Permit Fact Sheet

This fact sheet addresses modifications made to Permit No. WI-0058891-06-0, which are effective January 01, 2026. For a full explanation of monitoring and reporting requirements, see fact sheet for Permit No. WI-0058891-06-0.

General Information

Permit Number	WI-0058891-06-1
Permittee Name and Address	A1 Advanced Pumping Service Inc N4314 CTH M, WEST SALEM, WI 54669
Permitted Facility	A1 Advanced Pumping Service Inc
Name and Address	N4314 CTH M, West Salem, WI
Discharge Location	Approved land application sites in La Crosse and Monroe counties.
Receiving Water	Groundwater Lower LaCrosse R Watershed in Little LaCrosse River of La Crosse River in La Crosse County

Facility Description

A1 Advanced Pumping Service ('A1') is a liquid waste hauling company of combined wastewater, consisting of sewage (municipal) sludge, septage (septic tank, holding tank, and domestic grease interceptors), industrial liquid waste, industrial liquid sludge, and occasionally manure. The facility hauls and landspreads the waste on Department-approved sites. A compliance schedule has been included in the permit that requires the permittee to submit an updated management plan.

The monitoring frequency required of the waste streams from the storage tanks has been increased.

This permit covers land application of the following wastes from various storage structures:

- Combined waste consisting of liquid sewage sludge (municipal biosolids), septage (includes septic tank, holding tank waste, and sanitary grease trap waste), industrial liquid waste, industrial liquid sludge, and non-CAFO manure in the 'Home Farm,' 'Olson,' and 'Pierce' tanks, and
- Combined waste consisting of liquid sewage sludge (municipal biosolids), septage (includes septic tank, holding tank waste, and sanitary grease trap waste), industrial liquid waste, and industrial liquid sludge in the 'Hammes' tank, and
- Combined waste consisting of liquid sewage sludge (municipal biosolids), septage (includes septic tank, holding tank waste, and sanitary grease trap waste), and non-CAFO manure in the Wehrs Pit.
- Liquid sewage sludge via direct land application.
 - o NOTE: 'Direct Land Application' means that a client's waste is transported and spread directly on approved fields without first being stored in this permittee's approved storage structures.

Depending on the mixed waste land applied, each land application site/field must comply with ss. NR 113.07, NR 204.07, NR 214.17, and/or NR 214.18 Wis. Adm. Codes requirements for 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 (sufficient to properly hold and treat the wastewater).

No winter land application is permitted for combined waste or municipal direct land application outfalls.. Winter is defined as frozen or snow covered ground. When soil temperatures are above freezing, all land application is limited to slopes of 12% or less. A1 has 119 approved sites/fields comprising approximately 1,900 acres located in La Crosse and Monroe counties.

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, #3, 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: Some waste storage structures or outfalls have department approval to contain multiple types of waste. For example: Outfalls 001, 002, and 003 are permitted to contain a mixture of sewage sludge (ch. NR 204, Wis. Adm. Code), septage (ch. NR 113, Wis. Adm. Code), and industrial wastes (ch. NR 214, Wis. Adm. Code). The permit provides A1 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."

*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.

- 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." *NOTE:* This permit currently does not authorize the storage or land application of industrial by-product solids.
- 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."

**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.

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: 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.

Storage Structures

A sample point (outfall) has been designated for the tank to track the land application of wastes from that discharge location. Throughout this permit the term 'outfall' is used for any Sample Point number where the location is also a discharge point. Wastes are comingled and then land applied. Wastes are typically injected during land application.

Tank/ Pad	Outfall	Tank Type	Waste Stored	Capacity (million gallons)	TRS	Q/Q	Township	Manure Stored?
Home Farm Tank	001	Steel, glass-lined	NR 113, NR 204, NR 214	1.4 MG	T16N, R6W, Section 9	NW/SE	Hamilton	Yes
Olson Tank	002	Steel, glass-lined	NR 113, NR 204, NR 214	0.5 MG	T19N, R4W, Section 19		Little Falls	Yes
Pierce Tank	003	Steel, glass-lined	NR 113, NR 204, NR 214	0.4 MG	T17N, R5W, Section 21	SW/N W	Burns	Yes
Wehrs Pit	004	Concrete	NR 204, NR 113	2.25 MG	T16N, R6W, Section 10		Hamilton	No

Other Methods of Disposal

A1 may also discharge wastes to other WPDES permitted facilities. Once the wastewater is discharged to these facilities, A1 is no longer is responsible for the land application. This waste must be reported on the annual 3400-52 'Other Methods of Disposal' form.

