# Wis. Admin. Code NR § 113.07

Section NR 113.07 - Disposal of septage

Every business engaged in servicing or authorizing servicing shall comply with all of the following requirements for disposal of septage:

### (1) DISPOSAL.

- (a) Disposal of septage shall be by discharge into a POTW or other facility for treatment or storage under a WPDES permit or to approved agricultural land, subject to all of the following:
  - 1. Septage disposal at WPDES permitted facilities shall comply with the WPDES permit requirements for that facility. An allowable WPDES permitted facility is one that meets requirements under ch. NR 204 for septage treatment which may be defined as a centralized septage treatment facility.
  - **2.** Septage from systems that have contracted for reserved capacity at a POTW shall be taken to that specific POTW.
- **(b)** All of the following restrictions apply to the land application of septage from non-holding tank POWTS on frozen or snow covered ground:
  - 1. Land application of septage removed from non-holding tank POWTS due to emergencies, including situations such as freeze-ups, is allowed if no other reasonable disposal methods are available. Reasonable disposal options include hauling the waste to a nearby treatment plant that will accept the septage in accordance with sub. (2). A business using land application for disposal shall obtain special written approval in advance from the department for specific sites that may be used for emergency situations. In addition, all of the following restrictions apply:
    - **a.** Sites or fields used shall have slopes less than or equal to 2 percent.
    - **b.** Waste shall be applied at a rate of less than 10,000 gallons per acre.
    - c. Application is not allowed within 750 feet of any surface water or wetland.
    - **d.** Application is not allowed in a floodplain.
  - **2.** Septage removed from non-holding tank POWTS due to a routine pumping may not be land applied during months when the ground is frozen or snow covered. Septage removed from non-holding tank POWTS shall be disposed at a POTW or stored under the requirements of this chapter.
  - **3.** Except as provided under par. (f), septage removed from non-holding tank POWTS that are regularly pumped more frequently than once every 6 months may be land applied during the months when the ground is frozen or snow covered. The restrictions under par. (c) apply to the land application of this septage.

**Note:** During months when the ground is frozen or snow covered, the land application of waste from non-holding tank POWTS is strongly discouraged. During these months, hauling septage from non-holding tank POWTS to a POTW or storing until land application can be completed on non-frozen, non-snow covered land application sites are the preferred methods of disposal.

- **(c)** Except as provided in par. (f), holding tank waste may be land applied during months when the ground is frozen or snow covered, on approved sites. The following restrictions, at a minimum, apply:
  - 1. Sites or fields used shall have slopes less than or equal to 6 percent. If slopes are greater than 2 percent but less than or equal to 6 percent, a site management plan is required.
  - 2. Waste shall be applied at a rate of less than 10,000 gallons per acre.
  - **3.** Application is not allowed within 750 feet of any surface water or wetland.
  - **4.** Application is not allowed in a floodplain.

**Note:** During months when the ground is frozen or snow covered, the land application of septage from holding tank POWTS is strongly discouraged. During these months, hauling septage from holding tank POWTS to a POTW or storing until land application can be completed on non-frozen, non-snow covered land application sites are the preferred methods of disposal.

- **(d)** Any land application of septage from holding tank POWTS or non-holding tank POWTS on frozen or snow covered ground is also subject to restrictions under sub. (3). Injection or incorporation may be utilized while the depth of frost is less than 4 inches.
- (e) Large commercial, industrial, recreational, or residential development holding tank POWTS that singly or when added together or increased by successive additions generate 3,000 gallons of septage per day or greater shall contract with a wastewater treatment facility for treatment of the septage. The contract terms shall provide assurance that the septage from the system will continually be conveyed to, and accepted, at the wastewater treatment facility. If a service area designation exists under s. 281.41(3), Stats., the wastewater treatment facility shall amend the service area to include the commercial, industrial, recreational or residential development. The department may not indicate sufficient disposal capacity to the department of safety and professional services, until the service area adjustments have been completed and approved.

**Note:** By agreement and administrative code, the department of safety and professional services will not issue a plan approval for a 3,000 gallons per day or greater holding tank POWTS without the department's approval of the method of wastewater disposal as provided under s. SPS 383.22(2) (b) 2.

**(f)** Disposal of wastewater from small holding tank and non-holding tank POWTS that generate less than 3,000 gallons of septage per day shall be by discharge into a POTW if any of the following conditions apply:

- **1.** The holding tank POWTS is located in the POTW's sewer service or holding tank service areas.
- 2. The non-holding tank POWTS is located in the POTW's sewer service area.
- **3.** The holding tank POWTS is located outside the POTW's sewer service and holding tank service areas if the POTW will accept the wastewater and if the cost to the hauler is less than or equal to the costs in Table2.
- **4.** The holding tank POWTS or non-holding tank POWTS is located outside of Wisconsin and the point at which the wastewater is conveyed into the state is within 20 miles (shortest direct route by road) of a POTW that is willing to accept, treat and dispose of the wastewater at a cost of less than or equal to the amount in Table 2.

