

Permit Fact Sheet

General Information

Permit Number:	WI-0058882-05-0
Permittee Name:	HPC industrial Services
Address:	1203 Klement St.
City/State/Zip:	Fort Atkinson WI 53538
Discharge Location:	Approved land spreading sites including but not limited to the counties of Dane, Jefferson, Rock, and Walworth
Receiving Water:	Groundwater of the State

Facility Description

HPC industrial Services (HPC), formerly Clean Harbors ES Industrial Services, Inc’s, and formerly Veolia ES Industrial Services, Inc. is located in Fort Atkinson, Wisconsin (Jefferson County). This facility provides short term storage and land application of industrial liquid waste, liquid industrial sludge, by-product solids, and septage waste for numerous clients. Currently, HPC has approximately 250 fields approved for the land application of wastes. HPC’s storage tank is located in the town of Milton, Wisconsin (Rock County). This permit covers the mixing of approved industrial waste with septage waste from multiple clients in the Agnew Farm Storage Tank prior to landspreading. Additionally, this permit also covers direct land spreading of industrial wastes and municipal sewage sludge. Monitoring requirements are established based on applicable Wis. Adm. Codes. The permit covers the following mixed wastes:

- Industrial liquid waste, liquid industrial sludge, by-product solids, and septage waste

Influent Clients:

HPC currently has 33 industrial clients approved under its WPDES permit to discharge waste into the Agnew Farm Storage Tank. HPC may receive approval of additional new clients throughout the term of the permit by providing the required information shown in the “New Waste Stream Requirements” section of the WPDES permit. Upon approval, HPC will update its land management plan to reflect the addition of new client(s). Due to the number of influent sample points that are added or deleted during a 5-year permit term, the department does not formally modify and re-notice the permit for new or removed influent sample points.

Storage Structures:

Sample Point	Tank Type	Capacity (Gal)	TRS	Q/Q	County	Township	2017 – 2023 Gal Landspread	Manure stored?	Wastes Stored
303	Slurrystore	1,000,000	T4, R13E, S21	SE/NW	Rock	Milton	5,804,580	No	Industrial wastes and septage

HPC must submit plans and specifications to the department for review and approval prior to additional tanks or storage structures being used to store wastes. A WPDES permit modification is required to include the new storage tank and discharges from the tank.

Sample point (Outfall) 303 is designated for Agnew Farm Storage Tank, the approved slurry store tank to track the land spreading of wastes from that discharge location. Approved wastes are comingled in the tank and then land spread. No municipal sewage sludge or manure will be put in the storage tank. The storage tank has a capacity of one million gallons.

From 2017 through 2023, approximately 5,804,580 gallons were landspread through Outfall 303 (see Appendix A for a complete summary of landspreading data).

Direct Land Spreading Outfalls:

HPC directly land spreads for clients under their WPDES permit. Total industrial waste spread from these outfalls from 2017 through 2023 was approximately 26,263,000 gallons (see Appendix A). Industrial liquid waste is injected via terra gator or drag line system on department approved sites/fields. Each land spreading site/field must be approved by the department and comply with all applicable Wis. Adm. Codes, including 1) separation distance from houses and wells, 2) separation distance from surface water and wetlands, 3) separation distance from bedrock and groundwater, and 4) soil permeability rate and available water holding capacity (sufficient to properly hold and treat the industrial wastes).

Winter time direct land spreading of industrial wastes is permissible on sites/fields meeting the above conditions and that have slopes less than 2% or on a case by case basis 2-6%, per ss. NR 214.17(2)(f) and 214.18(2)(f), Wis. Adm. Codes. When soil temperatures are above freezing, all land spreading is limited to approved sites with slopes of 12% or less.

HPC has also requested to directly land apply sewage sludge from future municipal clients. For sewage sludge, winter land application is prohibited. The biosolids from only one municipal client may be directly land applied on any given approved site. No industrial or septage wastes may be applied to that site.

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

Management Plan:

All land application practices are outlined under a department-approved land application management plan. HPC must submit an updated management plan for department review and approval by October 1, 2025, and prior to initiating any future changes in land application practices.