Management Plan

All land application practices are outlined under a department approved management plan. All must submit an updated management plan for department review and approval per the "Schedules" in the permit, and again prior to initiating any future changes in land application practices.

Permit Nomenclature

Within this permit, various acronyms are used to designate waste types by outfall. For example, Outfall 003 is shown as (M+I+S). This means that this outfall is used for land application of, municipal (M) sewage sludge, industrial (I) wastes, and Septage (S).

In tables, gray coloring indicates this is a change from the previous permit.

Permit Requirements

1 Influent – Monitoring Requirements

Influent monitoring and reporting requirements have not been altered with this permit modification.

2 Land Application - Sludge/By-Product Solids

2.1 Sampling Point(s)

	Sample Point Designation							
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)						
001		Land application of commingled industrial liquid waste, industrial liquid sludge, sewage liquid sludge, septage (grease trap waste, holding tank waste, and septic tank waste), and non-CAFO manure from the 1.4 million gallon steel, glass-lined storage tank known as the 'Home Farm' tank. Representative samples of the combined permitted waste streams stored at this storage facility shall be collected and analyzed in a manner that will yield results representative of the waste as a whole. Location: NW1/4, SE1/4, T16N, R6W, Section 9, Town of Hamilton, La Crosse County, WI (Industrial Liquid Waste, Industrial Liquid Sludge, Sewage Liquid Sludge, Septage, non-CAFO manure).						
002		Land application of commingled industrial liquid waste, industrial liquid sludge, sewage liquid sludge, septage (grease trap waste, holding tank waste, and septic tank waste), and non-CAFO manure from the 518,000 gallon steel, glass-lined storage structure known as the 'Olson' tank. Representative samples of the combined permitted waste streams stored at this storage facility shall be collected and analyzed in a manner that will yield results representative of the waste as a whole. Location: SE1/4, SE1/4, T19N, R4W, Section 19, Town of Little Falls, Monroe County, WI (Industrial Liquid Waste, Industrial Liquid Sludge, Sewage Liquid Sludge, Septage, and non-CAFO manure).						
003		Land application of commingled industrial liquid waste, industrial liquid sludge, sewage liquid sludge, septage (grease trap waste, holding tank waste, and septic tank waste), and non-CAFO manure from the 406,000 gallon steel, glass-lined tank known as the 'Pierce'						

	Sample Point Designation					
Sample Point Number	Discharge Flow, Units, and Averaging Period	Sample Point Location, Waste Type/Sample Contents and Treatment Description (as applicable)				
		tank. Representative samples of the combined permitted waste streams stored at this storage facility shall be collected and analyzed in a manner that will yield results representative of the waste as a whole. Location: SW1/4, NW1/4, T17N, R5W, Section 21, Township of Burns, La Crosse County, WI (Industrial Liquid Waste, Industrial Liquid Sludge, Sewage Liquid Sludge, Septage, and non-CAFO manure).				
004		Land application of commingled sewage liquid sludge and septage (grease trap waste, holding tank waste, and septic tank waste) from the 2.25 million gallon concrete-lined storage structure known as the 'Wehr Pit'. Representative samples of the combined permitted waste streams stored at this storage pit shall be collected and analyzed in a manner that will yield results representative of the waste as a whole. Location: NE ¼ SW ¼, Section 10, T16N, R06W, Town of Hamilton, La Cross County, WI (Sewage Liquid Sludge, Septage).				
005	NEW SAMPLING POINT/OUTFALL	Land application of commingled industrial liquid waste, industrial liquid sludge, sewage liquid sludge, and septage (grease trap waste, holding tank waste, and septic tank waste), from the 750,000 gallon steel, glass-lined tank known as the 'Hammes' tank. Representative samples of the combined permitted waste streams stored at this storage facility shall be collected and analyzed in a manner that will yield results representative of the waste as a whole. Location: SE1/4, NE1/4, Section 7, T15N, R5W, Township of Coon Valley, La Crosse County, WI (Industrial Liquid Waste, Industrial Liquid Sludge, Sewage Liquid Sludge, and Septage).				
602		Direct land application of sewage liquid sludge from La Crosse WWTP (Sewage Liquid Sludge).				

2.2 Monitoring Requirements and Limitations

2.2.1 Sample Point Number: 001- Home Farm Tank (M+I+S)

Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes	
Flow Rate		gal/month	Monthly	Estimated	Sewage Liquid Sludge, Industrial Liquid Waste, Industrial Liquid Sludge, Septage	
Solids, Total		Percent	Monthly	Composite		

	Mo	nitoring Requir	ements and Li	mitations	
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Nitrogen, Total Kjeldahl		mg/L	Monthly	Composite	
Nitrogen, Ammonia (NH3-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	
COD		mg/L	Monthly	Composite	
Chloride		mg/L	Monthly	Composite	
pH Field		su	Monthly	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	Grab	

None.