### TABLE 2

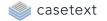
## Years Maximum Fee/1000 Gallons

1996-1998 \$16.00

1999-2001 \$18.00

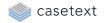
2002-2004 \$20.00

- **5.** The holding tank POWTS is located within 20 miles (shortest direct route by road) of a POTW that is willing to accept, treat, and dispose of the wastewater at a cost of less than or equal to the amount in Table 2. This provision only applies to those holding tank POWTS located in any of the following counties:
  - **a.** Brown
  - b. Calumet
  - c. Dane
  - d. Dodge
  - e. Door
  - f. Fond du Lac
  - g. Jefferson
  - h. Kenosha
  - i. Kewaunee
  - j. Manitowoc
  - k. Milwaukee
  - I. Outagamie



- m. Ozaukee
- n. Racine
- o. Rock
- p. Sheboygan
- **q.** Walworth
- r. Washington
- s. Waukesha
- t. Winnebago
- **(g)** The requirement under par. (f) does not apply if any of the following conditions are met:
  - 1. Storage has been utilized and the septage from holding tank POWTS generating less than 3,000 gallons per day and non-holding tank POWTS will be land applied in accordance with a WPDES permit.
  - **2.** Septage from holding tank POWTS generating less than 3,000 gallons per day and non-holding tank POWTS is treated and disposed of in accordance with a WPDES permit.
  - **3.** The owner of the septic tank component of the POWTS is exempt from licensing under s. 281.48, Stats.
- (2) DISPOSAL OF SEPTAGE AT A POTW.
  - (a) The following shall apply to disposal of septage for the period between April 16 and November 14:
    - 1. Licensed businesses may apply to a POTW for permission to discharge septage.
    - **2.** A POTW may deny or approve an application for disposal of septage at that facility. If approved, the POTW may set conditions for disposal.
    - **3.** The only requirements that licensed disposers discharge to POTWs or that POTWs accept and treat septage during nonwinter months are those in sub. (1)(e) and (f).
  - **(b)** The following shall apply to disposal of septage for the period between November 15 and April 15:
    - **1.** Each year, prior to September1, licensed disposers may apply to POTWs for permission to dispose of septage during winter.
    - **2.** Applications submitted to POTWs by licensed disposers are subject to review by POTWs pursuant to s. 281.49, Stats.

Note: Section 281.49, Stats. requires that POTW's shall:



- 1. Review septage applications and provide a written denial or approval to the licensed disposer by October 1 of each year.
- **2.** Develop a disposal plan for each licensed disposer approved for septage acceptance. A disposal plan, at a minimum, shall contain the following terms and conditions:
  - **a.** Specific quantities, locations, times, and methods for discharge of septage into the sewerage system.
  - **b.** Requirements to report the source and amount of septage placed in the sewerage system.
  - **c.** Requirements for the licensed disposer to pay to analyze other than residential septage.
  - **d.** Actual and equitable disposal fees based on the septage introduced into the sewerage system and calculated at the rate applied to other users of the sewerage system, and including the costs of additional facilities or personnel necessary to accept septage at the point of introduction into the sewerage system.
  - e. All the terms and conditions imposed on the disposer of septage.
  - **f.** A formal approval that the licensed disposer has permission to discharge septage to a specific POTW under specific conditions.
- 3. Accept and treat septage from licensed disposers unless:
  - **a.** Treatment of the septage would cause the POTW to exceed its operating design capacity or to violate any applicable effluent limitations or standards, water quality standards or any other legally applicable requirements, including court orders or state or federal statutes, rules, regulations or orders; or
  - **b.** The septage is not compatible with the sewerage system; or
  - **c.** The disposer has not applied for and received approval to dispose of septage in the sewerage system or the disposer fails to comply with the disposal plan; or
  - **d.** The licensed disposer fails to comply with septage disposal rules promulgated by the POTW or the conditions of the disposal plan in subd. 2
- (c) Licensed disposers shall cooperate with POTW's in the implementation of a septage acceptance priority system pursuant to s. NR 205.07(2) (e).

**Note:** The priority system for septage acceptance at POTW's in s. NR205.07 (2) (e) is as follows:

- 1. 'First priority.' Wastes from existing or new holding and septic tanks within the POTW's sewer service area and holding tanks within the POTW's holding tank service area.
- **2.** 'Second priority.' Wastes from existing holding tanks for residential or com-mercial establishments outside the POTW's sewer service area and holding tank service area but

inside the POTW's planning area where the holding tank was installed to replace an inadequate private sewerage system.