Land Spreading:

All land spreading is restricted to department approved sites/fields only. Upon future notification by DNR of the unacceptability of the site, HPC must immediately discontinue use of the site. Because Outfall 303 contains septage wastes, injection during land spreading will be required to satisfy NR 113.07(d)2, Wis. Adm. Code requirements. Additionally, no winter land spreading is approved for this outfall.

Other Methods of Disposal:

HPC may also haul industrial liquid waste to nearby wastewater treatment facilities. Once the industrial liquid waste is discharged to these facilities, HPC no longer is responsible for the land spreading. HPC may also haul industrial wastes to nearby wastewater treatment facilities (WWTFs) or other facilities approved to receive industrial wastes. Currently, HPC does not discharge into department approved manure storage structures per NR 214.17(1) Wis. Adm. Code.

Other Specific Permit Limits and Requirements:

Following is a summary of some of the specific permit requirements. These permit requirements are consistent with other industrial contract hauler permits.

- The volume of all wastes (Industrial Liquid Waste, Liquid Industrial Sludge, Septage/Grease Interceptor, and by-product solids) discharged into the storage tank must be monitored and reported on monthly discharge monitoring reports. In addition, a daily log must be kept of all wastes discharged into the tank. This log includes, among other things, any waste characterization information, and a certification from the generator as to the type of wastes unless a contract has been signed with the generator which establish the type of wastes that will be accepted. See the section below titled “waste types.”
- Prior to accepting any additional new wastes into storage facilities or land applying new wastes, HPC must provide information, including a characterization, on the type of wastes and receive DNR approval.
- Before initiating a discharge from the tank, it should be mixed and the contents analyzed for the required parameters. The results of the analyses should be used to establish the site loading rates.
- During periods of direct discharge (direct land spreading outfalls) the industrial liquid waste and liquid industrial sludge must be monitored monthly for flow rate, chloride, COD, pH, total Kjeldahl nitrogen (TKN), ammonia nitrogen, phosphorus, potassium, and total solids and quarterly for water extractable phosphorus. In addition, a daily log must be kept of the volume discharged through each outfall. The monitoring results and a summary of the discharge volume must be reported annually.
- This permit includes provisions for the direct discharge of municipal sewage sludge containing radium from Lake Mills WWTF. Annual monitoring for Radium and Fecal Coliform are being required, as well as monthly Flow, and Quarterly monitoring of the parameters addressed in NR 204, Wis. Adm. Code is being required. Also included is the option for the permittee to take in municipal clients which produce sewage sludge not containing Radium.
- The land spreading, either from storage or directly, is restricted to department approved sites.
- Application rates for all outfalls not containing sewage sludge are limited to the:
 - Maximum daily and weekly hydraulic load limit of the soil, shown in ch. NR 214, Wis. Adm. Code;
 - Nutrient needs of the crop cover; and
 - A chloride limit of 170 lbs/acre/year or 340 lbs/acre/two years.
- Waste that contains municipal sewage sludge or septage waste is prohibited from being land applied during the winter. Land application of sewage sludge during the winter is prohibited. Winter is defined as frozen or snow-covered ground.
- Only industrial liquid waste identified in the permit application or subsequently approved through the procedures for new wastes may be discharged either directly or through the storage system.
- HPC is required to submit for approval by October 1, 2025 an updated Land Application Management Plan to ensure they are operating in compliance with the permit, NR 113, NR 204, and NR 214, Wis. Adm. Codes. The land application management plan shall, among other items, identify a procedure for notifying the DNR Basin Representative of sites to be used during upcoming land application events.
- To ensure the continued acceptability of land spreading sites that were previously approved, HPC must notify the DNR Basin Representative of site use for review and approval, prior to using a land spreading site for the first time during the term of the proposed permit. If DNR does not approve or deny the site within 7 business days after notification of the intent to use the site, HPC may apply waste to the site under the conditions of the previous approval. Upon future notification by DNR of the unacceptability of the site, HPC shall immediately discontinue use of the site.

