



WPDES PERMIT

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

UNITED LIQUID WASTE RECYCLING, LLC

is permitted, under the authority of Chapter 283, Wisconsin Statutes, to discharge from a facility
located at
N2797 STH 26, Watertown, WI 53098
to

**Groundwaters of the State via landspreading on approved sites including, but not limited to the counties of
Columbia, Dane, Dodge, Fond du Lac, Green Lake, and Jefferson**

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

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

State of Wisconsin Department of Natural Resources
For the Secretary

By _____
Nate Willis, P.E.
Wastewater Section Manager

Date Permit Signed/Issued

PERMIT TERM: EFFECTIVE DATE – January 01, 2023
EFFECTIVE DATE OF MODIFICATION – August 01, 2026

EXPIRATION DATE – December 31, 2027

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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 of industrial wastewater, industrial cake sludge, and/or by-product solids from ULWR Confidential Client 100 (Industrial Liquid Waste, Liquid Industrial Sludge, Industrial Cake Sludge, By-Product Solids).
703	Inflow to Storage of food waste from ULWR Confidential Client 102 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
705	Inflow to Storage of Pretreatment Sludge and by-product solids from ULWR Confidential Client 20 (Liquid Industrial Sludge, By-Product Solids).
708	Inflow to Storage of industrial waste from ULWR Confidential Client 107 (Industrial Liquid Waste, Liquid Industrial Sludge).
711	Inflow to Storage of food processing waste from ULWR Confidential Client 111 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
712	Inflow to Storage of food processing waste from ULWR Confidential Client 112 (Industrial Liquid Waste, Liquid Industrial Sludge).
716	Inflow to Storage of food processing wastes from ULWR Confidential Client 16 (Industrial Liquid Waste, Liquid Industrial Sludge, Industrial Cake Sludge).
718	Inflow to Storage of industrial cake sludge from ULWR Confidential Client 28 (Industrial Cake Sludge).
719	Inflow to Storage of food processing waste from ULWR Confidential Client 29 (Industrial Liquid Waste, Liquid Industrial Sludge).
721	Inflow to Storage of dairy processing waste from ULWR Confidential Client 31 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
724	Inflow to Storage of Liquid and By-Product Recycling Wastes from ULWR Can Recycling Room (Industrial Liquid Waste).
726	Inflow to Storage of Industrial Wastewater from ULWR Confidential Client 36 (Industrial Liquid Waste, Liquid Industrial Sludge).
728	Inflow to Storage of food processing waste from ULWR Confidential Client 41 (Industrial Liquid Waste, Liquid Industrial Sludge, Industrial Cake Sludge, By-Product Solids).
729	Inflow to Storage of industrial food processing wastewater from ULWR Confidential Client 42 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
731	Inflow to Storage of Liquid Industrial Sludge, Industrial Liquid Waste, and/or By-Product Solids from ULWR Confidential Client 44 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
732	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 45 (Industrial Liquid Waste, Industrial Liquid Sludge, By-Product Solids).
733	Inflow to Storage of Industrial Wastewater from ULWR Confidential Client 46 (Industrial Liquid Waste, Industrial Liquid Sludge).
734	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 47 (Industrial Liquid Waste, Liquid Industrial Sludge)..
735	Inflow to Storage of food processing waste from ULWR Confidential Client 48 (Industrial Liquid Waste, Liquid Industrial Sludge).
736	Inflow to Storage of Liquid Industrial Sludge, Industrial Liquid Waste, and/or By-Product Solids from ULWR Confidential Client 125 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
739	Inflow to Storage of food processing wastewater from ULWR Confidential Client 59 (Industrial Liquid Waste, Liquid Industrial Sludge).
741	Inflow to Storage of dairy processing waste from ULWR Confidential Client 67 (Industrial Liquid Waste, Liquid Industrial Sludge).
742	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 70 (Industrial Liquid Waste, Liquid Industrial Sludge).
743	Inflow to Storage of food processing waste from ULWR Confidential Client 72 (Industrial Liquid Waste, Liquid Industrial Sludge).
744	Inflow to Storage of Industrial Wastewater from ULWR Confidential Client 74 (Industrial Liquid Waste, Industrial Liquid Sludge).
747	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 84 (Industrial Liquid Waste, Liquid Industrial Sludge).
748	Inflow to Storage of cake sludge from ULWR Confidential Client 85 (Industrial Cake Sludge).
749	Inflow to Storage of food processing wastes from Confidential Client 86 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
750	Inflow to Storage of food processing wastes from ULWR Confidential Client 87 (Liquid Industrial Sludge, By-Product Solids).
751	Inflow to Storage of Industrial Wastewater from ULWR Confidential Client 1 (Industrial Liquid Waste, Liquid Industrial Sludge).
752	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 91 (Industrial Liquid Waste, Liquid Industrial Sludge).
753	Inflow to Storage of Industrial Sludge and/or By-Product Solids from ULWR Confidential Client 3 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
758	Inflow to Storage of food processing wastes from ULWR Confidential Client 8 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
759	Inflow to Storage of whey/permeate from ULWR Confidential 92 (Industrial Liquid Waste, Liquid Industrial Sludge).
763	Inflow to Storage of food processing waste from ULWR Confidential Client 13 (Industrial Liquid Waste, Liquid Industrial Sludge).
765	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 15 (Industrial Liquid Waste, Liquid Industrial Sludge).
767	Inflow to Storage of Industrial Wastewater from ULWR Confidential Client 17 (Industrial Liquid Waste, Liquid Industrial Sludge).
769	Inflow to Storage of Industrial Wastewater and/or by-product solids from ULWR Confidential Client 97 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
770	Inflow to Storage of Industrial Wastewater and/or By-Product Solids from ULWR Confidential Client 98 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
772	Inflow to Storage of food processing waste from ULWR Confidential Client 901 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
774	Inflow to Storage of Sewage Cake Sludge from ULWR Municipal Client 1. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
775	Inflow to Storage of Liquid Sewage Sludge from ULWR Municipal Client 2. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
776	Inflow to Storage of Liquid Sewage Sludge from ULWR Municipal Client 3. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).
777	Inflow to Storage of Sewage Cake Sludge from ULWR Municipal Client 4. Waste must be directed to the following storage structures: P1, P2, or P4 (Contains Radium - Sewage Cake Sludge).
778	Inflow to Storage of Industrial Liquid Waste, Liquid Industrial Sludge and/or Liquid Sewage Sludge from ULWR Confidential Client 914. If truckload contains sewage sludge, waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Industrial Liquid Waste, Liquid Industrial Sludge, Liquid Sewage Sludge).
779	Inflow to Storage of Liquid Sewage Sludge from ULWR Municipal Client 5. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).
780	Inflow to Storage of Sewage Cake Sludge from ULWR Municipal Client 6. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
782	Inflow to Storage of Sewage Cake Sludge from ULWR Municipal Client 8. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
784	Inflow to Storage of mixed industrial and sewage cake sludge leachate from ULWR Main Cake Storage, Pad #1. Waste must be directed to the following storage structures: CL-1, CL-2, or CL Pond (once approved) (Industrial Liquid Waste, Liquid Sewage Sludge).
785	Inflow to Storage of sewage cake sludge leachate from ULWR CL Property Cake Storage, Pad #2. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).
786	Inflow to Storage of Settled Solids from ULWR Main Facility H-1 Grit Separation Chambers (Industrial Cake Sludge).
787	Inflow to Storage of Settled Solids from ULWR CL-1 Grit Separation Chambers. Waste must be directed to the following storage structure: P1 (Mixed Industrial Cake Sludge, Sewage Cake Sludge, and Septage).
788	Inflow to Storage of food processing wastes from ULWR Confidential Client 118 (Industrial Liquid Waste, Liquid Industrial Sludge).
789	Inflow to Storage of Septic Tank Waste to H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Septage).
790	Inflow to Storage of Holding Tank Waste to H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Septage).
791	Inflow to Storage of Sanitary Grease Trap Waste to H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Septage).
794	Inflow to Storage of Sewage Cake Sludge from ULWR Municipal Client 10. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
795	Inflow to Storage of food processing waste from ULWR Confidential 119 (Industrial Liquid Waste, Industrial Cake Sludge, By-Product Solids).
796	Inflow to storage of sewage liquid sludge from ULWR Municipal Client 13. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Contains Radium - Sewage Liquid Sludge).
797	Inflow to storage of industrial grease trap waste from ULWR confidential client 120 (Liquid Industrial Sludge).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
798	Inflow to storage of food processing wastewater from ULWR Confidential Client 121 (Industrial Liquid Waste, Liquid Industrial Sludge).
799	Inflow to Storage of Liquid Sewage Sludge from ULWR Municipal Client 14. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).
800	Inflow to Storage of Sewage Cake Sludge from ULWR Municipal Client 15. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
802	Inflow to Storage of dairy processing waste from ULWR Confidential Client 688 (Industrial Liquid Waste, Liquid Industrial Sludge).
803	Inflow to Storage of food processing waste from ULWR Confidential Client 126 (Industrial Liquid Waste, Liquid Industrial Sludge).
804	Inflow to Storage of food processing waste from ULWR Confidential Client 127 (Industrial Liquid Waste, Liquid Industrial Sludge).
805	Inflow to Storage of food processing wastes from ULWR Confidential Client 128 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
807	Inflow to Storage of Sewage Liquid Sludge from ULWR Confidential Municipal Client 17. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Sewage Liquid Sludge).
808	Inflow to Storage of Sewage Cake Sludge from ULWR Confidential Municipal Client 18. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
809	Inflow to Storage of Sewage Cake Sludge from ULWR Confidential Municipal Client 19. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
810	Inflow to Storage of food processing waste from ULWR Confidential Client 699 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
811	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client P101 (Industrial Liquid Waste, Liquid Industrial Sludge).
812	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client P678 (Industrial Liquid Waste, Liquid Industrial Sludge).
813	Inflow to Storage of Liquid Sewage Sludge from ULWR Confidential Municipal Client 20. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).
814	Inflow to Storage of dairy processing waste from ULWR Confidential Client 130 (Industrial Liquid Waste, Liquid Industrial Sludge, By-Product Solids).
815	Inflow to Storage of Liquid Industrial Sludge from ULWR Confidential Client 135 (Industrial Liquid Waste, Liquid Industrial Sludge).
816	Inflow to Storage of Liquid Industrial Sludge and/or Septage from ULWR Confidential Client 136 (Industrial Liquid Waste, Liquid Industrial Sludge, Septage).
817	Inflow to Storage of food processing waste from ULWR Confidential Client 138 (Industrial Liquid Waste, Liquid Industrial Sludge).
818	Inflow to Storage of Liquid Sewage Sludge from ULWR Confidential Municipal Client 21. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).
819	Inflow to Storage of Liquid Sewage Sludge from ULWR Confidential Municipal Client 22. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or CL Pond (once approved) (Liquid Sewage Sludge).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
820	Inflow to Storage of Sewage Cake Sludge from ULWR Confidential Municipal Client 23. Waste must be directed to the following storage structures: P1, P2, or P4 (Sewage Cake Sludge).
821	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 24. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
822	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 25. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
823	Inflow to Storage of industrial waste from ULWR Confidential Client 137 (Industrial Liquid Waste, Industrial Liquid Sludge).
824	Inflow to Storage of industrial waste from ULWR Confidential Client 142 (Industrial Liquid Waste, Industrial Liquid Sludge).
825	Inflow to Storage of industrial waste from ULWR Confidential Client 141 (Industrial Liquid Waste, Industrial Liquid Sludge).
826	Inflow to Storage of industrial waste from ULWR Confidential Client 143 (Industrial Liquid Waste, Industrial Liquid Sludge).
827	Inflow to Storage of industrial waste from ULWR Confidential Client 144 (Industrial Liquid Waste, Industrial Liquid Sludge).
828	Inflow to Storage of industrial waste from ULWR Confidential Client 145 (Industrial Liquid Waste, Industrial Liquid Sludge).
829	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 30. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
830	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 38. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
831	Inflow to Storage of Lime Sludge from ULWR Confidential Client 146. Waste must be directed to CL-1 (Industrial Liquid Sludge).
832	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 39. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
833	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 40. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
834	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 49. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
835	Inflow to Storage of Sewage Liquid Sludge from ULWR Municipal Client 51. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
836	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 149 (Industrial Liquid Waste).
837	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 150 (Industrial Liquid Waste).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
838	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 147 (Industrial Liquid Waste).
839	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 148 (Industrial Liquid Waste).
840	Inflow to Storage of industrial cake sludge from ULWR Confidential Client 151 (Industrial Cake Sludge).
841	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 152 (Industrial Liquid Waste).
842	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 153 (Industrial Liquid Waste).
843	Inflow to Storage of industrial liquid waste from ULWR Confidential Client 156 (Industrial Liquid Waste).
844	Inflow to Storage of industrial waste from ULWR Confidential Client 154 (Industrial Liquid Waste, Industrial Liquid Sludge).
845	Inflow to Storage of industrial waste from ULWR Confidential Client 155 (Industrial Liquid Waste).
846	Inflow to Storage of industrial waste from ULWR Confidential Client 158 (Industrial Liquid Waste, Industrial Liquid Sludge).
847	Inflow to Storage of industrial waste from ULWR Confidential Client 159 (Industrial Liquid Waste, Industrial Liquid Sludge).
848	Inflow to Storage of industrial waste from ULWR Confidential Client 160 (Industrial Liquid Waste, Industrial Liquid Sludge).
849	Inflow to Storage of industrial waste from ULWR Confidential Client 161 (Industrial Liquid Waste, Industrial Liquid Sludge).
850	Inflow to Storage of industrial waste from ULWR Confidential Client 162 (Industrial Liquid Waste, Industrial Liquid Sludge).
851	Inflow to Storage of industrial waste from ULWR Confidential Client 164 (Industrial Liquid Waste, Industrial Liquid Sludge).
852	Inflow to Storage of industrial waste from ULWR Confidential Client 165 (Industrial Liquid Waste, Industrial Liquid Sludge).
853	Inflow to Storage of industrial waste from ULWR Confidential Client 166 (Industrial Liquid Waste, Industrial Liquid Sludge).
854	Inflow to Storage of industrial waste from ULWR Confidential Client 167 (Industrial Liquid Waste, Industrial Liquid Sludge).
855	Inflow to Storage of industrial waste from ULWR Confidential Client 168 (Industrial Liquid Waste, Industrial Liquid Sludge).
856	Inflow to Storage of industrial waste from ULWR Confidential Client 169 (Industrial Liquid Waste, Industrial Liquid Sludge).
857	Inflow to Storage of sewage sludge from ULWR Municipal Client 170. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).
858	Inflow to Storage of industrial waste from ULWR Confidential Client 171 (Industrial Liquid Waste, Industrial Liquid Sludge).
859	Inflow to Storage of sewage sludge from ULWR Municipal Client 172. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
860	Inflow to Storage of sewage sludge from ULWR Municipal Client 173. Waste must be directed to the following storage structures: H-3, H-4, CL-1, CL-2, or the CL Pond (once approved) (Sewage Liquid Sludge).

