



BUREAU OF WATER QUALITY

Guidance Document

Wisconsin DNR

Wastewater Program Septage
Work Team

Septage Storage Management Plans: How to Review and Approve

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This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

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1.0 Definitions

1. **Agronomic rate**: the total septage application rate (dry weight basis) designed to provide the amount of nitrogen needed by the food crop, feed crop, fiber crop, cover crop, or other vegetation grown on the land and designed to minimize the amount of nitrogen in the septage that passes the root zone of the crop or vegetation grown on the land to ground water (referenced from sub. NR 113.03(2), Wis. Adm. Code).
2. **Application rate**: the hydraulic loading limits placed on a landspreading site or field normally expressed as gallons/acre/week (referenced from sub. NR 113.03(3), Wis. Adm. Code).
3. **Approved site**: property approved by the department or its agent for the disposal, recycling, or storage of septage (referenced from sub. NR 113.03(4), Wis. Adm. Code).
4. **Business**: any individual, partnership, corporation, or body politic that does servicing (referenced from sub. NR 113.03(8), Wis. Adm. Code).
5. **Certified operator**: any person servicing private sewage systems such as septic and holding tanks, dosing chambers, grease interceptors, seepage beds, seepage pits, seepage trenches, distribution cells, privies, or portable restrooms who holds a valid Wisconsin septage servicing operator's certification under ch. NR 114, Wis. Adm. Code (referenced from sub. NR 113.03(9), Wis. Adm. Code).
6. **Department**: the department of natural resources (referenced from sub. NR 113.03(12), Wis. Adm. Code).
7. **Disposal**: the controlled discharge of septage to a publicly owned treatment works (POTW), treatment or storage lagoon, or to an agricultural field for the purpose of recycling nutrients back into the environment (referenced from sub. NR 113.03(13), Wis. Adm. Code).
8. **Grease interceptor** (aka grease trap): a watertight receptacle designed to intercept and retain grease or fatty substances contained in kitchen and other food wastes (referenced from s. NR 113.03(21), Wis. Adm. Code). Grease interceptor and grease trap mean the same thing. This term should not be confused with a receptacle for grease collected from fryers (and similar cooking processes) and retained in onsite containers for removal/reuse.
 - a. **Industrial/process grease interceptor** (aka food processing or manufacturing grease): a watertight receptacle designed to intercept and retain grease connected through process piping that is completely separate from sanitary plumbing.

Septage Coordinator 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.

- b. Sanitary grease interceptor: a watertight receptacle connected to sanitary plumbing and designed to intercept and retain grease from sources including but not limited to, kitchens and restaurants. Sanitary grease contains human pathogens and is subject to ch. NR 113, Wis. Adm. Code.
9. (Industrial) by-product solids: 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 (referenced from sub. NR 214.03(4), Wis. Adm. Code).
 10. (Industrial) liquid waste: 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 which result in an point source discharge to a land treatment system (referenced from sub. NR 214.03(27), Wis. Adm. Code).
 11. (Industrial) sludge: the accumulated solids generated during the biological, physical, or chemical treatment, coagulation, or sedimentation of water or wastewater (referenced from sub. NR 214.03(34), Wis. Adm. Code).
 12. Groundwater: any of the waters of the state, as defined in s. 281.01(18), Wis. Stats. and s. 299.01(5), Wis. Stats., occurring in a saturated subsurface geological formation of permeable rock or soil (referenced from sub. NR 113.03(22), Wis. Adm. Code).
 13. High use field: a field that is approved by the department to receive more than 39,000 gallons per acre of septage per crop year and the volume applied is limited to the crop nutrient requirements (referenced from sub. NR 113.03(24), Wis. Adm. Code).
 14. Holding tank: an approved watertight receptacle for the collection and holding of wastewater or sewage.
 - a. Domestic holding tank: a watertight receptacle for the collection and holding of domestic wastewater [See definition of “wastewater-domestic” below]. Typically regulated under the authority of ch. 145, Wis. Stats (referenced from sub. NR 113.03(26), Wis. Adm. Code). *Note: This type is system may also be referred to as a “holding tank POWTS” which is defined as a holding tank component of a private on-site wastewater treatment system (POWTS) used for the collection and holding of sewage (referenced from s. NR 113.03(26m), Wis. Adm. Code).*
 - b. Nondomestic or mixed (domestic + nondomestic) holding tank: a watertight receptacle for the collection and holding of nondomestic wastewaters or a mix of domestic/nondomestic wastewaters [See definition of “wastewater-nondomestic” below]. Typically regulated under the authority of chs. 281 and 283, Wis. Stats.