Waste Types

All hauler permits in the State of Wisconsin categorize the waste types into one of 7 individual categories, based on how closely the characteristics align with definitions outlined in ch. NR 113, ch. NR 204, and ch. NR 214, Wis. Adm. Codes.

Note: Waste types #2, #5, and #6 below are not authorized for land application under this WPDES permit. To accept these waste types, the permit must be modified to include applicable requirements for handling prior to acceptance.

Combined/Mixed wastes: the Agnew waste storage structure (outfall 303) industrial wastes (ch. NR 214, Wis. Adm. Code). The permit provides HPC with flexibility regarding the volume of each approved waste type that is approved for

each mixed waste outfall. To ensure flexibility, this permit does not prescribe any specific ratios of sewage sludge to septage wastes to industrial wastes in waste storage structures or outfalls.

1. **Industrial Liquid Sludge*** (from s. NR 214.03(34), Wis. Adm. Code): “the accumulated solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of water or wastewater.” Process grease interceptor waste falls under this definition.
2. **Industrial Cake Sludge*** (from s. NR 214.03(34), Wis. Adm. Code): “the accumulated solids generated during the biological, physical or chemical treatment, coagulation or sedimentation of water or wastewater.”
3. **Industrial By-Product Solids** (from s. NR 214.03(4), Wis. Adm. Code): “waste materials from the animal product or food processing industry including, but not limited to: remains of butchered animals, paunch manure and vegetable waste materials such as leaves, cuttings, peelings and actively fermenting sweet corn silage.”
4. **Industrial Liquid Waste** (from s. NR 214.03(27), Wis. Adm. Code): “process wastewater and waste liquid products, including silage leachate, whey, whey permeate, whey filtrate, contact cooling water, cooling or boiler water containing water treatment additives, and wash water generated in industrial, commercial and agricultural operations...”
5. **Sewage Liquid Sludge**** (aka “municipal sludge” or “biosolids” --from s. NR 204.03(55), Wis. Adm. Code): “the **semi-solid or liquid** residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes scum or solids removed in primary, secondary or advanced wastewater treatment processes and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.”
6. **Sewage Cake Sludge**** (aka “municipal sludge” or “biosolids” --from s. NR 204.03(55), Wis. Adm. Code): “the **solid** residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes scum or solids removed in primary, secondary or advanced wastewater treatment processes and material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.”
7. **Septage*** (from s. NR 113.03(55), Wis. Adm. Code):** “means the wastewater or contents of septic or holding tanks, dosing chambers, grease interceptors, seepage beds, seepage pits, seepage trenches, privies or portable restrooms.” **Sanitary** grease interceptor waste falls under this definition.

**NOTE: The distinction between “Industrial Cake Sludge” and “Industrial Liquid Sludge” is a function of the extent that the sludge has been dewatered. Generally speaking, if a sludge is able to be pumped, it is considered a liquid sludge. Conversely, if a sludge can be stacked, it is considered a cake sludge. This permit currently does not authorize the storage or land application of industrial cake sludge.*

**NOTE: Industrial (process) grease is generated from large-scale food production. Numerous meat and poultry processors generate industrial/process grease. Grease generated by the industrial food production process enters a grease interceptor installed in or connected to process pipes, not sanitary plumbing pipes. Non-domestic septage (including process grease) is regulated pursuant to ch. NR 214, Wis. Adm. Code. In addition, process piping is not regulated by the plumbing code; therefore, this waste is exempt from ch. NR 113, Wis. Adm. Code requirements. This waste is regulated as an industrial sludge pursuant to s. NR 214.18, Wis. Adm. Code.*

***NOTE: The distinction between “Sewage Cake Sludge” and “Sewage Liquid Sludge” is a function of the extent that the sewage sludge has been dewatered. Generally speaking, if a sewage sludge is able to be pumped, it is*

considered a sewage liquid sludge. Conversely, if a sewage sludge can be stacked, it is considered a sewage cake sludge. This permit does not authorize the storage and subsequent land application of sewage cake sludge, though the permittee may accept sewage cake sludge and directly land apply it.