1.2 New Waste Stream Requirements

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

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

1. The proposed confidential client number or name, for each new client, customer, or waste generator. If an independent trucking company is transporting waste material to the permittee's facility, then the name of this company must also be submitted. A supplement to the client confidential list, which includes client number, name, address and contact person information (email and phone number), and waste profile sheet shall be provided under separate cover.
2. The type(s) of waste material (e.g., treatment plant sewage sludge, industrial liquid waste, industrial sludge, by-product solids, septage etc.) and industrial category (including SIC code, if applicable), along with a certification signed by the generator's representative indicating the waste is as described.
3. Potential sources of domestic waste within industrial waste stream (if applicable).
4. A detailed description of the treatment system, industrial process from which each individual waste material originates (if applicable), regardless of the volume of the material. Also include, if applicable: if the client has a WPDES Permit, whether or not it is a unique, short-term project (such as lagoon desludging, digester cleanout), and any other relevant information which will aid the DNR in reviewing the new clients in a timely manner.
5. SDS sheets for any specific chemicals that could be present in their original state in the waste material.
6. For each client, customer or generator, the annual volume of each waste material type anticipated to be received, the expected frequency received, volume per receipt event, and period of the year it will be received.
7. A description of the manner in which each waste material from each client, customer or waste generator will be processed and discharged under this permit, including whether the waste will be applied directly on land under this permit, or if it will be co-mingled with

other wastes in a storage facility(s), and which storage facility(s) the waste may be stored in.

8. Laboratory analyses (from a certified or registered laboratory) shall be performed to characterize the chemical composition of the material. An analysis shall be performed on every waste material from each waste generator for the following:

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

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

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

Arsenic, Cadmium, Copper, Fecal Coliform, Lead, Mercury, Molybdenum, Nickel, Selenium, Zinc, and Radium-226

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

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

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

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

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

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 or pad. 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.

1.2.2 Recycling Center Wastes

If waste from the recycling center is discharged into a storage structure, the permittee shall report the type of product(s) under the 'Comments' section of the eDMR and the type of waste under sampling point 724 upon completion of the Recycling Center Waste Inventory (see s. 4.2 of the 'Schedules' section of this permit below for details on developing and maintaining an inventory of all recycling center waste streams).