15. Hydraulic loading rate: the volume of waste discharged per unit area per unit time (referenced from sub. NR 113.03(27), Wis. Adm. Code).
16. Incorporation: the mixing of septage with topsoil, by methods such as discing, mold-board plowing, chisel plowing or rototilling to a minimum depth of 4 inches (referenced from sub. NR 113.03(28), Wis. Adm. Code).
17. Injection: the subsurface placement of septage to a depth of 4 to 12 inches (referenced from sub. NR 113.03(30), Wis. Adm. Code).
18. Land application (or “landspreading” or “land applied” or “landspread”): the spreading of septage onto the land surface, the injection of septage below the land surface, or the incorporation of septage into the soil, so that the septage can either condition the soil or fertilize crops or vegetation grown in the soil (referenced from sub. NR 113.03(31), Wis. Adm. Code).
19. Litter free: the absence of nonbiodegradable material such as plastics or glass of 2 inches or greater in length on the soil surface (referenced from sub. NR 113.03(33), Wis. Adm. Code).
20. Log books and invoice record systems: a record keeping system that utilizes log books, invoice records, or a combination of both (referenced from sub. NR 113.03(33m), Wis. Adm. Code).
21. Management plan: a plan for optimizing land application of septage and demonstrating compliance with the requirements of this chapter and may include standard operating procedures for various processes or procedures (referenced from sub. NR 113.03(31m), Wis. Adm. Code).
22. Manure: has the meaning given under s. NR 151.015(12), Wis. Adm. Code (referenced from sub. NR 113.03(34d), Wis. Adm. Code) which is a material that consists primarily of excreta from livestock, poultry, or other animals.
23. Master operator: a certified operator who has met the requirements under sub. NR 114.18(2), Wis. Adm. Code and holds a valid Wisconsin master operator certification for servicing septage (referenced from sub. NR 113.03(34h), Wis. Adm. Code).
24. Nuisance: any source of filth or probable cause of sickness not in compliance with this rule (referenced from sub. NR 113.03(35), Wis. Adm. Code).
25. Operator-in-charge (or “OIC”): the master operator who has been designated by the owner to be responsible for the operation of a septage servicing business (referenced from sub. NR 113.03(35r), Wis. Adm. Code).
26. Pathogens: disease causing organisms. This includes certain bacteria, protozoa, viruses, and viable helminth ova (referenced from sub. NR 113.023(38), Wis. Adm. Code).

27. Portable restroom: fixtures, incorporating holding tank facilities, designed to directly receive human excrement. Portable restrooms are self-contained units, may be designed for one or more person's use at a given time and are readily transportable (referenced in sub. NR 113.03(41), Wis. Adm. Code).
28. Privy: an enclosed nonportable toilet into which human wastes not carried by water are deposited to a subsurface storage chamber that may or may not be watertight. This includes all of the following (referenced from sub. NR 113.03(43), Wis. Adm. Code):
- a. Pit privy for which a cavity in the ground is constructed for toilet uses and receives human excrement to be partially absorbed directly by the surrounding soil.
 - b. Vault privy in which human excrement is stored for decomposition and periodic servicing.
29. Septage: means the scum, liquid, sludge, or other waste in any of the following (referenced sub. NR 113.03(55), Wis. Adm. Code):
- a. A septic or holding tank, dosing chamber, grease interceptor, seepage bed, seepage pit, seepage trench, distribution cell, or other component of private onsite wastewater treatment systems.
 - b. A privy or portable restroom.
- Septage Coordinator Note 1: This does not include non-domestic wastewater/septage (non-domestic examples include, but are not limited to process grease, car wash waste, catch basin waste, etc.).*
- Septage Coordinator Note 2: Section 281.49, Wis. Stats., defines "septage" as the scum, liquid, sludge or other waste from a septic tank, soil absorption field, holding tank or privy. This term does not include the waste from a grease interceptor." This definition applies to a POTW's acceptance of septage for treatment.*
30. Sewage sludge: the solid, 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 (referenced from sub. NR 204.03(55), Wis. Adm. Code).
31. Service (or "servicing"): act of removing the scum, liquid, sludge, or other wastes from a POTWS such as septic or holding tanks, dosing chambers, grease interceptors, seepage beds, seepage pits, distribution cells, seepage trenches, privies, or portable restrooms and properly disposing or recycling of the contents as provide in this chapter (referenced from sub. NR 113.03(57), Wis. Adm. Code).