- **3.** 'Third priority.' Wastes from existing septic tanks and holding tanks that were installed not as a replacement to an inadequate sewer system for residential or commercial establishments outside the POTW's sewer service and holding tank service areas but inside the POTW's planning area.
- **4.** 'Fourth priority.' Wastes from new or existing septic and holding tanks for residential or commercial establishments outside the POTW's planning area.

## (3) LAND DISPOSAL OF SEPTAGE.

(a) No business may dispose of septage by a land application method unless the land application is done in accordance with this chapter and is consistent with the grade designation of the operator-in-charge.

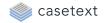
**Note:** Any business disposing of septage by a land disposal method may be subject to the provisions of ch. 160, Stats., and ch. NR 140, if an analysis of the groundwater beneath the disposal field indicates groundwater contamination.

**(b)** 

1. Septage may not be landspread on soils which have a permeability rate greater than 6 inches per hour within the top 36 inches, unless it is demonstrated that the soil has a water holding capacity of greater than 5 inches above the groundwater and bedrock. In no case may greater than the top 60 inches in a soil profile be used to determine the 5 inches of water holding capacity. Permeability shall be calculated using the following table or other method acceptable to the department:

#### **Textural Classification System**

USDA	Permeability Inches/Hour		
Sand	Greater Than 6		
Loamy Sand			
Sandy Loam	2.0 - 6.0		
Loam	0.6 - 2.0		
Silt Loam	0.6.20		
Silt	0.6 - 2.0		
Sandy Clay Loan	n		
Clay Loam	0.6 - 2.0		
Silty Clay Loam			



Sandy Clay

Silty Clay 0.1 - 2.0

Clay

- **2.** Septage may not be surface applied on soils that have a permeability of less than 0.2 inches per hour within the top 6 inches of soil.
- **3.** Septage may not be landspread or discharged into or on any wetlands or in areas subject to ponding, including any ditch, dry run, pond, lake, stream, flowage, floodplain, cave, sinkhole, mine, gravel pit, or quarry.
- **4.** Septage may not be landspread on any land without the owner's permission.
- **5.** Septage shall be landspread in a manner to prevent surface runoff. Septage may not be landspread on saturated soils during rainfall events or in areas of ponded water. All landspreading fields shall be left in a litter free condition.
- **6.** Land application vehicles shall be moving forward at all times while septage is being uniformly spread. Ponding of septage is prohibited.
- **7.** Septage may not be landspread on fields that are receiving or have received POTW sludges in the last crop year.
- **8.** Septage that is land applied based on the agronomic crop requirements may not be applied more than 10 months prior to the planting of the crop.
- **9.** A minimum 2-foot wide grass strip shall be maintained at the property line down slope from all land application sites.
- **10.** Fields that are discontinued for more than one year of crop production shall be revegetated with grass or other appropriate cover.

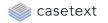
### 11.

- **a.** Each business proposing to use a high use field shall establish the nitrogen need of the crop to be grown as determined by the analysis of soil samples.
- **b.** The nitrogen recommendations shall be in accordance with the University of Wisconsin Extension bulletin A-2809 dated November 2012, which is incorporated by reference or other soil nutrient determination and soil sampling guidance approved by the department.

**Note:** Copies of Bulletin A-2809 dated November 2012 are available for inspection in the offices of the department of natural resources and the legislative reference bureau.

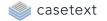
**12.** Any person who land applies septage shall comply with the minimum separation distances and maximum slope requirements in Table 3.

**TABLE 3** 



	Spreading Incorporation Injection		
Minimum depth from surface to bedrock and groundwater	3.0 ft	3.0 ft	3.0 ft
Maximum allowable slope (non-frozen, non-snow covered)	6.0%	12.0%	12.0%
Maximum allowable slope (frozen, snow covered) (3)	2.0%	N/A <sup>(4)</sup>	N/A
Minimum distance to a community well	1000 ft	1000 ft	1000 ft
Minimum distance to other well <sup>(5)</sup>	250 ft	250 ft	250 ft
Minimum distance to a residence, business or recreational area without permission from the owner or occupant	500 ft	500 ft <sup>(1)</sup> 200 ft <sup>(2)</sup>	200 ft
Minimum distance to a residence or business with written permission from the owner or occupant	250 ft	200 ft <sup>(1)</sup> 100 ft <sup>(2)</sup>	100 ft
Minimum distance to rural schools and health care facilities	1000 ft	1000 ft	500 ft
Minimum distance to a stream, river, pond, lake, sinkhole, flowage, ditch or wetland (greater than 6% to 12% slope)	N/A	200 ft	150 ft
Minimum distance to a stream, river, pond, lake, sinkhole, flowage, ditch or wetland (0% to 6% slope; nonwinter)	200 ft	150 ft	100 ft
Minimum distance to a stream, river, pond, lake, sinkhole, flowage or wetland (0% to 2% slope; winter) <sup>(3)</sup>	750 ft	N/A	N/A
Minimum distance to a dry run			
Slope 0-6%	100 ft	50 ft	25 ft
Slope 6-12%	N/A	100 ft	50 ft
Minimum distance to a property line <sup>(6)</sup>	50 ft	25 ft	25 ft

