waste).
724	Inflow to storage from Old Wisconsin Sausage, Inc. of primary settling treatment from meat processing and rendering (industrial liquid sludge).
725	Inflow to storage from Master Gallery Foods of food grade grease trap waste (grease trap waste).
726	Inflow to storage from Blue Harbor Resorts of food grade grease trap waste (grease trap waste).
727	Inflow to storage from Schreiber Foods of by-product solids from dairy production (industrial liquid sludge).
728	Inflow to storage from Ocean Spray of liquid industrial processing wastewater from juice production (industrial liquid waste, waste #2).
730	Inflow to storage from Plexus Corp-AWI of food processing wastewater from manufacturing and packaging production (industrial liquid waste).

Sampling Point Designation	
Sampling Point Number	**Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)**
731	Inflow to storage from Grande Cheese - Juda of solid settling treatment of whey processing (industrial liquid sludge, waste #1).
732	Inflow to storage from Grande Cheese - Juda of industrial wastewater from whey processing (industrial liquid waste, waste #2).
733	Inflow to storage from Valero Renewable Fuels of corn mash from ethyl alcohol production (industrial liquid sludge, waste #1).
735	Inflow to storage from Wisconsin Power and Light of tank rinse water. Tanks contain small concentration of ammonium hydroxide (industrial washwater).

1.2 New Waste Stream Requirements

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

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

- 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.

- 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.

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

- 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.

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

- 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.

- 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.

- 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.

  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.

- 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.

- 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 Monitoring Requirements

The permittee shall comply with the following 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.

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.

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 s. 4.4 of this permit.

1.4.1 Sampling Point 701 - Custom Culinary Sludge; 702- Griffith Labs; 703- HV Manufacturing; 706- Redi Serve Foods; 707- Strass Veal; 708- V V F LLC; 713- Tyson Foods; 714- Vantage Oleochemical; 715- Valero Renewable Fuels #1; 716- Standard Process SP; 717- Jones Dairy Farm; 719- Johnsonville Sausage; 722- Bel Brands; 724- Old Wisconsin Sausage Inc.; 725- Master Gallery Foods; 727- Schreiber Foods; 731- Grande Cheese - Juda #1

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

1.4.2 Sampling Point 711- Milwaukee Secure Detention CTR; 718- Racine Correctional Facility; 721- Blue Mound Country Club & Golf; 726- Blue Harbor Resorts

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

1.4.3 Sampling Point 704 - Masterson CO; 712- Renewable Energy Group; 728- Ocean Spray #2; 730- Plexus Corp-AWI; 732- Grande Cheese - Juda #2;; 705 - Ocean Spray #1; 733 - Valero Renewable Fuels #2; 735 - Wis Power & Light - Rinsewater;

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

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, Waste Type/Sample Contents and Treatment Description (as applicable)**
303	The Agnew Farm (Milton) Storage Tank is an above ground steel storage tank (Slurrystore) located SE/NW, Section 21 of T4, R13E, with a 1.0 MG storage capacity approved for storage of comingled industrial liquid wastes, liquid industrial sludge, industrial by-product solids, and septage wastes. No manure is mixed with this tank.
306	Direct land application of industrial sludge from Valero Renewable Fuel WWTF (liquid industrial sludge).
307	Direct land application of industrial sludge from PGP International's DAF unit (liquid industrial sludge, waste #1).
308	Direct land application of high strength industrial wastewater from PGP International (industrial liquid waste, waste #2).
311	Direct land application of high strength industrial wastewater from Grande Cheese - Juda (dairy industrial liquid waste, waste #1).
312	Direct land application of industrial sludge from Grande Cheese - Juda (liquid industrial sludge, waste #2).
140	Direct land application of sewage sludge from Lake Mills WWTF (contains Radium) (Sewage Liquid Sludge).
130	Direct land application of municipal biosolids which do NOT contain radium. PLACEHOLDER: DEPARTMENT APPROVAL TO ACTIVATE OUTFALL 130 MUST BE RECEIVED 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) 303 - Agnew Farm Storage Tank