32. Spill: the uncontrolled discharge, dumping, or leaking of any septage or any of its constituents that may be emitted into the air, be discharged into any waters of the state, or otherwise enter the environment (referenced from sub. NR 113.03(65), Wis. Adm. Code).

33. Standard Operating Procedure (or “SOP”): a set of step-by-step instructions compiled by a business to help workers carry out complex routine operations (referenced from sub. NR 113.03(65m), Wis. Adm. Code).

Septage Coordinator Note: SOPs aim to achieve efficiency, quality output, and uniformity of performance, while reducing miscommunication and non-compliance with industry regulations. SOPs are often included in a septage management plan.

34. Surface application: spreading septage on the surface of the land without mixing the septage with the soil (referenced from sub. NR 113.03(66), Wis. Adm. Code).

35. Surface water: those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, marshes, water courses, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction, except those waters which are entirely confined and completely retained upon the property of a facility (referenced from sub. NR 113.03(67), Wis. Adm. Code).

36. Uniform application: evenly spreading septage over a site through the use of a splash plate, injector, or other department approved spreading method (referenced from sub. NR 113.03(68m), Wis. Adm. Code).

37. Vector attraction: the characteristics of septage that attract rodents, flies, mosquitos, or other organisms capable of transporting infectious agents (referenced from sub. NR 113.03(69), Wis. Adm. Code).

38. Wastewater-domestic: wastewater originating solely from human and domestic activities such as sanitary, bath, laundry, dishwashing, garbage disposal, and the cleaning of domestic areas or utensils. Wastewater from restaurants is synonymous with domestic wastewater. [clarified pursuant to DSPS (Dept. Commerce) and DNR Memo of Understanding dated December 16, 1999].

39. Wastewater-non-domestic: includes, but is not limited to, wastes collected from non-residential garages used for storage, maintenance, or washing of motor vehicles, commercial food processing, commercial laundromats, animal shelters or kennels, animal rendering, metal fabricating, electronic component manufacturing, chemical manufacturing, milk houses, and other industrial and commercial process water. [clarified pursuant to DSPS (Dept. Commerce) and DNR Memo of Understanding dated December 16, 1999].

Septage Coordinator Note: Nondomestic wastewater may include a mix of nondomestic and domestic wastes.

40. Wetlands: those areas where water is at, near, or above the land surface long enough to be capable of supporting aquatic or hydrophytic vegetation, and which have soils or vegetation indicative of wet conditions (referenced from sub. NR 113.03(71), Wis. Adm. Code).
41. Wisconsin sanitary license: a license to service private sewage systems, such as septic and holding tanks, dosing chambers, grease interceptors, seepage beds, seepage pits, seepage trenches, distribution cells, privies, or portable restrooms, issued by the department under s. 281.48(3), Wis. Stats. (referenced from sub. NR 113.03(74), Wis. Adm. Code).

2.0 Acronyms

1. DNR: Wisconsin Department of Natural Resources (also known as “department”)
2. DSPS: Wisconsin Department of Safety and Professional Services (formerly a part of the Department of Commerce)
3. GPS: Global Positioning System
4. OIC: Operator-in-Charge
5. OIT: Operator-in-Training
6. PC: Pathogen Control
7. POTW: Publicly Owned Treatment Works
8. POWTS: Private On-Site Wastewater Treatment System
9. PRSA: Portable Restroom Servicing Assistant
10. SOP: Standard Operating Procedure
11. SU: Standard Units
12. SWAMP: System for Wastewater Applications, Monitoring, and Permits
13. VAR: Vector Attraction Reduction
14. WPDES: Wisconsin Pollutant Discharge Elimination System
15. WWTF: Wastewater Treatment Facility

3.0 Background

All septage businesses in the State of Wisconsin that service and/or dispose of septage (human waste removed from septic tanks, holding tanks, sanitary grease interceptors, portable restrooms, privies, etc.) shall be issued a Wisconsin sanitary (business) license pursuant to ch. NR 113, Wis. Adm. Code. Each septage business must designate a master operator as the operator-in-charge (OIC). All individuals servicing septage, except for portable restroom servicing assistants (PRSAs), shall be properly certified under the following designations: operator-in-training (OIT), certified septage vehicle operator, and/or master operator pursuant to ch. NR 114, Wis. Adm. Code. PRSAs must work under the direction of the OIC. PRSAs are limited to only servicing portable restrooms and cannot landspread septage. Each vehicle and/or trailer used for servicing of septage shall be inspected and properly registered pursuant to ch. NR 113, Wis. Adm. Code.