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 clients that only have sampling data that is older than the effective date of this WPDES permit. One representative sample shall be taken for each waste type. When two or more waste types are commingled, one sample shall be taken that is representative of the mixture of the waste types. A reissuance application is due 180 days prior to the expiration date of this permit. See section 1.2 above for the sampling parameters that would need to be submitted.

1.3.2 Changes to Existing Clients

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

1.4 Influent Monitoring Requirements

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

NOTE: Section 3.2.9 applies to the tracking of sewage sludge that is directly (not stored) land applied.

1.4.1 Sampling Point 701 - ULWR Confidential Client 100; 728- ULWR Confidential Client 41; 795- ULWR Confidential Client 119; 810- ULWR Confidential Client 699; 814- ULWR Confidential Client 130

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Industrial Liquid Waste		gal/month	Monthly	Estimated	
Industrial Liquid Sludge		gal/month	Monthly	Estimated	
Industrial Cake Sludge		lbs/month	Monthly	Estimated	
Industrial By-Product Solids		lbs/month	Monthly	Estimated	

1.4.2 Sampling Point 703 - ULWR Confidential Client 102; 705- ULWR Confidential Client 20; 711- ULWR Confidential Client 111; 721- ULWR Confidential Client 31; 724- ULWR Can Recycling Room; 729- ULWR Confidential Client 42; 731- ULWR Confidential Client 44; 732- ULWR Confidential Client 45; 736- ULWR Confidential Client 125; 749- ULWR Confidential Client 86; 750- ULWR Confidential Client 87; 753- ULWR Confidential Client 3; 758- ULWR Confidential Client 8; 769- ULWR Confidential Client 97; 770- ULWR Confidential Client 98; 772- ULWR Confidential Client 901; 805- ULWR Confidential Client 128

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Industrial Liquid Waste		gal/month	Monthly	Estimated	
Industrial Liquid Sludge		gal/month	Monthly	Estimated	
Industrial By-Product Solids		lbs/month	Monthly	Estimated	

1.4.3 Sampling Point 716 - ULWR Confidential Client 16

The permittee has indicated that the client in this subsection potentially generates all of the waste types identified in this table.

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

1.4.4 Sampling Point 708 - ULWR Confidential Client 107; 712- ULWR Confidential Client 112; 719- ULWR Confidential Client 29; 726- ULWR Confidential Client 36; 733- ULWR Confidential Client 46; 734- ULWR Confidential Client 47; 735- ULWR Confidential Client 48; 739- ULWR Confidential Client 59; 741- ULWR Confidential Client 67; 742- ULWR Confidential Client 70; 743- ULWR Confidential Client 72; 744- ULWR Confidential Client 74; 747- ULWR Confidential Client 84; 751- ULWR Confidential Client 1; 752- ULWR Confidential Client 91; 759- ULWR Confidential Client 92; 763- ULWR Confidential Client 13; 765- ULWR Confidential Client 15; 767- ULWR Confidential Client 17; 788- ULWR Confidential Client 118; 798- ULWR Confidential Client 121; 802- ULWR Confidential Client 688; 803- ULWR Confidential Client 126; 804- ULWR Confidential Client 127; 811- ULWR Confidential Client P101; 812- ULWR Confidential Client P678; 815- ULWR Confidential Client 135; 816- ULWR Confidential Client 136; 817- ULWR Confidential Client 138; 823- ULWR Confidential Client 137; 824- ULWR Confidential Client 142; 825- ULWR Confidential Client 141; 826- ULWR Confidential Client 143; 827- ULWR Confidential Client 144; 828- ULWR Confidential Client 145; 836- ULWR Confidential Client 149; 837- ULWR Confidential Client 150; 838- ULWR Confidential Client 147; 839- ULWR Confidential Client 148; 841- ULWR Confidential Client 152; 842- ULWR Confidential Client 153; 843- ULWR Confidential Client 156; 844- ULWR Confidential Client 154; 845- ULWR Confidential Client 155; 846- ULWR Confidential Client 158; 847- ULWR Confidential Client 159; 848- ULWR Confidential Client 160; 849- ULWR Confidential Client 161; 850- ULWR Confidential Client 162; 851- ULWR Confidential Client 164; 852- ULWR Confidential Client 165; 853- ULWR Confidential Client 166; 854- ULWR Confidential Client 167, 855- ULWR Confidential Client 168; 856- ULWR Confidential Client 169; and 858- ULWR Confidential Client 171

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

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

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

1.4.5 Sampling Point 797 - ULWR Confidential Client 120 and 831- ULWR Confidential Client 146

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

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

1.4.6 Sampling Point 718 - ULWR Confidential Client 28; 748- ULWR Confidential Client 85; 786- Solids from H1 Grit Chambers, and 840- ULWR Confidential Client 151

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Industrial Cake Sludge		lbs/month	Monthly	Estimated	

1.4.7 Sampling Point 778 - ULWR Confidential Client 914

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

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

1.4.8 Sampling Point 775 - ULWR Municipal Client 2; 776- ULWR Municipal Client 3; 779- ULWR Municipal Client 5; 784- Leachate from Main Cake Pad; 785- Leachate from Pad #2; 796- ULWR Municipal Client 13; 799- ULWR Municipal Client 14; 807- ULWR Confidential Municipal 17; 813- ULWR Confidential Municipal 20; 818- ULWR Municipal Client #21; 819- ULWR Municipal Client #22; 821- ULWR Municipal Client 24; 822- ULWR Municipal Client 25; 829- ULWR Municipal Client 30; 830- ULWR Municipal Client 38; 832- ULWR Municipal Client 39; 833- ULWR Municipal Client 40; 834- ULWR Municipal Client 49; 835- ULWR Municipal Client 51; 857- ULWR Municipal Client 170; 859- ULWR Municipal Client 172; 860- ULWR Municipal Client 173

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

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

1.4.9 Sampling Point 774 - ULWR Municipal Client 1; 777- ULWR Municipal Client 4; 780- ULWR Municipal Client 6; 782- ULWR Municipal Client 8; 787- Solids from CL Grit Chambers; 794- ULWR Municipal Client 10; 800- ULWR Municipal Client #15; 808- ULWR Confidential Municipal 18; 809- ULWR Confidential Municipal 19; 820- ULWR Municipal Client #23

The permittee has indicated that each of the clients in this subsection potentially generate all of the waste types identified in this table.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Sewage Cake Sludge		lbs/month	Monthly	Estimated	

1.4.10 Sampling Point 789 - Septic Tank Waste; 790- Holding Tank Waste; 791- Sanitary Grease Waste

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

1.4.10.1 Operational Records for Septage

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

- pick-up date and time

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

1.4.11 Influent Volume Monitoring

Volume monitoring and reporting on monthly eDMRs is only required during months when wastes from a sampling point are discharged into any of the storage structures or pads. Domestic (Septage, Liquid Sewage Sludge) liquid wastes may only be discharged into the following storage structures: CL-1, CL-2, CL Pond (once approved), H-3, and H-4. Sewage cake sludge may only be placed in the following storage pads: P1, P2, or P4.

1.4.12 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. 3.4.3 of this permit.

2 Groundwater Requirements

2.1 Monitoring Requirements and Limitations

2.1.1 Groundwater Monitoring System for CL Pond

Location of Monitoring System: In vicinity of CL Pond storage lagoon (Outfalls 105 and 106)

Wells to be Monitored: PH: MW-32, PH: MW-31, PH: MW-33

Well Used To Calculate Preventive Action Limits (PALs): PH: MW-31

PALs listed in the table below have been identified based on ch. NR 140, Wis. Adm. Code. Future PALs will be calculated based on background groundwater quality data from this designated well. Groundwater contaminant concentrations shall be minimized, and PALs met in groundwater monitoring wells to the extent it is technically and economically feasible.

Point of Standards Application Well(s): PH: MW-33

Enforcement standards are to be met in groundwater located beyond the 250-foot design management zone, or beyond the property boundary, whichever is closer to the land treatment system. See the Standard Requirements section of this permit for additional conditions related to exceedance of groundwater standards.

Required Monitoring: Grab samples shall be collected from each well to be monitored per the frequency shown in the table below. The grab samples shall be analyzed for the parameters specified in the table below.