*****NOTE:** Sanitary grease interceptor: a watertight receptacle designed to intercept and retain grease that enters the interceptor from sanitary plumbing in or from kitchens and restaurants. Sanitary grease contains human pathogens. See ch. NR 113, Wis. Adm. Code.

Substantial Compliance Determination

Enforcement During Last Permit: The facility has completed all previously required actions as part of the enforcement process.

After a desk top review of all discharge monitoring reports (DMRs), wastewater characteristic reports (forms 3400-049), land application reports (forms 3400-055), compliance schedule items, and a site visit on **May 12, 2023**, this facility has been found to be in substantial compliance with their current permit.

Compliance determination entered by *Kassandra Shultz* on **May 12, 2023.**

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
701		Inflow to storage from Custom Culinary of primary settling treatment from salad dressing production (liquid industrial sludge).
702		Inflow to storage from Griffith Labs of primary settling treatment from salad dressing production (liquid industrial sludge).
703		Inflow to storage from HV Manufacturing of primary settling treatment from salad dressing production (liquid industrial sludge).
704		Inflow to storage from Masterson CO of confectionary process wastewater (industrial liquid waste).
705		Inflow to storage from Ocean Spray of juice processing wastewater (industrial liquid waste, waste #1).
706		Inflow to storage from Redi Serve Foods of primary settling treatment from meat processing and rendering (liquid industrial sludge).
707		Inflow to storage from Strass Veal of food production grease interceptor (Industrial liquid waste).
708		Inflow to storage from V V F LLC of primary settling treatment from soap and detergent production (liquid industrial sludge).
711		Inflow to storage from Milwaukee Secure Detention CTR of food grade grease interceptor waste (Septage).
712		Inflow to storage from Renewable Energy Group of industrial process wastewater (industrial liquid waste).
713		Inflow to storage from Tyson Foods of primary settling treatment

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
		from meat processing and rendering (liquid industrial sludge).
714		Inflow to storage from Vantage Oleochemical of primary settling treatment from pharmaceutical manufacturing (liquid industrial sludge).
715		Inflow to storage from Valero Renewable Fuels of industrial treatment biosolids from ethyl alcohol production (liquid industrial sludge, waste #1).
716		Inflow to storage from Standard Process SP of food grade grease interceptor waste (Industrial liquid waste).
717		Inflow to storage from Jones Dairy Farm of primary settling treatment from meat processing and rendering (liquid industrial sludge).
718		Inflow to storage from Racine Correctional Facility of grease interceptor waste (Septage).
719		Inflow to storage from Johnsonville Sausage of food grade grease interceptor waste (Industrial liquid waste).
721		Inflow to storage from Blue Mound Country Club & Golf of grease interceptor waste (Industrial liquid waste).
722		Inflow to storage from Bel Brands of food grade grease interceptor waste (Industrial liquid waste).
724		Inflow to storage from Old Wisconsin Sausage, Inc. of primary settling treatment from meat processing and rendering (liquid industrial sludge).
725		Inflow to storage from Master Gallery Foods of food grade grease interceptor waste (Industrial liquid waste).
726		Inflow to storage from Blue Harbor Resorts of grease interceptor waste (Septage).
727		Inflow to storage from Schreiber Foods of by-product solids from dairy production (liquid industrial sludge).
728		Inflow to storage from Ocean Spray of liquid industrial processing wastewater from juice production (industrial liquid waste, waste #2).
730		Inflow to storage from Plexus Corp-AWI of food processing wastewater from manufacturing and packaging production (industrial liquid waste).
731		Inflow to storage from Grande Cheese - Juda of solid settling treatment of whey processing (liquid industrial sludge, waste #1).