Many septage businesses own or operate a septage storage facility. These septage storage facilities range from a single 500-gallon DSPTS-approved holding tank to 1,000,000 gallon (or greater) storage lagoons. Typically, septage is removed from these storage facilities and hauled to a Wisconsin Pollutant Discharge Elimination System (WPDES) permitted facility (examples: wastewater treatment facility (WWTF) or permitted contract hauler approved to receive septage) or landspread on department-approved fields. All septage storage facilities must comply with the requirements of s. NR 113.12, Wis. Adm. Code. Prior to receiving septage, the owner or operator of a new or conversion septage storage facility shall obtain the following documents:

- Department plan and specification conditional approval, conditional acceptance under ch. NR 110, Wis. Adm Code, or exemption under par. NR 113.12(3)(d), Wis. Adm. Code.
- A WPDES permit if required under par. NR 113.12(1)(d), Wis. Adm. Code.
- A department approved spill plan under par. NR 113.12(7)(a), Wis. Adm. Code.
- A department approved management plan under par. NR 113.12(7)(d), Wis. Adm. Code.

Note: Existing septage storage facilities approved prior to October 1, 2021 shall comply with the requirements specified pursuant to par. NR 112.12(3)(a), Wis. Adm. Code.

All septage storage facilities, regardless of size, are required to have a septage management plan. Septage storage management plans are a collection of detailed procedures relating to septage intake and storage, mixing, conveying, land applying, and/or disposal pursuant to ch. NR 113, Wis. Adm. Code. The management plan typically serves as a standard operating procedure (SOP) for the permittee's or licensee's employees to reference and implement. This guidance document can also be utilized by department staff to ensure that the septage storage facility meets WPDES permit and/or ch. NR 113, Wis. Adm. Code requirements.

Once approved by the department, operations must conform with the approved management plan. Should the licensee or permittee wish to operate differently than specified in the approved management plan, the permittee/licensee must submit a modified written plan for department review and approval prior to implementing the proposed modifications (reference subd. NR 113.12(7)(d)1., Wis. Adm. Code).

The goal of this guidance document is to create a standardized outline of items for septage permittees and licensees to address in their management plans.

Legal Note: This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

4.0 Applicability

This guidance document describes the septage storage management plan requirements for septage licensees and septage WPDES permittees.

The following wastes and situations are excluded from the use of this guidance document:

- Industrial wastes (industrial liquid wastes, by-product solids, and sludges including process grease, non-domestic wastes, etc.) landspread by the waste generator pursuant to ch. NR 214, Wis. Adm. Code;
- Sewage sludge land applied pursuant to ch. NR 204, Wis. Adm. Code;
- WPDES permitted contract haulers that temporarily store and landspread various wastes;
- Farm process wastewater regulate per ch. NR 243, Wis. Adm. Code;
- Farm process wastewater from non-permitted farms;
- Lime sludges generated by paper mills or water supply treatment facilities; and
- Hazardous wastes.

Note: Process wastewater (milkhouse waste, silage leachate, etc.) generated at an agricultural facility (permitted and non-permitted) and discharged into a manure storage unit is typically classified as an agricultural waste. Wastes from agricultural and industrial facilities may be characteristically similar but are regulated pursuant to the type and/or origin of waste generation and the applicable administrative code definitions.

5.0 Management Plan Requirements

Septage storage management plans include the following sections:

1. Cover Page,
2. Septage Influent Tracking,
3. Septage Storage,
4. Septage Transport,
5. Spill Plan,
6. Septage Land Application,
7. Septage Additional Disposal Options, and
8. Record Keeping and Reporting.

5.1 Cover Page

The cover page includes the following information:

1. Permittee or licensee name,
2. Permit or license number,
3. Mailing address,
4. Authorized representative or operator-in-charge (OIC),
5. Contact information (phone, email address, etc.) of authorized representative,
6. Management plan developer,
7. Contact information (phone, email address, etc.) of management plan developer, and
8. Version number or draft number and date of the management plan.