PARAMETER	UNITS	PREVENTIVE ACTION LIMIT	ENFORCEMENT STANDARD	FREQUENCY
Depth To Groundwater	feet	*****	N/A	Quarterly
Groundwater Elevation	feet MSL	*****	N/A	Quarterly
pH Field	su	*****	N/A	Quarterly
Nitrogen, Nitrite + Nitrate (as N) Dissolved	mg/L	2.0	10	Quarterly
Chloride Dissolved	mg/L	125	250	Quarterly
CBOD ₅	mg/L	*****	N/A	Quarterly
Nitrogen, Total Kjeldahl Dissolved	mg/L	*****	N/A	Quarterly
Nitrogen, Ammonia Dissolved	mg/L	0.97	9.7	Quarterly
Solids, Total Dissolved	mg/L	*****	N/A	Quarterly

2.1.1.1 Preventive Action Limits To Be Calculated For Indicator Parameters

*****Preventive Action Limits (PALs) for NR 140 Indicator Parameters have not yet been established for this site. For more information see “Indicator Parameter – Preventive Action Limits” in the Standard Requirements section. PALs are not calculated for Depth to Groundwater, Groundwater Elevation, nor Total Kjeldahl Nitrogen.

3 Land Application Requirements

3.1 Sampling Point(s)

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

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, WasteType/Sample Contents and Treatment Description (as applicable)
001	Land Application of Combined Industrial Wastes from a Concrete Storage Tank Designated as H-1. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Liquid Industrial Sludge, Industrial Liquid Waste).
012	Land Application of Combined Industrial Wastes from Stainless Steel Tank Designated as H-2. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Liquid Industrial Sludge, Industrial Liquid Waste).
019	Land Application of Industrial Waste from Below-Ground Synthetic Lined Anaerobic Storage Lagoons. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Liquid Industrial Sludge, Industrial Liquid Waste).
020	Land Application of Industrial Waste from the Below-Ground, Synthetic Lined "Big Pond." The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Industrial Liquid Waste, Liquid Industrial Sludge).
030	Land Application of Liquid Sewage Sludge (Steel, Glass Lined Tank Designated as H-3, waste is often routed through steel, glass-lined tank designated as H-4) and Industrial Wastes (Stainless Steel Tank Designated as H2). The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Septage, Liquid Sewage Sludge, Industrial Liquid Waste, Liquid Industrial Sludge).
050	Land Application of Industrial Cake Sludge and By-Product Solids from the ULWR Main Facility Storage Pad #1. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Industrial Cake Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
051	Land Application of Mixed Industrial Cake Sludge, Sewage Cake Sludge, and By-Product Solids from the ULWR Main Facility Cake Storage Pad #1. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 32 SW1/4 NE1/4 (Industrial Cake Sludge, By-Product Solids, Sewage Cake Sludge).
101	Land Application of Mixed Industrial Waste, Liquid Sewage Sludge, and Septage from Steel, Glass Lined Tank Designated as CL-1. Industrial liquid sludge contains radium. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Liquid Sewage Sludge, Liquid Industrial Sludge, Industrial Liquid Waste, Septage).
102	Land Application of Mixed Industrial Waste, Liquid Sewage Sludge, and Septage from Steel Glass Lined Tank Designated as CL-2. Industrial liquid sludge contains radium. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Liquid Sewage Sludge, Liquid Industrial Sludge, Industrial Liquid Waste, Septage).
105	Land Application of Industrial Waste from the Below-Ground, Synthetic-Lined "CL Pond" Lagoon. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Liquid Industrial Sludge, Industrial Liquid Waste).

Sampling Point Designation	
Sampling Point Number	Sampling Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
106	Land Application of Septage, Sewage Liquid Sludge, and Industrial Waste from the Below-Ground, Synthetic-Lined "CL Pond" Lagoon. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Septage, Sewage Liquid Sludge, Liquid Industrial Sludge, Industrial Liquid Waste). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
108	Land Application of Industrial Cake Sludge, Sewage Cake Sludge, and By-Product Solids from ULWR CL Property Industrial Cake Storage Pad #3. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (By-Product Solids, Industrial Cake Sludge, Sewage Cake Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
109	Land Application of Industrial Cake Sludge and By-Product Solids from ULWR CL Property Industrial Cake Storage Pad #3. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (By-Product Solids, Industrial Cake Sludge).
110	Land Application of Mixed Industrial Cake Sludge and By-Product Solids from ULWR CL Property Cake Storage Pad #3 and Sewage Cake Sludge from ULWR CL Property Cake Storage Pad #2. Sewage sludge applied under this outfall shall not contain Radium-226. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Sewage Cake Sludge, By-Product Solids, Industrial Cake Sludge). PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.
111	Land Application of Mixed Industrial Cake Sludge and By-Product Solids from ULWR CL Property Cake Storage Pad #3 and Sewage Cake Sludge from ULWR CL Property Cake Storage Pad #2. Sewage Cake Sludge Contains Radium-226. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Sewage Cake Sludge (with Radium-226), By-Product Solids, Industrial Cake Sludge).
113	Land Application of Sewage Cake Sludge from ULWR CL Property Cake Storage Pad #2. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Sewage Cake Sludge).
114	Land application of industrial cake sludge and industrial by-product solids from ULWR's Pad #4. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 26, NE 1/4, SW /14, (Industrial Cake Sludge, By-Product Solids).
115	Land application of mixed sewage cake sludge, industrial cake sludge, and industrial by-product solids from Pad #4. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 26, NE 1/4, SW /14, (Sewage Cake Sludge, Industrial Cake Sludge, By-Product Solids).
116	Land application of sewage cake sludge from Pad #4. The process for obtaining a representative sample is detailed in the land management plan. Location: 10N, 15E, Section 26, NE 1/4, SW /14, (Sewage Cake Sludge).
118	Land application of mixed sewage liquid sludge, industrial liquid waste, industrial liquid sludge, and septage from steel, glass-lined slurrystore known as CL-3. The process for obtaining a representative sample is detailed in either the approved Management Plan or the applicable sections in this permit. Location: 10N, 15E, Section 33 SE1/4 SE1/4 (Liquid Sewage Sludge, Liquid Industrial Sludge, Industrial Liquid Waste, Septage).
226	Direct land application of sewage sludge from municipal clients. PLACEHOLDER: DEPARTMENT APPROVAL REQUIRED PRIOR TO USE.

3.2 Monitoring Requirements and Limitations

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

3.2.1 Sampling Point (Outfall) 001 - Industrial Waste - H-1; 012- Industrial Waste - H-2; 019- Industrial - Anaerobic Lagoons; 020- Industrial Waste - Big Pond; 105- Industrial Waste - CL Pond

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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Estimated	Liquid Industrial Sludge and Industrial Liquid Waste
Solids, Total		Percent	Monthly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Monthly	Composite	
Phosphorus, Total		mg/L	Monthly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Monthly	Composite	
pH Field		su	Monthly	Grab	
COD		mg/L	Monthly	Composite	
Chloride		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	-	-	Daily	Log
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Frozen Site Maximum Daily Loading Volume	6,800, or alternate approved in writing	Gal/Acre/Day	Daily	Calculated

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
Unfrozen Site Maximum Daily Loading Volume	13,500, or alternate approved in writing	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 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.1.1 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

3.2.1.2 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

3.2.1.3 Outfall 105 Re-activation Requirements

Upon activation of Outfall 106 (commingled sewage sludge, septage, and industrial waste from the CL Pond), Outfall 105 shall be inactivated and fall into ‘placeholder’ status in the permit. Prior to re-activation of Outfall 105, the permittee shall update the management plan to include the standard operating procedure for sanitizing the CL Pond. Outfall 105 shall only be re-activated when department concurrence has been received and the permittee has demonstrated the approved process has been followed and incorporated into the management plan as a standard operating procedure.

3.2.1.4 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for these outfalls.

3.2.2 Sampling Point (Outfall) 050 - PH: Industrial Solids - Pad #1; 109- Industrial Solids - Pad #3; 114- Industrial Solids - Pad #4

The permittee shall comply with the following monitoring requirements and limitations for these industrial cake sludge and by-product solids outfalls. The permittee may only land apply the type of waste approved for these outfalls on approved sites. Additional requirements for these outfalls are included in this section and other sections below.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		lbs/month	Monthly	Estimated	Industrial Cake Sludge and By-Product Solids
Solids, Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
pH Field		su	Quarterly	Grab	
Chloride		Percent	Quarterly	Composite	
Arsenic, Total Recoverable		mg/kg	Quarterly	Composite	
Cadmium, Total Recoverable		mg/kg	Quarterly	Composite	
Copper Dry Wt		mg/kg	Quarterly	Composite	
Lead Dry Wt		mg/kg	Quarterly	Composite	
Mercury Dry Wt		mg/kg	Quarterly	Composite	
Molybdenum Dry Wt		mg/kg	Quarterly	Composite	
Nickel Dry Wt		mg/kg	Quarterly	Composite	
Selenium Dry Wt		mg/kg	Quarterly	Composite	
Zinc Dry Wt		mg/kg	Quarterly	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	-	-	Daily	Log
DNR Site Number(s)	-	Number	Daily	Log
Acres Applied	-	Acres	Daily	Log
Application Rate	-	Tons/Acre/Day	Daily	Calculated

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.2.1 Soil Incorporation Requirements

Cake Sludge and By-Product Solids Requirements: After land application, cake sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to department approval. The permittee shall comply with the requirements in the department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

3.2.2.2 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.