Sample Point Designation		
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)
732		Inflow to storage from Grande Cheese - Juda of industrial wastewater from whey processing (industrial liquid waste, waste #2).
733		Inflow to storage from Valero Renewable Fuels of corn mash from ethyl alcohol production (industrial by-product solids, waste #2).
735		Inflow to storage from Wisconsin Power and Light of tank rinse water. Tanks contain small concentration of ammonium hydroxide (industrial washwater).
303		The Agnew Farm (Milton) Storage Tank is an above ground steel storage tank (Slurrystore) located SE/NW, Section 21 of T4, R13E, with a 1.0 MG storage capacity approved for storage of comingled industrial liquid wastes, liquid industrial sludge, industrial by-product solids, and septage wastes. No manure is mixed with this tank.
306		Direct land application of industrial sludge from Valero Renewable Fuel WWTF (liquid industrial sludge).
307		Direct land application of industrial sludge from PGP International's DAF unit (liquid industrial sludge, waste #1).
308		Direct land application of high strength industrial wastewater from PGP International (industrial liquid waste, waste #2).
311		Direct land application of high strength industrial wastewater from Grande Cheese - Juda (dairy industrial liquid waste, waste #1).
312		Direct land application of industrial sludge from Grande Cheese - Juda (liquid industrial sludge, waste #2).
130		Direct land application of municipal biosolids. PLACEHOLDER: DEPARTMENT APPROVAL TO ACTIVATE OUTFALL 130 MUST BE RECEIVED PRIOR TO USE.
140		Direct land application of Sewage Liquid Sludge containing radium from Lake Mills WWTF.

1 Influent – Monitoring Requirements

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

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

Changes from Previous Permit:

“Flow rate” has been updated to “Industrial Liquid Sludge” to better classify the waste. This is an administrative change and does not require the facility to test differently than the previous permit.

The sample type has been changed from “measure” to “estimate” to properly reflect how it is recorded.

Gallons per day (gpd) has been changed to gallons per month.

Explanation of Limits and Monitoring Requirements

The estimation of volume has been changed from daily to monthly for a couple reasons: first, condensing the data to be analyzed on a monthly basis allows the department to more efficiently determine waste volumes in reviewing eDMR data and determining seasonal land application trends, and second, this requirement is consistent for all haulers across the State.

SAMPLE POINT NUMBER: 711- MILWAUKEE SECURE DETENTION CTR; 718- RACINE CORRECTIONAL FACILITY; 721- BLUE MOUND COUNTRY CLUB & GOLF; 726- BLUE HARBOR RESORTS

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		Gallons/month	Monthly	Estimate	Sanitary Grease Interceptor Wastes

Changes from Previous Permit:

The sample type has been changed from “measure” to “estimate” to properly reflect how it is recorded.

Gallons per day (gpd) has been changed to gallons per month.

Explanation of Limits and Monitoring Requirements

The estimation of volume has been changed from daily to monthly for a couple reasons: first, condensing the data to be analyzed on a monthly basis allows the department to more efficiently determine waste volumes in reviewing eDMR data and determining seasonal land application trends, and second, this requirement is consistent for all haulers across the State.

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

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

Changes from Previous Permit:

“Flow rate” has been updated to “Industrial Liquid waste” to better classify the waste. This is an administrative change and does not require the facility to test differently than the previous permit.

The sample type has been changed from “measure” to “estimate” to properly reflect how it is recorded.

Gallons per day (gpd) has been changed to gallons per month.

Outfalls 737, 738, 739, 740 have been removed from the permit.

Explanation of Limits and Monitoring Requirements

The estimation of volume has been changed from daily to monthly for a couple reasons: first, condensing the data to be analyzed on a monthly basis allows the department to more efficiently determine waste volumes in reviewing eDMR data and determining seasonal land application trends, and second, this requirement is consistent for all haulers across the State.

2 Land Application

Sample Point Number: 303- Agnew Farm Storage Tank

This section covers comingled liquid industrial sludge, industrial liquid waste, grease interceptors, and septage wastes that are land spread after being stored in the Agnew Farm Storage Tank.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Total Monthly	Storage is approved for comingled liquid industrial sludge, industrial liquid, interceptor, by-product solids, and septage wastes.