5.2 Septage Influent Tracking

The septage influent tracking section includes the following information:

1. Detail influent tracking procedures for each type of septage (septic tank, holding tank, domestic grease interceptor, and portable restroom).
2. Detail the method(s) utilized to discharge septage into the storage unit(s).
3. Provide a template of the daily influent log book or invoice record system used to track each load of septage hauled to the septage storage facility. The template tracks the following information:
 - a. Complete name and address or location of system serviced,
 - b. Date and time of servicing,
 - c. Type of system and description of all septage types pumped (*Note: For WPDES permittees, the system type must be tracked as an influent sample point number such as 990, 995, 997, and 998.*),
 - d. Estimated gallons collected (*Note: Some septage storage units may be equipped with a flow meter to measure influent waste(s). In this situation, the management plan should include details regarding the routine calibration of this flow meter (date, individual/company completing the calibration, etc.). The department recommends that flow meters be calibrated annually.*),
 - e. Complete name and address or location of septage storage facility,
 - f. Date and time of septage pumped to septage storage facility, and
 - g. Certification statement that the above information is true, accurate, and complete provided by the OIC of the licensed septage business that placed the domestic septage in the septage storage facility (if required by NR 113.11(3)(c)7.a., Wis. Adm. Code).

5.3 Septage Storage Facilities

This section relates to septage storage structures, and includes the following information:

1. List all DNR approved septage storage structures. This list contains the following information:
 - a. Storage structure name. *Note: For WPDES permittees, identify the DNR designated sample point number (example: land application Outfall 901),*
 - b. Date of storage unit construction,
 - c. Complete legal description of each storage unit,
 - d. Construction description (type and material) of each storage unit,
 - e. Structure capacity of each storage unit,
 - f. Septage type(s) stored in each storage unit, and
 - g. Approximate volume stored annually.
2. Identify the location of each septage storage structure on an aerial photograph.
3. Provide a flow diagram detailing septage discharge into, mixing, and removal from each storage unit.
4. Briefly outline the procedures for ongoing maintenance inspections for each septage storage structure (per par. NR 113.12(6)(c), Wis. Adm. Code). Consider including a template maintenance inspection log in the management plan. Generally, a maintenance inspection log contains the following information:
 - a. Any evidence of tank leakage,
 - b. Any evidence of pipe or valve leakage,
 - c. Missing equipment including caps or plugs,
 - d. Any evidence of visible cracks or rusting that indicate future potential issues, and
 - e. Disappearance of volumes of septage within the septage storage facility.
5. Briefly outline the procedures for re-evaluation of each septage storage structure (per par. NR 113.12(6)(b), Wis. Adm. Code). *Note: The owner or operator of a septage storage facility shall complete a re-evaluation inspection once every 10 years.*
6. Describe the typical storage length of a batch of septage. *Note: No permittee or licensee may store septage for longer than two years per par. NR 113.12(1)(c), Wis. Adm. Code.*
7. Detail procedures for maintaining 3 feet of free board in septage storage lagoons to prevent overflowing. For all other septage storage structures except those approved under subd. NR 113.12(3)(d)2., Wis. Adm. Code, the facility shall maintain no less than 18 inches of free board from the top of walls to prevent overflowing.
8. Describe the mixing procedures prior to landspreading of septage to ensure a homogenous mixture of septage.
9. Detail the removal and disposal of grit, sediment, and trash from the storage unit to a licensed landfill per par. NR 113.12(7)(f), Wis. Adm. Code.

5.4 Septage Transport

The septage transport section of the management plan includes the following information:

1. Describe the method of pumping septage from the storage unit to the hauling vehicle.
2. Identify and provide contact information (examples: email address and phone number) for all contractor, sub-contractors, or businesses hired for removing septage.
3. Detail the unloading process for each vehicle at the land application site or disposal location.
4. Describe contingency plans for periods of adverse or inclement weather to ensure septage does not exceed the capacity of the storage structure(s). *Note: This information may also be detailed in the “Septage Land Application” section.*

5.5 Spill Plan

A spill plan is a written procedure for spill and accident cleanup. The spill plan section of the management plan includes the following information:

1. Provide spill scenarios involving septage storage, transport, and land application or disposal.
2. Detail cleanup SOPs for spills less than 50 gallons.
3. Detail cleanup SOPs for spills greater than 50 gallons. *Note: Spills greater than 50 gallons need to be reported to the department (spill hotline).*
4. List equipment and supplies utilized to render the spills harmless and address nuisance conditions.
5. Identify contact names and information for individuals (or mutual assistance businesses) that will provide additional servicing vehicles and response services.
6. Include department emergency hotline contact including the phone number of the 24-hour spill hotline (1-800-943-0003) and the department’s regional septage coordinator. *Note: The department may require the submittal of a spill report following notification to the spill hotline.*

5.6 Septage Land Application

This section details the actual practices used during septage landspreading activities and includes the following:

1. Detail procedures for submittal of new landspreading sites. A complete landspreading site submittal includes the “Land Application Site Request” form (3400-053).