3.2.2.3 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.

3.2.2.4 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for these outfalls.

3.2.3 Sampling Point (Outfall) 030 - Mixed Wastes (M+I+S) - H2/H3

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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Estimated	Septage, Liquid Sewage Sludge, Liquid Industrial Sludge, and Industrial Liquid Waste
Solids, Total		Percent	See Permit Note	Composite	See s. 3.2.3.3
Nitrogen, Total Kjeldahl		mg/L	See Permit Note	Composite	See s. 3.2.3.3
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	See Permit Note	Composite	See s. 3.2.3.3
Phosphorus, Total		mg/L	See Permit Note	Composite	See s. 3.2.3.3
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	See Permit Note	Composite	See s. 3.2.3.3
pH Field		su	See Permit Note	Grab	See s. 3.2.3.3
COD		mg/L	See Permit Note	Composite	See s. 3.2.3.3
Chloride		mg/L	See Permit Note	Composite	See s. 3.2.3.3
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	See s 3.3.4 and 3.3.5
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	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Bimonthly	Grab	

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

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.3.1 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

3.2.3.2 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

3.2.3.3 Monitoring Frequency

For the parameters indicated above, during periods of discharge, the permittee shall take at least one composite sample for every 1,000,000 gallons (**with an allowable buffer of +/- 250,000 gallons**) that is land applied in a given week, or take one composite sample weekly, whichever is more frequent. **When more than one sample in a week is required, samples shall be taken in accordance with the schedule in the table below, and there shall be no more than 1,500,000 gallons and no less than 500,000 gallons between each composite sample, except that the minimum of 500,000 gallons between samples does not apply to samples taken in excess of the requirements of this section.** The proper procedures for tracking volume during periods of discharge shall be specified in the land management plan, which must be approved by the department.

Sample	Acceptable sampling window
First sample	0 – 1,250,000 gallons
Second sample	750,000 – 2,250,000 gallons
Third sample	1,750,000 – 3,250,000 gallons
Fourth sample	2,750,000 – 4,250,000 gallons

3.2.3.4 Other Sewage Sludge Land Application Requirements

Refer to ss. 3.3.1-3.3.6 below and the standard requirements (Section 5) for other applicable sewage sludge requirements for this outfall.

3.2.3.5 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for this outfall.

3.2.4 Sampling Point (Outfall) 101 - Mixed Wastes (M+I(R)+S) - CL-1, 102 - Mixed Wastes (M+I(R)+S) - CL-2

The permittee shall comply with the following monitoring requirements and limitations for this combined waste outfall. The permittee may only land apply the type of waste approved for these outfalls on approved sites. Additional requirements for these outfalls are included in this section and other sections below.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Estimated	Liquid Sewage Sludge, Industrial Liquid Waste, Liquid Industrial Sludge (may contain Radium), and Septage
Solids, Total		Percent	Weekly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Weekly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Weekly	Composite	
Phosphorus, Total		mg/L	Weekly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Weekly	Composite	
pH Field		su	Weekly	Grab	
COD		mg/L	Weekly	Composite	
Chloride		mg/L	Weekly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	See s 3.3.4 and 3.3.5
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	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Bimonthly	Grab	
Radium 226 Dry Wt		pCi/g	Annual	Composite	

Daily Land Application Log

Discharge Monitoring Requirements and Limitations

The permittee shall maintain a daily land application log for mixed waste land applied each day when land application occurs. The following minimum records must be kept, in addition to all analytical results for the wastes that are land applied. The log book records shall form the basis for the annual land application report requirements.

Parameters	Units	Sample Frequency
Date	Date	Daily as used
DNR Site Number(s)	Number	Daily as used
Outfall number applied	Number	Daily as used
Acres applied	Acres	Daily as used
Amount applied	As appropriate * /day	Daily as used
Application rate per acre	unit */acre	Daily as used
Nitrogen applied per acre	lb/acre	Daily as used
Method of Application	Injection, Incorporation, or surface applied	Daily as used

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.4.1 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

3.2.4.2 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

3.2.4.3 Land Application of Sludge Which Contains Elevated Levels of Radium-226

The land application of sludge containing radium-226 shall be terminated when the soil level of radium-226 equals or exceeds 2 pico curies per gram of soil on a dry weight basis in the top 12 inches of soil. The permittee shall document how radium-contaminated sludge is handled at the facility in the land management plan. Sludge containing radium-226 shall be land applied in accordance with all of the following requirements:

- (1) The soil pH shall be at least 6.0 prior to the application of sludge containing radium-226. This pH shall be maintained during the period the site is used for the land application of sludge containing radium-226.
- (2) The soil shall have at minimum a 6 inch layer with a clay content of at least 18% within the top 5 feet of the soil profile and be above the seasonal high groundwater level and bedrock. This determination shall be based primarily on the detailed county soil survey books.
- (3) The soil shall have at minimum a 6 inch layer with an organic matter content of at least 12 tons/acre within the top 5 feet of soil and be above seasonal high groundwater or bedrock. This determination shall be based primarily on the on-site soil test.
- (4) The department may on a case-by-case basis conditionally approve fields that do not meet all criteria established in subds. (1) to (3) above, where evaluation of sludge characteristics, soil features and management practices indicate no adverse impacts to the environment or public health would result.
- (5) Sludge containing radium-226 may not be applied to fields used for the production of tobacco.

- (6) Application of radium-226 sludge shall be terminated when the calculated site loading reaches 1640 microcuries per acre. To continue site use, the permittee shall sample soils according to a plan approved by the department and show that soil radium-226 activity is below 2 pCi/g in the top foot of soil.

Note: The following equation can be used when calculating the amount of radium-226 per acre:

$$\text{Radium-226 (microcuries/acre)} = [\text{Concentration (picocuries/gram)} \times 10^{-6} \text{ (microcuries/picocuries)} \times \% \text{ solids} \times \text{Volume (gallons)} \times 3785 \text{ (g/gallon)}] / \text{Area (acres)}$$

3.2.4.4 Other Sewage Sludge Land Application Requirements

Refer to ss. 3.3.1-3.3.6 below and the standard requirements (Section 5) for other applicable sewage sludge requirements for these outfalls.

3.2.4.5 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for these outfalls.

3.2.5 Sampling Point (Outfall) PH: 106 - Mixed Wastes (M+I+S) - CL Pond; 118 - Mixed Wastes (M+I+S) - CL-3

The permittee shall comply with the following monitoring requirements and limitations for this combined waste outfall. The permittee may only land apply the type of waste approved for these outfalls on approved sites. Additional requirements for these outfalls are included in this section and other sections below.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Estimated	Liquid Sewage Sludge, Industrial Liquid Waste, Liquid Industrial Sludge, and Septage.
Solids, Total		Percent	Weekly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Weekly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Weekly	Composite	
Phosphorus, Total		mg/L	Weekly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Weekly	Composite	
pH Field		su	Weekly	Grab	
COD		mg/L	Weekly	Composite	
Chloride		mg/L	Weekly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	See s 3.3.4 and 3.3.5
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	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Bimonthly	Grab	

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

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.5.1 Annual Site Nitrogen Loading

For details on nitrogen loading requirements, including approval of an alternate nitrogen pounds/acre/year site loading, see the “Nitrogen Requirements for Liquid Wastes, By-Product Solids and Sludges” paragraph in the Standard Requirements section of this permit.

3.2.5.2 Biennial Site Chloride Loading

For details on chloride requirements see the “Chloride Requirements for Liquid Wastes and By-Product Solids” paragraph in the Standard Requirements section of this permit.

3.2.5.3 Outfall 106 Requirements

Upon activation of Outfall 105 (industrial waste from the CL Pond), Outfall 106 shall be inactivated in the permit. Only one of these two outfalls shall be active in any given month. Outfall 106 shall only be activated upon installation of the groundwater monitoring wells for the CL Pond identified in Section 2 of this WPDES permit.

3.2.5.4 Other Sewage Sludge Land Application Requirements

Refer to ss. 3.3.1-3.3.6 below and the standard requirements (Section 5) for other applicable sewage sludge requirements for these outfalls.

3.2.5.5 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for these outfalls.