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Total Monthly	Storage is approved for comingled liquid industrial sludge, industrial liquid, by-product solids, interceptor, and septage wastes. No manure is mixed with this tank.
pH Field		su	Weekly	Grab	
Chloride		mg/L	Weekly	Composite	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
COD		mg/L	Monthly	Composite	
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	Monthly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Monthly	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	-	Gallons	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	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**
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 Pathogen Control and Vector Attraction Reduction (Grease Interceptor-mixed waste)

Pathogen Control and Vector Attraction Reduction Requirements

The permittee shall address pathogen control and vector attraction in one of the following ways:

- Liquid injection
- Incorporation within 6 hours of surface application, or
- The pH shall be raised to 12 or higher by alkali addition and without the addition of more alkali, shall remain at 12 or higher for 30 minutes. The pH shall be determined on each truckload using pH paper for the appropriate pH range or an acceptable pH meter. Alternatively, the entire tank contents may be pH adjusted if approved in the management plan, and consistent with that plan. In all cases, pH should be measured in a slurry and corrected to a temperature of 25 deg. C with the following formula:

$$\text{Correction Factor} = \frac{0.03 \text{ pH units} \times (\text{Measured Temp} - 25 \text{ deg C})}{1 \text{ deg C}}$$

Actual pH = Measured pH +/- Correction Factor

If either injection or incorporation are utilized to satisfy the pathogen and vector control requirements then the minimum duration between application and harvest or use as specified in s. NR 113.07(3)(d)2, Wis. Adm. Code, shall be maintained.

2.2.1.2 Other Land Application Requirements

See Section 2.4 "General Land Application Requirements" for other applicable requirements for this outfall.

2.2.1.3 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.

2.2.1.4 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.

2.2.2 Sample Point (Outfall) 306 – Valero Renewable Fuels; 307- PGP #1; 308- PGP #2; 311- Grande Cheese - Juda #1; 312- Grande Cheese - Juda #2

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Measure	Industrial liquid waste or industrial liquid sludge
pH Field		su	Monthly	Grab	
Chloride		mg/L	Monthly	Grab	
COD		mg/L	Monthly	Grab	
Nitrogen, Ammonia (NH_3-N) Total		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Phosphorus, Total		mg/L	Monthly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		mg/L	Monthly	Grab	
Solids, Total		Percent	Monthly	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	-	Gallons	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 Future DLA Clients

This outfall contains Direct Land Application outfalls for industrial liquid waste or industrial liquid sludge clients. Future outfalls that are approved for direct land application of industrial liquid waste or industrial liquid sludge will be assigned an outfall number under this section.

2.2.2.2 Other Land Application Requirements

See Section 2.4 "General Land Application Requirements" for other applicable requirements for these outfalls.

2.2.2.3 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.

2.2.2.4 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 Sampling Point (Outfall) 140 - DLA: Lake Mills WWTF

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Measure	Direct Land Application of Sewage Liquid Sludge (contains Radium)
Solids, Total		Percent	Quarterly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
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	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonium (NH_4-N) Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
Radium 226 Dry Wt		pCi/g	Annual	Composite	
Fecal Coliform	Geometric Mean	2,000,000 MPN/g TS	Annual	Grab	

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations		
The permittee shall maintain a daily land application log for biosolids land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the biosolids land applied. The log book records shall form the basis for the annual land application report requirements.		
Parameters	**Units**	**Sample Frequency**
Date	Date	Log
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

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations The permittee shall maintain a daily land application log for biosolids land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the biosolids land applied. The log book records shall form the basis for the annual land application report requirements.		
Parameters	**Units**	**Sample Frequency**
Date	Date	Log
Method of Application	Injection, Incorporation, or surface applied	Daily as used

Annual Report – Summary of Monitoring Requirements and Limitations The Annual Report is due by January 31st of each year for the previous calendar year. See the 'Annual Land Application Report' subsection in Standard Requirements.				
Parameters	**Limit**	**Units**	**Reporting Frequency**	**Sample Type**
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Volume Per Site	-	Gallons	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Volume/ Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.2.3.1 Future DLA Clients

This outfall contains Direct Land Application of municipal sewage sludge waste with Radium. Future outfalls that are approved for direct land application of municipal sewage sludge clients which contain Radium will be assigned an outfall number under this section.