2.2.2 Sampling Point (Outfall) 002 - Olson Tank (M+I+S); 003- Pierce Tank (M+I+S); 005-Hammes Tank (M+I+S)

	Mo	onitoring Requir	ements and Li	mitations	
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes
Flow Rate		gal/month	Monthly	Estimated	
Solids, Total		Percent	Quarterly	Composite	
Nitrogen, Total Kjeldahl		mg/L	Quarterly	Composite	
Nitrogen, Ammonia (NH3-N) Total		mg/L	Quarterly	Composite	
Phosphorus, Total		mg/L	Quarterly	Composite	
Phosphorus, Water Extractable		% of Tot P	Quarterly	Composite	
Potassium, Total Recoverable		mg/L	Quarterly	Composite	
COD		mg/L	Quarterly	Composite	
Chloride		mg/L	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	

	Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
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			

Outfall 005 has been added with the same monitoring/reporting requirements as Outfalls 002 and 003.

Explanation of Limits and Monitoring Requirements

Fecal Coliform monitoring and a limitation are included to ensure that the permittee is complying with the pathogen reduction requirements in ch. NR 204, Wis. Adm. Code.

pH monitoring is included 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.

Nitrogen, Phosphorus, and Potassium monitoring is included 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 are included to ensure that Ceiling and High Quality (NR 204) metals limits are not exceeded for sludge that is land applied.

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

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.

2.2.3 Sample Point Number: 004- Wehrs Pit (M+S)

	Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Flow Rate		gal/month	Monthly	Estimated	Sewage Liquid Sludge, Septage		
Solids, Total		Percent	Monthly	Composite			
Nitrogen, Total Kjeldahl		mg/L	Monthly	Composite			
Nitrogen, Ammonia (NH3-N) Total		mg/L	Monthly	Composite			

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

None.

2.2.4 Sample Point Number: 602- DLA: La Crosse (M)

	Monitoring Requirements and Limitations						
Parameter	Limit Type	Limit and Units	Sample Frequency	Sample Type	Notes		
Flow Rate		gal/month	Monthly	Estimated	Sewage Liquid Sludge, Sewage Cake Sludge		
Solids, Total		Percent	Quarterly	Grab			
Nitrogen, Total Kjeldahl		mg/L	Quarterly	Grab			
Nitrogen, Ammonia (NH3-N) Total		mg/L	Quarterly	Grab			
Phosphorus, Total		mg/L	Quarterly	Grab			
Phosphorus, Water Extractable		% of Tot P	Quarterly	Grab			
Potassium, Total Recoverable		mg/L	Quarterly	Grab			
pH Field		su	Quarterly	Grab			
Arsenic Dry Wt	Ceiling	75 mg/kg	Quarterly	Grab			
Arsenic Dry Wt	High Quality	41 mg/kg	Quarterly	Grab			
Cadmium Dry Wt	Ceiling	85 mg/kg	Quarterly	Grab			
Cadmium Dry Wt	High Quality	39 mg/kg	Quarterly	Grab			
Copper Dry Wt	Ceiling	4,300 mg/kg	Quarterly	Grab			
Copper Dry Wt	High Quality	1,500 mg/kg	Quarterly	Grab			
Lead Dry Wt	Ceiling	840 mg/kg	Quarterly	Grab			
Lead Dry Wt	High Quality	300 mg/kg	Quarterly	Grab			
Mercury Dry Wt	Ceiling	57 mg/kg	Quarterly	Grab			
Mercury Dry Wt	High Quality	17 mg/kg	Quarterly	Grab			
Molybdenum Dry Wt	Ceiling	75 mg/kg	Quarterly	Grab			
Nickel Dry Wt	Ceiling	420 mg/kg	Quarterly	Grab			
Nickel Dry Wt	High Quality	420 mg/kg	Quarterly	Grab			
Selenium Dry Wt	Ceiling	100 mg/kg	Quarterly	Grab			
Selenium Dry Wt	High Quality	100 mg/kg	Quarterly	Grab			
Zinc Dry Wt	Ceiling	7,500 mg/kg	Quarterly	Grab			
Zinc Dry Wt	High Quality	2,800 mg/kg	Quarterly	Grab			
Fecal Coliform	Geometric Mean - Monthly	2,000,000 MPN/g TS	Quarterly	Grab			

None.

3 Schedules

No changes have been made to the 'Schedules' section of this WPDES permit.

Prepared By:

Nate Willis, P.E. Wastewater Section Manager Bureau of Water Quality

Date:

11/12/2025