3.2.6 Sampling Point (Outfall) 051 - Mixed Cake (M+I) - Pad #1; 108- PH: Mixed Cake (M+I) – Pad #3; 110- PH: Mixed Cake (M+I) - Pads 2/3; 115- Mixed Cake (M+I) - Pad #4

The permittee shall comply with the following monitoring requirements and limitations for these combined waste outfalls. The permittee may only land apply the type of wastes approved for this outfall on approved sites. Additional requirements for this outfall are included in this section and other sections below.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		lbs/month	Monthly	Estimated	Sewage Cake Sludge, By-Product Solids and Industrial Cake Sludge
Solids, Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
pH Field		su	Quarterly	Grab	
Chloride		Percent	Quarterly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	See s 3.3.4 and 3.3.5
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab	

Daily Land Application Log
Discharge Monitoring Requirements and Limitations
The permittee shall maintain a daily land application log for mixed cake land applied each day when land application occurs. Mixed cake may include industrial cake sludge, municipal cake sludge, and by-product solids. The following minimum records must be kept, in addition to all analytical results for the mixed wastes that are land applied. The log book records shall form the basis for the annual land application report requirements.

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

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.6.1 Soil Incorporation Requirements

Cake Sludge and By-Product Solids Requirements: After land application, cake sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to department approval. The permittee shall comply with the requirements in the department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

3.2.6.2 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.

3.2.6.3 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.

3.2.6.4 Other Sewage Sludge Land Application Requirements

Refer to ss. 3.3.1-3.3.6 below and the standard requirements (Section 5) for other applicable sewage sludge requirements for these outfalls.

3.2.6.5 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for these outfalls.

3.2.7 Sampling Point (Outfall) 111 - Mixed Cake (M(R)+I) - Pads 2/3

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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		lbs/month	Monthly	Estimated	Sewage Cake Sludge (with Radium), By-Product Solids, and Industrial Cake Sludge
Solids, Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
pH Field		su	Quarterly	Grab	
Chloride		Percent	Quarterly	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	See s 3.3.4 and 3.3.5
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab	
Radium 226 Dry Wt		pCi/g	Annual	Composite	See s. 3.2.7.4

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations		
<p>The permittee shall maintain a daily land application log for mixed cake land applied each day when land application occurs. Mixed cake may include industrial cake sludge, municipal cake sludge, and by-product solids. The following minimum records must be kept, in addition to all analytical results for the mixed wastes that are land applied. The log book records shall form the basis for the annual land application report requirements.</p>		
Parameters	Units	Sample Frequency
Date	Date	Daily as used
DNR Site Number(s)	Number	Daily as used
Outfall number applied	Number	Daily as used
Acres applied	Acres	Daily as used
Amount applied	As appropriate */day	Daily as used
Application rate per acre	unit */acre	Daily as used
Nitrogen applied per acre	lb/acre	Daily as used

Daily Land Application Log		
Discharge Monitoring Requirements and Limitations		
The permittee shall maintain a daily land application log for mixed cake land applied each day when land application occurs. Mixed cake may include industrial cake sludge, municipal cake sludge, and by-product solids. The following minimum records must be kept, in addition to all analytical results for the mixed wastes that are land applied. The log book records shall form the basis for the annual land application report requirements.		
Method of Application	Injection, Incorporation, or surface applied	Daily as used

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	165, or alternate approved in writing	Pounds/Acre/Year	Annual	Calculated
Total Chloride per Site	340, or alternate approved in writing	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	-

3.2.7.1 Soil Incorporation Requirements

Cake Sludge and By-Product Solids Requirements: After land application, cake sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to department approval. The permittee shall comply with the requirements in the department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

3.2.7.2 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.

3.2.7.3 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.

3.2.7.4 Land Application of Sludge Which Contains Elevated Levels of Radium-226

The land application of sludge containing radium-226 shall be terminated when the soil level of radium-226 equals or exceeds 2 pico curies per gram of soil on a dry weight basis in the top 12 inches of soil. The permittee shall document how radium-contaminated sludge is handled at the facility in the land management plan. Sludge containing radium-226 shall be land applied in accordance with all of the following requirements:

- (1) The soil pH shall be at least 6.0 prior to the application of sludge containing radium-226. This pH shall be maintained during the period the site is used for the land application of sludge containing radium-226.
- (2) The soil shall have at minimum a 6 inch layer with a clay content of at least 18% within the top 5 feet of the soil profile and be above the seasonal high groundwater level and bedrock. This determination shall be based primarily on the detailed county soil survey books.
- (3) The soil shall have at minimum a 6 inch layer with an organic matter content of at least 12 tons/acre within the top 5 feet of soil and be above seasonal high groundwater or bedrock. This determination shall be based primarily on the on-site soil test.
- (4) The department may on a case-by-case basis conditionally approve fields that do not meet all criteria established in subds. (1) to (3) above, where evaluation of sludge characteristics, soil features and management practices indicate no adverse impacts to the environment or public health would result.
- (5) Sludge containing radium-226 may not be applied to fields used for the production of tobacco.
- (6) Application of radium-226 sludge shall be terminated when the calculated site loading reaches 1640 microcuries per acre. To continue site use, the permittee shall sample soils according to a plan approved by the department and show that soil radium-226 activity is below 2 pCi/g in the top foot of soil.

Note: The following equation can be used when calculating the amount of radium-226 per acre:

$$\text{Radium-226 (microcuries/acre)} = [\text{Concentration (picocuries/gram)} \times 10^{-6} \text{ (microcuries/picocuries)} \times \% \text{ solids} \times \text{Volume (gallons)} \times 3785 \text{ (g/gallon)}] / \text{Area (acres)}$$

3.2.8 Sampling Point (Outfall) 113 - Sewage Cake - Pad #2; 116- Sewage Cake - Pad #4

The permittee shall comply with the following monitoring requirements and limitations for this outfall. The permittee may only land apply sewage cake sludge through this outfall on approved sites. Additional requirements for this outfall are included in applicable subsections below.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		lbs/month	Monthly	Estimated	Sewage Cake Sludge
Solids, Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
pH Field		su	Quarterly	Grab	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	See s 3.3.4 and 3.3.5
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab	

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	See NR 204	Pounds/Acre/Year	Annual	Calculated
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	See NR 204	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

3.2.8.1 Soil Incorporation Requirements

Cake Sludge and By-Product Solids Requirements: After land application, cake sludge shall be incorporated into the soil. The timing of such incorporation and other related requirements and procedures shall be specified in the management plan or in specific site applications, subject to department approval. The permittee shall comply with the requirements in the department approved management plan, specific site-approval requirements and the terms and conditions of this permit.

3.2.8.2 Site Nitrogen Loading

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

3.2.9 Sampling Point (Outfall) 226 - PH: DLA: Municipal Client

The permittee shall comply with the monitoring requirements and limitations and other applicable sections below for the listed outfalls and for other direct land application (sewage sludge) outfalls approved by the department during the term of the permit. The permittee shall not directly land apply any sewage sludge/sewage cake sludge under this permit unless department approval has been granted with a designated outfall. Direct land application of industrial wastes is not authorized under this permit.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		lbs/month	Monthly	Estimated	
Solids, Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
pH Field		su	Quarterly	Grab	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Composite	See s. 3.3.1
Radium 226 Dry Wt		pCi/g	Annual	Composite	

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

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

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

Annual Report – Summary of Monitoring Requirements and Limitations				
The Annual Report is due by January 31 st of each year for the previous calendar year. See the ‘Annual Land Application Report’ subsection in Standard Requirements.				
Parameters	Limit	Units	Reporting Frequency	Sample Type
DNR Site Number(s)	-	Number	-	-
Acres Land Applied	-	Acres	Annual	-
Total Kjeldahl Nitrogen per Site	See NR 204	Pounds/Acre/Year	Annual	Calculated
Volume/Acre	-	Gal/Acre	Annual	Calculated
Other Sources of Nitrogen	See NR 204	Pounds/Acre/Year	Annual	Calculated
Application Method	-	-	Annual	-

3.2.9.1 Direct Land Application

Representative samples shall be taken of the waste material from each direct application outfall at least quarterly during which land application occurs. The samples shall be analyzed for the parameters at the frequency specified in Table 3.2.9. Prior to discharge of waste to approved sites, the permittee shall provide in writing to the owner of the site the most recent data from any required monitoring and the volume of waste to be discharged.

3.2.9.2 Designated Landspreading Sites for Sewage Sludge

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

3.2.9.3 Land Application of Sludge Which Contains Elevated Levels of Radium-226

The land application of sludge containing radium-226 shall be terminated when the soil level of radium-226 equals or exceeds 2 pico curies per gram of soil on a dry weight basis in the top 12 inches of soil. The permittee shall document how radium-contaminated sludge is handled at the facility in the land management plan. Sludge containing radium-226 shall be land applied in accordance with all of the following requirements:

- (1) The soil pH shall be at least 6.0 prior to the application of sludge containing radium-226. This pH shall be maintained during the period the site is used for the land application of sludge containing radium-226.