2.2.3.2 Other Land Application Requirements

Refer to sections 2.3 and 2.4 below and the standard requirements for other applicable requirements for this outfall.

2.2.3.3 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.

2.2.3.4 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.

2.2.4 Sampling Point (Outfall) 130- Place Holder: DLA Biosolids Client

Monitoring Requirements and Limitations					
Parameter	**Limit Type**	**Limit and Units**	**Sample Frequency**	**Sample Type**	**Notes**
Flow Rate		gal/month	Monthly	Measure	Direct Land Application of Sewage Liquid Sludge (no Radium)
Solids, Total		Percent	Quarterly	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	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonium (NH_4-N) Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
Fecal Coliform	Geometric Mean	2,000,000 MPN/g TS	Annual	Grab	

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations		
The permittee shall maintain a daily land application log for biosolids land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the biosolids land applied. The log book records shall form the basis for the annual land application report requirements.		
Parameters	**Units**	**Sample Frequency**
Date	Date	log
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 biosolids land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the biosolids land applied. The log book records shall form the basis for the annual land application report requirements.		
Parameters	**Units**	**Sample Frequency**
Date	Date	log
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

Annual Report – Summary of Monitoring Requirements and Limitations The Annual Report is due by January 31st of each year for the previous calendar year. See the 'Annual Land Application Report' subsection in Standard Requirements.				
Parameters	**Limit**	**Units**	**Reporting Frequency**	**Sample Type**
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Volume Per Site	-	Gallons	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Volume/ Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	-	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

2.2.4.1 Future DLA Clients

This outfall contains Direct Land Application of municipal sewage sludge waste which does not contain Radium. Future outfalls that are approved for direct land application of municipal sewage sludge clients which do not contain Radium will be assigned an outfall number under this section.

2.3 Municipal Sewage Sludge General Land Application Requirements

This section applies to all outfalls which contain municipal sewage sludge. The permittee must adhere to the following requirements once direct land application outfalls for municipal sewage sludge are approved.

2.3.1 Vector Attraction Reduction Requirements

The department requires that municipal sludge land applied from meet the vector attraction requirements of NR 204.07(7) Wis. Adm. Code. Requirements and procedures for vector attraction reduction, such as incorporation of municipal sludge (if incorporation is selected as the method for vector attraction reduction), 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, specified site-approval requirements, and the terms and conditions of this permit.

2.3.2 Designated Land Application Sites for Municipal Sewage Sludge

The permittee is required to have approved designated land application sites for land application of municipal biosolids/sewage sludge. The sewage sludge shall only be land applied on designated sites as approved. Sewage sludge from only one municipality may be land applied on each approved site. No industrial wastes may be land applied on sites used for sewage sludge.

2.3.3 Nitrogen Loading Requirements for Municipal Sludge

All sludge management activities shall be conducted in compliance with ch. NR 204, Wis. Adm. Code "Domestic Sewage Sludge Management." See s. NR 204.07(8), Wis. Adm. Code "Application Rates."

2.3.4 List 2 Analysis

If the monitoring frequency for List 2 parameters is more frequent than "Annual" then the sludge may be analyzed for the List 2 parameters just prior to each land application season rather than at the more frequent interval specified.

2.3.5 Changes in Feed Sludge Characteristics

If a change in feed sludge characteristics, treatment process, or operational procedures occurs which may result in a significant shift in sludge characteristics, the permittee shall reanalyze the sludge for List 1, 2, 3 and 4 parameters each time such change occurs.

2.3.6 Multiple Sludge Sample Points (Outfalls)

If there are multiple sludge sample points (outfalls), but the sludges are not subject to different sludge treatment processes, then a separate List 2 analysis shall be conducted for each sludge type which is land applied, just prior to land application, and the application rate shall be calculated for each sludge type. In this case, List 1, 3, and 4 and PCBs need only be analyzed on a single sludge type, at the specified frequency. If there are multiple sludge sample points (outfalls), due to multiple treatment processes, List 1, 2, 3 and 4 shall be analyzed for each sludge type at the specified frequency.