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
					No manure is mixed with this tank.
pH Field		su	Weekly	Grab	
Chloride		mg/L	Weekly	Composite	
COD		mg/L	Monthly	Composite	
Solids, Total		Percent	Weekly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Weekly	Composite	
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Weekly	Composite	
Phosphorus, Total		mg/L	Monthly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Monthly	Composite	

Changes from Previous Permit:

Sample Type for total solids, total kjeldahl nitrogen, total ammonia nitrogen, total phosphorus, water extractable phosphorus, and total recoverable potassium proposed to change from "Grab" to "Composite".

Explanation of Limits and Monitoring Requirements

All required parameters for monitoring are determined to gain a basic characterization of the waste type that is land applied; these parameters are also consistent for other haulers across the State and are determined appropriate in accordance with chs. NR 204, NR 113, NR 214, Wis. Adm. Code.

pH monitoring is continued in this permit to ensure that the waste being land applied does not have an adverse effect on the pH of the soil. This should be collected as a grab sample, as the pH in the sample could change and not be representative of the waste if composited. Total Solids monitoring is included to ensure the permittee is documenting the data from the labs. Also, this information will allow for further characterization of the waste. These parameters were increased from Monthly to Weekly to ensure that this sampling is occurring as close to land application as practicable.

Nitrogen, Phosphorus, and Potassium monitoring is continued in this permit to ensure that the nutrient content of the waste being land applied is adequately tracked for the benefit of both ensuring that applicable groundwater standards are complied with and that crop needs are met.

Chloride monitoring is being continued to ensure that the biennial chloride loading rate of 340 lbs/acre/2 years is not exceeded.

Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that "tie-up" phosphorus limiting the amount of phosphorus that is plant

available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

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

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Measure	
pH Field		su	Monthly	Grab	
Chloride		mg/L	Monthly	Grab	
COD		mg/L	Monthly	Grab	
Nitrogen, Ammonia (NH ₃ -N) Total		mg/L	Monthly	Grab	
Nitrogen, Total Kjeldahl		mg/L	Monthly	Grab	
Phosphorus, Total		mg/L	Monthly	Grab	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab	
Potassium, Total Recoverable		mg/L	Monthly	Grab	
Solids, Total		Percent	Monthly	Grab	

Changes from Previous Permit:

Potassium monitoring has been changed from Quarterly to Monthly.

Total Phosphorus monitoring has been changed from Quarterly to Monthly.

Total Solids monitoring has been changed from Annual to Monthly.

Total Solids units has been changed from mg/L to Percent.

Explanation of Limits and Monitoring Requirements

All required parameters for monitoring are determined to gain a basic characterization of the waste type that is land applied; these parameters are also consistent for other haulers across the State and are determined appropriate in accordance with ch., NR 214, Wis. Adm. Code.

pH monitoring is continued in this permit to ensure that the waste being land applied does not have an adverse effect on the pH of the soil. This should be collected as a grab sample, as the pH in the sample could change and not be representative of the waste if composited. Total Solids monitoring is included to ensure the permittee is documenting the data from the labs. Also, this information will allow for further characterization of the waste. These parameters were increased from Monthly to Weekly to ensure that this sampling is occurring as close to land application as practicable.

Nitrogen, Phosphorus, and Potassium monitoring is continued in this permit to ensure that the nutrient content of the waste being land applied is adequately tracked for the benefit of both ensuring that applicable groundwater standards are complied with and that crop needs are met.

Chloride monitoring is being continued to ensure that the biennial chloride loading rate of 340 lbs/acre/2 years is not exceeded

Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

2.1.2 Sample Point Number: 309- Sludge Removal (Fort Atkinson)

Changes from the previous permit:

This sample point has been removed from the permit.

2.1.3 Sample Point Number: 130- Direct Land Application of Municipal Biosolids (PLACEHOLDER)

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

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	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		Percent	Quarterly	Composite	
Fecal Coliform	Geometric Mean	2,000,000 MPN/g TS	Annual	Grab	

Changes from Previous Permit:

Flow rate has been added to the permit.

Fecal Coliform has been added to the permit.