- (2) The soil shall have at minimum a 6 inch layer with a clay content of at least 18% within the top 5 feet of the soil profile and be above the seasonal high groundwater level and bedrock. This determination shall be based primarily on the detailed county soil survey books.
- (3) The soil shall have at minimum a 6 inch layer with an organic matter content of at least 12 tons/acre within the top 5 feet of soil and be above seasonal high groundwater or bedrock. This determination shall be based primarily on the on-site soil test.
- (4) The department may on a case-by-case basis conditionally approve fields that do not meet all criteria established in subds. (1) to (3) above, where evaluation of sludge characteristics, soil features and management practices indicate no adverse impacts to the environment or public health would result.
- (5) Sludge containing radium-226 may not be applied to fields used for the production of tobacco.
- (6) Application of radium-226 sludge shall be terminated when the calculated site loading reaches 1640 microcuries per acre. To continue site use, the permittee shall sample soils according to a plan approved by the department and show that soil radium-226 activity is below 2 pCi/g in the top foot of soil.

Note: The following equation can be used when calculating the amount of radium-226 per acre:

$$\text{Radium-226 (microcuries/acre)} = [\text{Concentration (picocuries/gram)} \times 10^{-6} \text{ (microcuries/picocuries)} \times \% \text{ solids} \times \text{Volume (gallons)} \times 3785 \text{ (g/gallon)}] / \text{Area (acres)}$$

3.2.9.4 Site Nitrogen Loading

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

3.2.9.5 Other Sewage Sludge Land Application Requirements

Refer to ss. 3.3.1-3.3.6 below and the standard requirements (Section 5) for other applicable sewage sludge requirements for these outfalls.

3.2.9.6 Other Land Application Requirements

Refer to ss. 3.4.1-3.4.7 below and the standard requirements (Section 5) for other applicable requirements for these outfalls.

3.3 Sewage Sludge Land Application Requirements

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

3.3.1 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.

3.3.2 Sludge Management

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

3.3.3 Winter Land Application Prohibition

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

3.3.4 Sludge Which Exceeds the Ceiling Limit

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

3.3.5 Sludge Which Exceeds the High Quality Limit

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

$$[(\text{Pollutant concentration (mg/kg)} \times \text{dry tons applied/ac}) \div 500] + \text{previous loading (lbs/acre)} = \text{cumulative lbs pollutant per acre}$$

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

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

3.3.6 Other Sewage Sludge Requirements

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

PATHOGEN CONTROL FOR CLASS B SEWAGE SLUDGE		
The permittee shall implement pathogen control as listed below. 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.		
** This permittee relies solely on the fecal coliform limitation to meet this pathogen control requirement		

VECTOR ATTRACTION REDUCTION REQUIREMENTS FOR SEWAGE SLUDGE		
The permittee shall implement any one of the vector attraction reduction options. 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.		
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

3.4 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).

3.4.1 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.

3.4.2 Land Application from Storage

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

3.4.3 Record Keeping and Reporting

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

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

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

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

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

For the purposes of calculating these loading rates, the permittee shall perform these calculations as a volumetric weighted average by utilizing both the volumes of waste which are land applied, and the individual analytical data associated with each of those volumes. This calculation methodology shall be specified in the department-approved management plan.

3.4.4 Operating Requirements And Management Plan

All land application sites used for treatment of liquid wastes, by-product solids and sludge shall be operated in accordance with a department-approved management plan. The management plan shall be consistent with the requirements of this permit, ss. NR 214.17 (3) and (6), and NR 214.18 (3) and (6), Wis. Adm. Code. The management plan shall also be consistent with the municipal requirements of s. NR 204.11(1), Wis. Adm. Code, as applicable. To ensure this consistency, the management plan shall address:

- the information identified in NR 214.17 (6) and NR 214.18 (6), Wis. Adm. Code, as well as s. NR 204.07 and s. NR 113.07 as applicable.

- record keeping and maintenance, including responsible individuals;
- a full description of calculations used to determine appropriate application rates and loadings delivered to land application sites;
- tracking of site loading;
- the method for reporting monthly land application loadings from each outfall;
- notification and mitigation procedures for handling wastes that deviate from those anticipated;
- spill mitigation and notification procedures;
- odor control;
- sampling methods, procedures, and locations, including procedures for obtaining representative samples from each storage structure and for each method of land application;
- 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.

3.4.5 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. All individual samples taken in a month shall be reported individually on the 3400-49 form.

3.4.6 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.

4 Schedules

4.1 Land Management Plan

Required Action	Due Date
Land Management Submittal: Submit an update to the management plan to optimize the land application system performance and demonstrate compliance with ch. NR 204, ch. NR 113, and ch. NR 214, Wis. Adm. Codes, by the Due Date. This management plan shall 1) specify information on pretreatment processes (if any); 2) identify land application sites; 3) describe site limitations; 4) address vegetative cover management and removal; 5) specify availability of storage; 6) describe the type of transporting and spreading vehicle(s); 7) specify sampling methods, procedures, and locations; 8) track site loading; 9) address contingency plans for adverse weather and odor/nuisance abatement; 10) spill notification and mitigation procedures; 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.	02/28/2023
Management Plan Update: Submit an update to the management plan to include operational procedures when managing waste from the CL-3 tank and optimize the land application system performance and demonstrate compliance with ch. NR 204, ch. NR 113, and ch. NR 214, Wis. Adm. Codes, by the Due Date.	09/30/2026
Ongoing Management Plan Updates: Updates are to be submitted and approved by the department when changes are made in land application practices. All updates should contain the latest colored aerial photos available.	

4.2 Recycling Center Waste Inventory

Required Action	Due Date
Develop Recycling Center Waste Inventory: The permittee shall submit an inventory to the department which outlines the specific clients and waste streams that are routed through the recycling center and discharged into one of the storage structures. This inventory should specify: 1) client name/source of waste, 2) type of waste (e.g. industrial liquid waste), 3) product/description of waste, and 4) estimated annual volume of waste discharged to storage structures covered under this permit.	12/31/2023
Inventory Update #1: The permittee shall review the Recycling Center Waste Inventory and update it with the amount of each waste type received during the previous 12 months.	12/31/2024
Inventory Update #2: The permittee shall review the Recycling Center Waste Inventory and update it with the amount of each waste type received during the previous 12 months.	12/31/2025
Inventory Update #3: The permittee shall review the Recycling Center Waste Inventory and update it with the amount of each waste type received during the previous 12 months.	12/31/2026
Inventory Update #4: The permittee shall review the Recycling Center Waste Inventory and update it with the amount of each waste type received during the previous 12 months.	12/31/2027
Ongoing Inventory Updates: In the event that this permit expires, the permittee shall continue to review the Recycling Center Waste Inventory, update it with the amount of each waste type received	

during the previous 12 months, and submit it by December 31st annually.	
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5 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).

5.1 Reporting and Monitoring Requirements

5.1.1 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.

5.1.2 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.

5.1.3 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.

5.1.4 Reporting of Monitoring Results

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

- Pollutant concentrations less than the limit of detection shall be reported as < (less than) the value of the limit of detection. For example, if a substance is not detected at a detection limit of 0.1 mg/L, report the pollutant concentration as < 0.1 mg/L.
- Pollutant concentrations equal to or greater than the limit of detection, but less than the limit of quantitation, shall be reported and the limit of quantitation shall be specified.
- For purposes of calculating NR 101 fees, the 2 mg/l lower reporting limits for BOD5 and Total Suspended Solids shall be considered to be limits of quantitation
- For the purposes of reporting a calculated result, average or a mass discharge value, the permittee may substitute a “0” (zero) for any pollutant concentration that is less than the limit of detection. However, if the effluent limitation is less than the limit of detection, the department may substitute a value other than zero for results less than the limit of detection, after considering the number of monitoring results that are greater than the limit of detection and if warranted when applying appropriate statistical techniques.
- If no discharge occurs through an outfall, flow related parameters (e.g. flow rate, hydraulic application rate, volume, etc.) should be reported as “0” (zero) at the required sample frequency specified for the outfall. For example: if the sample frequency is daily, “0” would be reported for any day during the month that no discharge occurred.

5.1.5 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.

5.1.6 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.

5.1.7 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.

5.2 System Operating Requirements

5.2.1 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.**

5.2.2 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.

5.2.3 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).

5.2.4 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.

5.2.5 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.

5.2.6 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.