2.3.7 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.

2.3.8 Sludge Which Exceeds the High-Quality Limit

Cumulative pollutant loading records shall be kept for all bulk 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 Table 3 of s. NR 204.07(5)(c), is experienced. Such loading records shall be kept for all List 1 parameters for each site land applied 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 established in Table 2 of s. NR 204.07(5)(b), the department shall be so notified through letter or in the comment section of the annual land application report (3400-55).

2.3.9 Lifetime Cumulative Metal Loadings for Municipal Sludge

Lifetime Cumulative Metal Loadings (for Municipal Sludge)

Metal	Limit (lbs/Acre)
Arsenic	36
Cadmium	34
Copper	1339
Lead	268
Mercury	15
Nickel	375
Selenium	89

2.3.10 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 Ammonium (NH4-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

2.3.11 Other Municipal Sludge Requirements

Other Municipal Sludge Requirements	
Sludge Requirements	**Sample Frequency**
Pathogen Control: The requirements shall be met prior to land application of sludge.	**Annual**
Vector Attraction Reduction: The vector attraction reduction shall be satisfied prior to, or at the time of land application.	**Annual**

2.3.12 Other Land Application Requirements

Refer to sections 2.3 and 2.4 below and the standard requirements for other applicable requirements for this outfall.

2.4 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).

2.4.1 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.

2.4.2 Addition of Future Direct Land Application Outfalls

Clean Harbors must submit characterization for new direct land application clients (both industrial and municipal), and receive approval from the department prior to landspreading. Upon approval, CH updates its land management plan to reflect the addition of the new client and sample point. Due to the number of sample points that are added or deleted during a 5-year permit term, the department will not formally modify and re-notice this permit for new or removed direct land application sample points.

2.4.3 Department Notification of Landspreading

The department shall be notified prior to any land application of liquid wastes, by-product solids, and sludge. The method of notification (phone message, email, letter, etc.) will be a process agreed-upon by the permittee and the facility regulator. The Landspreading Management Plan shall contain a description of the manner by which this notification will occur. All such notifications shall occur at least 7 days prior to the land application event and shall include a list of sites anticipated for use during those events.

2.4.4 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.

2.4.5 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least once a quarter during which land application occurs for that waste material. The samples shall be analyzed for the parameters at the frequency specified in the monitoring table for the respective outfall. The permittee shall provide in writing to the owner of the sites the volume of wastewater, pounds per acre of nutrients, and location of application after the application. Industrial wastewater may not be applied to a site/field the same year that municipal sludges are land applied to that site/field.

2.4.6 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.

2.4.7 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 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.

2.4.7.1 Monthly Average Discharge Volume

The monthly average of the daily discharge volume shall be reported on the Characteristics Report Form 3400-49. Calculate the monthly average discharge volume by dividing the total amount discharged for the month by the total number of days in the month.

2.4.7.2 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.

2.4.8 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.

2.4.9 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.

2.5 Municipal Sewage Sludge General Land Application Requirements

This section applies to all outfalls which contain municipal sewage sludge. The permittee must adhere to the following requirements once direct land application outfalls for municipal sewage sludge are approved.

2.5.1 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.

2.5.2 Vector Attraction Reduction Requirements

The department requires that municipal sludge land applied from meet the vector attraction requirements of NR 204.07(7) Wis. Adm. Code. Requirements and procedures for vector attraction reduction, such as incorporation of municipal sludge (if incorporation is selected as the method for vector attraction reduction), 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, specified site-approval requirements, and the terms and conditions of this permit.

2.5.3 Designated Land Application Sites for Municipal Sewage Sludge

The permittee is required to have approved designated land application sites for land application of municipal biosolids/sewage sludge. The sewage sludge shall only be land applied on designated sites as approved. Sewage sludge from only one municipality may be land applied on each approved site. No industrial wastes may be land applied on sites used for sewage sludge.