2. Detail procedures for obtaining and regularly updating a list of approved fields (“Approved Sites Report”).
3. Provide current copies of “approved” fields information including the DNR approval forms (form 3400-122) and maps. *Note: This information can be provided in the management plan appendix.*
4. Describe all land applying vehicles and equipment (examples include, but are not limited to: surface application with vehicle-mounted splash plate, incorporation with disc, and injection).
5. Describe the identification procedure for setback and restricted areas for each field (examples include, but are not limited to: flagging, cones, rangefinder, and GPS unit). Setback from fixed features include residences, wells (private and community), surface waters, wetlands, etc. Restricted areas include soil map units with potential shallow bedrock, shallow groundwater, steep slope, high permeability and low water holding capacity, etc.
6. Provide a template of the daily land application (discharge) log. Generally, a land application log contains the following information:
 - a. Date and time septage removed from septage storage facility,
 - b. Field DNR number,
 - c. Site/field name,
 - d. Septage type (examples: septic tank, holding tanks, grease interceptor, portable restroom),
 - e. Acres applied per site per day,
 - f. Volume of septage applied to site,
 - g. Hydraulic application rate (gallons/acre/day),
 - h. Application methods (surface application with alkali addition, incorporation, and/or injection), and
 - i. SOPs and certification to ensure pathogen control (PC) and vector attraction reduction (VAR) requirements have been satisfied pursuant to pars. NR 113.07(3)(d) and (e), respectively.
7. Detail land application SOPs to ensure uniform application of septage across each field.
8. Provide hydraulic application rate (gallons/acre) calculations for each type of land applying vehicle and equipment used to ensure compliance with weekly and annual limits.
9. Provide the annual agronomic rate (gal/acre/year) calculation for the expected crop yield per acre.
10. Detail additional nitrogen source (examples: commercial fertilizer and manure) tracking procedures for each field to ensure annual loading limits are not exceeded.

11. Describe the proposed department notification procedure(s) for anticipated removal of septage from the septage storage unit. *Note: The owner or operator must provide notification 7 days prior to land application events. The department may waive the 7-day notification requirement when regular or ongoing land application events are proposed and details of the regular or ongoing land application events are included in the management plan (reference: subd. par. NR 113.12(7)(d)4.k., Wis. Adm. Code).*
12. Describe procedures for litter control and minimizing odors. *Note: All sites must remain litter free pursuant to subd. pars. NR 113.12(7)(d)2.f and NR 113.12(7)(d)4.o., Wis. Adm. Code).*
13. Winter land application of holding tank POWTS (if applicable). Detail winter land application SOPs to comply with par. NR 113.07(1)(d), Wis. Adm. Code. “Winter” is defined as frozen or snow-covered ground. Include a list of department-approved winter fields in the management plan. *Note: Winter restrictions apply to frozen or snow ground per NR 113.07(1)(b) and (c), Wis. Adm. Code.*
14. High Use Septage Land Application Fields (if applicable). Identify (list) all approved high use fields (DNR number, site/field name, owner, legal description, and approved acreage). Outline soil sampling procedures (UW Extension A2809 “Nutrient Application Guidelines for Field, Vegetable, and Fruit Crops in Wisconsin”) and soil testing frequency. Provide example calculations to verify that the volume of septage applied to a field does not exceed the hydraulic volume (gallons/acre/crop year) which is necessary to supply the nitrogen needs of the crop grown. *Note: This information can be provided in the management plan appendix.*
15. Alternative Hydraulic Application Rates (Gallons/Acre/Week). Identify (list) all fields approved with an alternative hydraulic application rate per sub. NR 113.09(5), Wis. Adm. Code (DNR number, site/field name, owner, legal description, approved acreage, and approved alternative hydraulic application rate). Provide hydraulic application rate (gallons/acre) calculations to demonstrate equipment can achieve alternative hydraulic application rates. *Note: This information can be provided in the management plan appendix.*
16. Approved Land Application Variances. Identify all previously issued variances approved per s. NR 113.15, Wis. Adm. Code. For each approved variance provide the following information:
 - a. Name, address, phone number, and business license number of the applicant,
 - b. Section of chapter for which a variance is sought,
 - c. Statement explaining why the variance is necessary,
 - d. Adequate description of the variance and circumstances in which it will be used, and
 - e. Written determination (approval) from the department.*Note: This information can be provided in the management plan appendix.*