Explanation of Limits and Monitoring Requirements

All required parameters for monitoring are determined to gain a basic characterization of the waste type that is land applied; these parameters are also consistent for other haulers across the State and are determined appropriate in accordance with chs. NR 204. Adm. Code.

Fecal Coliform has been added due to possible septage in the grease interceptor wastes.

Nitrogen, Phosphorus, and Potassium monitoring is continued in this permit to ensure that the nutrient content of the waste being land applied is adequately tracked for the benefit of both ensuring that applicable groundwater standards are complied with and that crop needs are met.

Metals monitoring is continued in this permit to ensure that Ceiling and High Quality (NR 204) metals limits are not exceeded for sludge that is land applied.

Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must

be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

2.1.4 Sampling Point (Outfall) 140 - Direct Muni – Lake Mills WWTF

Monitoring Requirements and Limitations					
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Measure	Direct Land Application of Sewage Liquid Sludge (contains radium)
Solids, Total		Percent	Quarterly	Composite	
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Composite	
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Composite	
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Composite	
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Composite	
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Composite	
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Composite	
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Composite	
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Composite	
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Composite	
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Composite	
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Composite	
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Composite	
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Composite	
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Composite	
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Nitrogen, Ammonium (NH ₄ -N) Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		Percent	Quarterly	Composite	
Phosphorus, Total		Percent	Quarterly	Composite	

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

Changes from Previous Permit:

Flow rate has been added to the permit.

Fecal Coliform has been added to the permit.

Explanation of Limits and Monitoring Requirements

All required parameters for monitoring are determined to gain a basic characterization of the waste type that is land applied; these parameters are also consistent for other haulers across the State and are determined appropriate in accordance with chs. NR 204. Adm. Code.

Fecal Coliform has been added due to possible septage in the grease interceptor wastes.

Nitrogen, Phosphorus, and Potassium monitoring is continued in this permit to ensure that the nutrient content of the waste being land applied is adequately tracked for the benefit of both ensuring that applicable groundwater standards are complied with and that crop needs are met.

Metals monitoring is continued in this permit to ensure that Ceiling and High Quality (NR 204) metals limits are not exceeded for sludge that is land applied.

Water extractable phosphorus (WEP) is the coefficient for determining plant available phosphorus from measured total phosphorus. In Wisconsin, the Penn State Method is utilized and is expressed in percent. While a total P may be significant, the WEP may show that only a small percentage of the P is available to plants because of factors such as treatment processes and chemical addition that “tie-up” phosphorus limiting the amount of phosphorus that is plant available. As part of the Wisconsin’s nutrient management plan (NMP) requirements, the accounting of all fertilizers must be included over the NMP cycle. The fertilizer value of the waste needs to be communicated to the farmer and accounted for in the NMP.

3 Schedules

3.1 Management Plan

A management plan is required for the land application system.

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

Explanation of Schedules

HPC is required to update their management plan and get approval from the department every time the facility makes a change to their operations. This allows the department the chance to comment on the operational changes, ensuring that compliance with the provisions of chs. NR 204, 113, and 214, Wis. Adm. Code is maintained. HPC is required to update their management plan by March 1, 2025, to ensure the current practices are properly recorded and addressed as necessary.

Special Reporting Requirements

None.

Other Comments:

None.

Attachments:

None.

Expiration Date:

December 31, 2029

Justification Of Any Waivers From Permit Application Requirements

None.

Prepared By: Jonathan Hill **Wastewater Engineer**

Date: 09/24/2024.

Notice of **[Enter one: issuance/reissuance/modification]** was published in the **[Enter name of publication]** ,
[Enter address of publication] .

APPENDIX A

Summary of 3400-55 Data from 2017 – 2023

Gallons Directly Land Applied	26,263,000
Gallons Indirectly Land Applied	17,935,060
Gallons of Industrial Liquid Sludge Applied	15,360,339
Gallons of Industrial Liquid Waste Applied	22,990,841
Industrial by-product solids	42,300
Gallons applied from the Agnew Farms Storage Tank	5,804,580