2.5.4 Nitrogen Loading Requirements for Municipal Sludge

All sludge management activities shall be conducted in compliance with ch. NR 204, Wis. Adm. Code “Domestic Sewage Sludge Management.” See s. NR 204.07(8), Wis. Adm. Code “Application Rates.”

2.5.5 List 2 Analysis

If the monitoring frequency for List 2 parameters is more frequent than "Annual" then the sludge may be analyzed for the List 2 parameters just prior to each land application season rather than at the more frequent interval specified.

2.5.6 Changes in Feed Sludge Characteristics

If a change in feed sludge characteristics, treatment process, or operational procedures occurs which may result in a significant shift in sludge characteristics, the permittee shall reanalyze the sludge for List 1, 2, 3 and 4 parameters each time such change occurs.

2.5.7 Multiple Sludge Sample Points (Outfalls)

If there are multiple sludge sample points (outfalls), but the sludges are not subject to different sludge treatment processes, then a separate List 2 analysis shall be conducted for each sludge type which is land applied, just prior to land application, and the application rate shall be calculated for each sludge type. In this case, List 1, 3, and 4 and PCBs need only be analyzed on a single sludge type, at the specified frequency. If there are multiple sludge sample points (outfalls), due to multiple treatment processes, List 1, 2, 3 and 4 shall be analyzed for each sludge type at the specified frequency.

2.5.8 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.

2.5.9 Sludge Which Exceeds the High-Quality Limit

Cumulative pollutant loading records shall be kept for all bulk 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 Table 3 of s. NR 204.07(5)(c), is experienced. Such loading records shall be kept for all List 1 parameters for each site land applied 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 established in Table 2 of s. NR 204.07(5)(b), the department shall be so notified through letter or in the comment section of the annual land application report (3400-55).

2.5.10 Lifetime Cumulative Metal Loadings for Municipal Sludge

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

2.5.11 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 Ammonium (NH4-N) Total (percent)
Phosphorus Total as P (percent)
Phosphorus, Water Extractable (as percent of Total P)

List 2 NUTRIENTS See the Monitoring Requirements and Limitations table above for monitoring frequency for the List 2 parameters
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

2.5.12 Other Municipal Sludge Requirements

Other Municipal Sludge Requirements	
Sludge Requirements	**Sample Frequency**
Pathogen Control: The requirements shall be met prior to land application of sludge.	**Annual**
Vector Attraction Reduction: The vector attraction reduction shall be satisfied prior to, or at the time of land application.	**Quarterly**

3 Schedules

3.1 Land Application Management Plan

A management plan is required for the land application system.

Required Action	Due Date
Land Application Management Plan: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with chs. NR 113, NR 204, NR 214, Wis. Adm. Code, by the Due Date. This management plan shall 1) identify land application sites including all DNR approval forms and maps for approved fields; 2) describe site limitations; 3) address vegetative cover management and removal; 4) specify availability of storage; 5) describe the type of transporting and spreading vehicle(s); 6) specify monitoring procedures; 7) track site loading; 8) address contingency plans for adverse weather and odor/nuisance abatement; 9) include response actions when potentially anomalous sampling results are received; 10) include chloride and nitrogen calculations and 11) 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.	03/01/2025
Ongoing Management Plan Updates:: Updates are to be submitted and approved by the department when changes are made in land application or management plan practices. All updates should contain the latest colored aerial photos available.	

4 Standard Requirements

NR 205, Wisconsin Administrative Code (Conditions for Industrial Dischargers): The conditions in ss. NR 205.07(1) and NR 205.07(3), Wis. Adm. Code, are included by reference in this permit. The permittee shall comply with all of these requirements. Some of these requirements are outlined in the Standard Requirements section of this permit. Requirements not specifically outlined in the Standard Requirement section of this permit can be found in ss. NR 205.07(1) and NR 205.07(3).