5.7 Septage Additional Disposal Options

As part of the management plan, information related to other methods of disposal is provided:

1. List all potential disposal options (examples include but are not limited to: wastewater treatment facilities, other septage businesses, and other WPDES permitted locations).
2. Provide a template of the daily disposal log. Generally, a disposal log contains the following information:
 - a. Outfall number (if applicable),
 - b. Septage type (examples: septic tank, holding tanks, grease interceptor, portable restroom),
 - c. Date and time septage was removed from septage storage unit,
 - d. Estimated volume,
 - e. Disposal location (including WPDES permit number), and
 - f. Disposal date and time.

5.8 Record Keeping and Reporting

The record keeping and reporting section of a septage management plan includes the following information:

1. Identify the name and contact information for the person responsible for maintaining the daily influent, land application, and disposal records. Identify the location where daily records are kept.
2. List all required annual reports (Form 3400-52 and Form 3400-55), the general due date for each report, and the name and contact information for the person who is responsible for submitting those reports to the department.

6.0 Septage Storage Management Plan Review

Once received, a review of the septage storage management plan should be conducted by the department's assigned regulator. Appendix A includes a checklist that can be used to review the draft septage management plan. Once the review has been completed, the facility regulator will send an approval or denial letter to the permittee's or licensee's authorized representative (see Appendix B). If the management plan is not complete, then the management plan should be denied and returned with comments. The comments may include a copy of the "Checklist for Reviewing Septage Management Plans" (Appendix A). Assistance may be necessary to help the applicant complete a satisfactory management plan.

7.0 SWAMP Documentation

For consistency efforts and to better query activities within the wastewater program, wastewater staff are required to update SWAMP after the management plan review is complete.

Event Tracker. Add the submittal and review date for the management plan into SWAMP's "Event Tracker" tab under "Contact Events."

Permit Documents. Add the management plan summary letter into SWAMP's "Permit Documents" tab. Title the document: "Septage Management Plan Approval Letter." Add the final management plan into SWAMP's "Permit Documents" tab. Title the document: "Septage Management Plan Approved [*Enter Approval Date*]".

8.0 Septage Storage Management Plan Updates

Following approval by the department, the septage permittee or licensee must operate in compliance with the management plan (per subd. NR 113.12(7)(d)1., Wis. Adm. Code). If the permittee or licensee wishes to operate differently than specified in the approved plan, a written request must be submitted to the department for approval to amend the management plan. Deviating from the management plan without department approval may result in violations of the facility's WPDES permit and/or ch. NR 113, Wis. Adm. Code. Further, the department may implement stepped enforcement on a case-by-case basis in response to these violations.

9.0 Appendix

9.1 Appendix A. Checklist for Reviewing Septage Storage Management Plans

SEPTAGE STORAGE MANAGEMENT PLAN CHECKLIST			
DNR REVIEWER:			
NAME OF FACILITY:		DATE SUBMITTED:	
FID:		PERMIT/LICENSE NUMBER:	
SUBMITTER:			
<i>Note: For additional details, please refer to the guidance document.</i>			
1. SEPTAGE MANAGEMENT PLAN REQUIREMENTS			
	Sufficient	Not Sufficient	Not Applicable
1. Cover page (recommended)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Septage influent tracking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Septage storage	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Septage transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Spill plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Septage land application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Septage additional disposal options	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Record keeping and reporting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			
2. COVER PAGE (Recommended)			
	Sufficient	Not Sufficient	Not Applicable
1. Permittee or licensee name	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. WPDES permit or license number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Mailing address	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Authorized representative (or OIC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Contact information	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Management plan developer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Version number/date of plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			