5.3 Groundwater Standard Requirements

5.3.1 Application of NR 140 to Substances Discharged

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

5.3.2 Groundwater Sampling

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

5.3.3 Indicator Parameter - Preventive Action Limits

Preventive action limits for indicator parameters are calculated using a minimum of eight sample analysis results available from a representative background well in accordance with the procedures in s. NR 140.20, Wis. Adm. Code.

5.3.4 Groundwater Monitoring Forms

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

5.3.5 Appropriate Formulas for Groundwater

Total Nitrogen = Total Kjeldahl Nitrogen (mg/L) + [NO₂ + NO₃] Nitrogen (mg/L)

Organic Nitrogen (mg/L) = Total Kjeldahl Nitrogen (mg/L) - Ammonia Nitrogen (mg/L)

5.3.6 Reporting Depth to Groundwater

Depth to groundwater shall be reported in feet, to the nearest 0.01 foot, below the top of the well casing. A report shall be on file with the Department stating the well casing top elevation in feet above mean sea level (MSL), to the nearest 0.01 foot, for each groundwater monitoring well.

5.3.7 Groundwater Elevation

Groundwater elevations shall be calculated by subtracting the depth to groundwater measurement from the well casing top elevation and shall be reported in feet above mean sea level (MSL) to the nearest 0.01 foot.

5.3.8 Groundwater Grab Samples

Grab samples shall be taken of the groundwater only after adequate removal or purging of standing water within the well casing has been performed. For those wells which will refill with water as fast as the water can be removed by bailing or pumping, four well volumes shall be removed prior to sample collection and analysis. For those wells which will not refill with water as fast as the water can be removed by bailing or pumping, the existing volume of water inside the well casing shall be removed and samples collected after the well has refilled to at least half the original volume in the well.

5.3.9 Filtering of Groundwater Samples

All groundwater monitoring well samples shall be filtered prior to analysis, except for the portion used to measure pH or field specific conductance, which shall be done using an unfiltered sample. While in-field analysis is preferred for these two tests, laboratory analysis done within two hours of sample collection is acceptable. For the portion to be filtered, it is preferred that filtering be performed in the field immediately following sample collection. However, laboratory filtering is acceptable. Filtering shall be performed through a standard 0.45 micron filter.

5.3.10 Groundwater Data Log

A data log shall be used to record the results of all field sampling and analysis events. This log shall include date of sampling event, groundwater sampler's name, well identification, depth from pipetop to water, depth from pipetop to well bottom, time of purging (start to end), volume of water purged, indication of whether the well was purged dry, time of sample withdrawal, and the following applicable field observations: pH, field conductivity, temperature, color, odor and turbidity, indication of whether field filtering was performed and time of filtering, indication of cap and lock replaced, and comments.

5.3.11 Notification of Attaining or Exceeding Groundwater Quality Standards

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

5.3.12 Preventive Action Limit (PAL) Exceedance

Analysis results (from the land treatment monitoring wells) that are less than this permit's PALs indicate that operation of the land treatment system is protective of groundwater quality. Substance concentrations that exhibit a trend over time of being greater than the PAL may indicate that additional technically and economically feasible actions are needed to reduce the discharge of the substance to the groundwater. In such a case, the Department may request an evaluation and response or propose a permit modification to require submittal of a groundwater evaluation report and implementation of a feasible response as specified in NR 140.24(1)(b), Wis. Adm. Code.

5.3.13 Enforcement Standard Exceedance Within the Design Management Zone

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

5.3.14 Enforcement Standard Exceedance Outside the Design Management Zone

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

5.4 Land Application Requirements

5.4.1 General Sludge Management Information

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

5.4.2 Land Application Characteristic Report

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

5.4.3 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 as follows.

Either congener-specific analysis or Aroclor analysis shall be used to determine the PCB concentration. The permittee may determine whether Aroclor or congener specific analysis is performed. Analyses shall be performed in accordance with the following provisions and Table EM in s. NR 219.04, Wis. Adm. Code.

- EPA Method 1668 may be used to test for all PCB congeners. If this method is employed, all PCB congeners shall be delineated. Non-detects shall be treated as zero. The values that are between the limit of detection 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. Note: It is recognized that a number of the congeners will co-elute with others, so there will not be 209 results to sum.
- EPA Method 8082A shall be used for PCB-Aroclor analysis and may be used for congener specific analysis as well. If congener specific analysis is performed using Method 8082A, the list of congeners tested shall include at least congener numbers 5, 18, 31, 44, 52, 66, 87, 101, 110, 138, 141, 151, 153, 170, 180, 183, 187,

and 206 plus any other additional congeners which might be reasonably expected to occur in the particular sample. For either type of analysis, the sample shall be extracted using the Soxhlet extraction (EPA Method 3540C) (or the Soxhlet Dean-Stark modification) or the pressurized fluid extraction (EPA Method 3545A). If Aroclor analysis is performed using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.11 mg/kg as possible. Reporting protocol, 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 congener specific analysis is done using Method 8082A, clean up steps of the extract shall be performed as necessary to remove interference and to achieve as close to a limit of detection of 0.003 mg/kg as possible for each congener. If the aforementioned limits of detection 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. The lab conducting the analysis shall perform as many of the following methods as necessary to remove interference:

3620C – Florisil	3611B – Alumina
3640A - Gel Permeation	3660B - Sulfur Clean Up (using copper shot instead of powder)
3630C - Silica Gel	3665A - Sulfuric Acid Clean Up

5.4.4 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.

5.4.5 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.

5.4.6 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.

5.4.7 Land Application of Sludge Which Contains Elevated Levels of Radium-226

When contributory water supplies exceed 2 pci per liter of Radium 226, monitoring for Radium 226 in sludge is required. Sludge containing Radium 226 shall be land applied in accordance with the requirements in s. NR 204.07(3)(n), Wis. Adm. Code.

5.4.8 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.

5.4.9 Chloride Requirements for Liquid Wastes and By-Product Solids

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

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

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

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

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

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

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

5.4.11 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.

5.4.12 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.

5.4.13 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.

5.4.14 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.

5.4.15 By-Product Storage Sites

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

5.4.16 Annual Inspections-Stacking Pads and Leachate Containment

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

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

5.4.17 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.

6 Summary of Reports Due

FOR INFORMATIONAL PURPOSES ONLY

Description	Date	Page
Land Management Plan -Land Management Submittal	February 28, 2023	46
Land Management Plan -Management Plan Update	September 30, 2026	46
Land Management Plan -Ongoing Management Plan Updates	See Permit	46
Recycling Center Waste Inventory -Develop Recycling Center Waste Inventory	December 31, 2023	46
Recycling Center Waste Inventory -Inventory Update #1	December 31, 2024	46
Recycling Center Waste Inventory -Inventory Update #2	December 31, 2025	46
Recycling Center Waste Inventory -Inventory Update #3	December 31, 2026	46
Recycling Center Waste Inventory -Inventory Update #4	December 31, 2027	46
Recycling Center Waste Inventory -Ongoing Inventory Updates	See Permit	47
General Sludge Management Form 3400-48	prior to any significant sludge management changes	53
Land Application Report Form 3400-55	January 31, each year whether or not waste is land applied	54
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	54
Groundwater Monitoring Forms.	no later than the date indicated on the form	51
Wastewater Discharge Monitoring Report	no later than the date indicated on the form	48

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

ATTACHMENTS 1 AND 2

ATTACHMENT 1

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

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

ATTACHMENT 2

PRIMARY INDUSTRIES AND POLLUTANT GROUPS REQUIRING TESTING

INDUSTRIAL CATEGORY	POLLUTANT GROUPS			
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides Dioxins and Furans
Adhesives and sealants	X	X	X	
Aluminum forming	X	X	X	

WPDES Permit No. WI-0061514-04-1
UNITED LIQUID WASTE RECYCLING, INC.

Auto and other laundries	X	X	X	X
Battery manufacturing	X		X	

WPDES Permit No. WI-0061514-04-1
 UNITED LIQUID WASTE RECYCLING, INC.

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

WPDES Permit No. WI-0061514-04-1
 UNITED LIQUID WASTE RECYCLING, INC.

INDUSTRIAL CATEGORY	POLLUTANT GROUPS				
	Volatile Organics	Acid Extractable Compounds	Base/Neutral Compounds	Pesticides	Dioxins and Furans
Subpart F - Semi-chemical		X			X
Subpart G - Mechanical Pulp	X	X			X
Subpart H - Non-Wood Chemical Pulp	?	?	?	?	X
Subpart I - Secondary Fiber Deink	X	X		X	X
Subpart J - Secondary Fiber Non-Deink	X	X		X	X
Subpart K - Fine and 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	