4.1 Reporting and Monitoring Requirements

4.1.1 Monitoring Results

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

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

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

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

4.1.2 Sampling and Testing Procedures

Sampling and laboratory testing procedures shall be performed in accordance with Chapters NR 218 and NR 219, Wis. Adm. Code and 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, a reporting limit of 2.0 mg/L for BOD_5 and 2.5 mg/L Total Suspended Solids shall be considered to be limits of quantitation.
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a "0" (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as "0" (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, "0" would be reported for any day during the month that no discharge occurred.

4.1.5 Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings or electronic data records for continuous monitoring instrumentation, copies of all reports required by the permit, and records of all data used to complete the application for the permit for a period of at least 3 years from the date of the sample, measurement, report or application, except for sludge management forms and records, which shall be kept for a period of at least 5 years.

4.1.6 Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or correct information to the Department.

4.1.7 Reporting Requirements – Alterations or Additions

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is only required when:

- The alteration or addition to the permitted facility may meet one of the criteria for determining whether a facility is a new source.
- The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification requirement applies to pollutants which are not subject to effluent limitations in the existing permit.
- The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use of disposal sites not reported during the permit application process nor reported pursuant to an approved land application plan. Additional sites may not be used for the land application of sludge until department approval is received.

4.2 System Operating Requirements

4.2.1 Noncompliance Reporting

The permittee shall report the following types of noncompliance by a telephone call to the Department's regional office within 24 hours after becoming aware of the noncompliance:

- any noncompliance which may endanger health or the environment;
- any violation of an effluent limitation resulting from a bypass;
- any violation of an effluent limitation resulting from an upset; and
- any violation of a maximum discharge limitation for any of the pollutants listed by the Department in the permit, either for effluent or sludge.

A written report describing the noncompliance shall also be submitted to the Department as directed at the end of this permit within 5 days after the permittee becomes aware of the noncompliance. On a case-by-case basis, the Department may waive the requirement for submittal of a written report within 5 days and instruct the permittee to submit the written report with the next regularly scheduled monitoring report. In either case, the written report shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; the steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance; and if the noncompliance has not been corrected, the length of time it is expected to continue.
A scheduled bypass approved by the Department under the 'Scheduled Bypass' section of this permit shall not be subject to the reporting required under this section.
NOTE: Section 292.11(2)(a), Wisconsin Statutes, requires any person who possesses or controls a hazardous substance or who causes the discharge of a hazardous substance to notify the Department of Natural Resources **immediately** of any discharge not authorized by the permit. **The discharge of a hazardous substance that is not authorized by this permit or that violates this permit may be a hazardous substance spill. To report a hazardous substance spill, call DNR's 24-hour HOTLINE at 1-800-943-0003**.

4.2.2 Bypass

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

- The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities or adequate back-up equipment, retention of untreated wastes, reduction of inflow and infiltration, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or 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.

4.2.3 Scheduled Bypass

Whenever the permittee anticipates the need to bypass for purposes of efficient operations and maintenance and the permittee may not meet the conditions for controlled diversions in the 'Controlled Diversions' section of this permit, the permittee shall obtain prior written approval from the Department for the scheduled bypass. A permittee's written request for Department approval of a scheduled bypass shall demonstrate that the conditions for unscheduled bypassing are met and include the proposed date and reason for the bypass, estimated volume and duration of the bypass, alternatives to bypassing and measures to mitigate environmental harm caused by the bypass. The department may require the permittee to provide public notification for a scheduled bypass if it is determined there is significant public interest in the proposed action and may recommend mitigation measures to minimize the impact of such bypass.

4.2.4 Controlled Diversions

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

- Effluent from the wastewater treatment facility shall meet the effluent limitations established in the permit. Wastewater that is diverted around a treatment unit or treatment process during a controlled diversion shall be recombined with wastewater that is not diverted prior to the effluent sampling location and prior to effluent discharge;
- A controlled diversion may not occur during periods of excessive flow or other abnormal wastewater characteristics;
- A controlled diversion may not result in a wastewater treatment facility overflow; and
- All instances of controlled diversions shall be documented in wastewater treatment facility records and such records shall be available to the department on request.