3. SEPTAGE INFLUENT TRACKING			
	Sufficient	Not Sufficient	Not Applicable
1. Detail influent tracking procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Detail methods to discharge septage into storage units(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Template daily influent log book or invoice record system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			
4. SEPTAGE STORAGE FACILITIES			
	Sufficient	Not Sufficient	Not Applicable
1. List all DNR (or DSPS) approved storage structures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identification of each storage structure on aerial photograph	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Flow diagram	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Procedures ongoing storage maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Procedures storage structure re-evaluation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Storage length (batch of septage)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Free board	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Mixing procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Removal of grit, sediment, and trash	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Note: Each time a septage storage facility is approved by the department, the above information should be provided as an amendment to the management plan.</i>			
Comments:			
5. SEPTAGE TRANSPORT			
	Sufficient	Not Sufficient	Not Applicable
1. Describe method of pumping waste from storage unit to hauling vehicle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Identify contractor(s) for removing liquids / solids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Explain how each vehicle is unloaded at disposal location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Contingency plan in case of inclement weather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			

6. SPILL PLAN			
	Sufficient	Not Sufficient	Not Applicable
1. Provide spill scenarios (storage, transport, land application, disposal)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Cleanup SOPs for spills less than 50 gallons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Cleanup SOPs for spills greater than 50 gallons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. List of equipment and supplies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Contact information for emergency response staff and/or businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. DNR spill hotline number	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			
8. SEPTAGE LAND APPLICATION			
	Sufficient	Not Sufficient	Not Applicable
1. Details of obtaining approved sites report	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. DNR Approval Forms (3400-122) and maps for all approved sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Identify all land application equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Outline how setbacks and restricted soils are identified	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Template daily land application log (including description for meeting PC and VAR requirements)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. SOPs for uniform application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Hydraulic application rate calculation for each type of spreading equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Example annual agronomic rate calculation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Tracking for other sources of nitrogen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Notification process	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Litter control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Winter land application SOPs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. High use field information (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Alternative hydraulic application rate (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Land application variances (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

9. SEPTAGE ADDITIONAL DISPOSAL OPTIONS

	Sufficient	Not Sufficient	Not Applicable
1. List all potential disposal options (WWTF, licensed septage businesses, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Provide blank copy of daily discharge log to the disposal location(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

12. RECORD KEEPING AND REPORTING

	Sufficient	Not Sufficient	Not Applicable
1. Identify who is responsible for maintaining daily log records & where records are stored	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. List all required annual reports and who is responsible for submitting those reports to the department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

13. ADDITIONAL COMMENTS

9.2 Appendix B. Template Approval Letter for Septage Storage Management Plans

[Enter Date]

[Enter WPDES or License Contact Name]

[Enter Title]

[Enter WPDES Permit or License Name]

[Enter Address]

RE: Approval of septage management plan for *[Enter WPDES Permit or License Name]*
(*[Enter WPDES Permit or License Number]*).

Dear *[Enter Mr./Ms.] [Enter Last Name]*,

Thank you for submitting a draft copy of *[Enter WPDES Permit or License Name 's]* septage storage management plan. The Wisconsin Department of Natural Resources (department) has reviewed and approved this draft document.

Effective immediately, *[Enter WPDES Permit or License Name]* must operate in conformance with this septage management plan.

If *[Enter WPDES Permit or License Name]* wishes to operate differently than specified in the approved septage storage management plan, a written request should be submitted to the department for approval to amend the management plan (pursuant to subd. NR 113.12(7)(d)1., Wis. Adm. Code). Deviating from the approved septage storage management plan without department approval may result in violations of *[Enter WPDES Permit (if applicable)] and/or* ch. NR 113, Wis. Adm. Code.

Sincerely,

[Enter Signature Block]

cc. *[Enter Permit/License]* file
[Enter Wastewater Supervisor]
[Enter Wastewater Statewide Residuals Coordinator]
[Enter Other WDNR Staff (as appropriate)]

10.0 Acknowledgements

The septage storage management plan “template” was originally developed in July 2018, and provided as a reference document for businesses applying for the “Storage of Domestic Septage” WPDES general permit (WI-0066435-01). This document was reformatted as a guidance document in December 2023, and reviewed by legal services to ensure compliance with chs. NR 113 and NR 114, Wis. Adm. Code. The WDNR Landspreading Work Group is composed of Fred Hegeman (Co-Coordinator), Steve Warrner (Co-Coordinator), Michelle BalkLudwig (WW PMT Co-Sponsor), Heidi Schmitt Marquez (WW PMT Co-Sponsor), Alison Canniff, Mike Chang, Peter Carlson, Teresa Hall, Kassie Schultz, and Nate Willis. For any questions regarding this guidance document please contact the WDNR Septage Work Group co-coordinators, Fred Hegeman and Steve Warrner.