4.2.5 Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training as required in ch. NR 114, Wis. Adm. Code, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4.2.6 Operator Certification

The wastewater treatment facility shall be under the direct supervision of a state certified operator. In accordance with s. NR 114.53, Wis. Adm. Code, every WPDES permitted treatment plant shall have a designated operator-in-charge holding a current and valid certificate. The designated operator-in-charge shall be certified at the level and in all subclasses of the treatment plant, except laboratory. Treatment plant owners shall notify the department of any changes in the operator-in-charge within 30 days. Note that s. NR 114.52(22), Wis. Adm. Code, lists types of facilities that are excluded from operator certification requirements (i.e. private sewage systems, pretreatment facilities discharging to public sewers, industrial wastewater treatment that consists solely of land disposal, agricultural digesters and concentrated aquatic production facilities with no biological treatment).

4.2.7 Spill Reporting

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

4.2.8 Planned Changes

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

4.2.9 Duty to Halt or Reduce Activity

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

4.3 Land Application Requirements

4.3.1 General Sludge Management Information

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

4.3.2 Monitoring and Calculating PCB Concentrations in Sludge

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

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

4.3.3 Land Application Characteristic Report

The analytical results from testing of liquid wastes, by-product solids and sludges that are land applied shall be reported annually on the Characteristic Report Form 3400 49. The report form shall be submitted electronically no later than the date indicated on the form. Following submittal of the electronic Characteristic Report Form 3400-49, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.
The permittee shall use the following convention when reporting sludge monitoring results: Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 1.0 mg/kg, report the pollutant concentration as < 1.0 mg/kg.
All sludge results shall be reported on a dry weight basis.

4.3.4 Annual Land Application Report

The annual totals for the land application loadings of liquid wastes, by-product solids and sludges to field spreading sites shall be submitted electronically on the Annual Land Application Report Form 3400-55 by January 31, each year whether or not waste is land applied. Following submittal of the electronic Annual Land Application Report Form 3400-55, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

4.3.5 Other Methods of Disposal or Distribution Report

The permittee shall submit electronically the Other Methods of Disposal or Distribution Report Form 3400-52 by January 31, each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit. Following submittal of the electronic Report Form 3400-52, this form shall be certified electronically via the 'eReport Certify' page by a responsible executive officer, manager, partner or proprietor as specified in s. 283.37(3), Wis. Stats., or a duly authorized representative of the officer, manager, partner or proprietor that has been delegated signature authority pursuant to s. NR 205.07(1)(g)2, Wis. Adm. Code. The 'eReport Certify' page certifies that the electronic report form is true, accurate and complete.

4.3.6 Land Application Site Approval

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

4.3.7 Operating Requirements/Management Plan

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

4.3.8 Chloride Requirements for Liquid Wastes and By-Product Solids

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

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

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

4.3.9 Nitrogen Requirements for Liquid Wastes and By-Product Solids and Sludges

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

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

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

4.3.10 Ponding

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

4.3.11 Runoff

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

4.3.12 Soil Incorporation Requirements

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

4.3.13 Field Stockpiles

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

4.3.14 Additional Requirements from ch. NR 214, Wis. Adm. Code

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

5 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Application Management Plan -Land Application Management Plan	March 1, 2025	25
Land Application Management Plan -Ongoing Management Plan Updates	See Permit	25
General Sludge Management Form 3400-48	prior to any significant sludge management changes	30
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	30
Other Methods of Disposal or Distribution Report Form 3400-52	by January 31, each year whether or not waste is hauled to another facility, landfilled, incinerated, or stored in a manure pit	31
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	26

Report forms shall be submitted electronically in accordance with the reporting requirements herein. Any facility plans or plans and specifications for municipal, industrial, industrial pretreatment and non industrial wastewater systems shall be submitted to the Bureau of Water Quality, P.O. Box 7921, Madison, WI 53707-7921. All other submittals required by this permit shall be submitted to:
South Central Region - Horicon, N7725 Hwy 28, Horicon, WI 53032-1060

1 Attachments

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
Subpart G - Mechanical Pulp	X	X			X

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