- (1) If not lime stabilized but incorporated within 6 hours.
- (2) If lime stabilized and incorporated within 6 hours.
- (3) See sub. (1) (b) for further limitations on winter application.



- (4) "N/A" means not allowed.
- (5) Separation distances to non-potable wells used for irrigation or monitoring may be reduced to 50 ft. if the septage is incorporated or injected and the department does not determine that a greater distance to the wells is required to protect the groundwater.
- **(6)** The distances to property lines may be reduced with the written permission of both property owners.
- **13.** Septage may not be landspread where it is likely to adversely affect a threatened or endangered species or its designated critical habitat or a historical site.

(c)

- **1.** Septage may be landspread seasonally on or into soils with a seasonal high groundwater level at a depth greater than one foot but less than 3 feet from the surface if the landspreading is limited to times when the soil is not saturated within 3 feet of the surface.
- **2.** Septage may be surface applied to hay fields after the hay has been harvested but not after the new growth of hay has reached a height of 6 inches above cut height.

3.

- **a.** A site shall be approved by the department based on information available to the department at the time of the site request.
- **b.** A site approval may be rescinded if information is provided or available to the department showing the information used by the department to approve a site is not consistent with the new information and the site is deemed by the department to be inadequate to protect public health and waters of the state.
- **c.** The department may request a site approval to be re-reviewed when ownership issues are unclear, violations such as overapplication are identified, or other potential concerns are identified about a specific site.
- **d.** A site that is approved by the department or by a county and meets all the separation requirements at the time of approval may not have the site approval rescinded for separation distance encroachment by residences, businesses, or recreational areas for a period of 5 years. This 5-year period shall run from the occupancy date of the encroachment.
- **4.** Site management plans may not allow surface spreading of septage on disposal sites with a slope greater than 6 percent.
- **5.** Surface application on snow covered fields requires plowed spreading lanes (snow removal) perpendicular to the slope when the snow depth is greater than 6 inches. Plowed lanes may not be wider than 20 feet and no closer than 40 feet.

(d)

1. Pathogens shall be reduced by one of the following methods:

- **a.** The site restrictions under subd. 2. shall be met when septage is applied to agricultural land, forest, or a reclamation site.
- **b.** The pH of septage applied to agricultural land, forest, or a reclamation site shall be raised to 12.0 or higher by alkali addition and, without the addition of more alkali, shall remain at 12.0 or higher for 30 minutes, and the site restrictions under subd. 2. a. to d. shall be met. When this option is utilized, each container of septage that is applied shall be monitored for compliance. For the purposes of measuring septage at a pH of 12.0 standard units, the pH shall be measured to 3 significant digits. **Note:** To achieve accurate pH monitoring results use 3 lots of narrow range pH paper or strips with 3 distinct lot numbers, or calibrate pH meters frequently with appropriate buffer solutions.
- **2.** Pathogen reduction is achieved by all of the following site restrictions:
  - **a.** Food crops with harvested parts that touch the septage/soil mixture and are totally above the land surface may not be harvested for 14 months after application of septage.
  - **b.** Food crops with harvested parts below the surface of the land may not be harvested for 20 months after application of septage when the septage remains on the land surface for 4 months or longer prior to incorporation into the soil.
  - **c.** Food crops with harvested parts below the surface of the land may not be harvested for 38 months after application of septage when the septage remains on the land surface for less than 4 months prior to incorporation into the soil.
  - **d.** Food crops, feed crops and fiber crops may not be harvested for 30 days after application of septage.
  - **e.** Animals may not be allowed to graze on the land for 30 days after application of septage.
  - **f.** Turf grown on land where septage is applied may not be harvested for one year after application of the septage when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the department.
  - **g.** Public access to land with a high potential for public exposure shall be restricted for one year after application of septage.
  - **h.** Public access to land with a low potential for public exposure shall be restricted for 30 days after application of septage.
- **(e)** One of the following vector attraction reduction requirements shall be met when septage is applied to agricultural land, forest, or a reclamation site:
  - 1. Septage is injected below the surface of the land such that no significant amount of the septage shall be present on the land surface within one hour after the septage is injected.



- **2.** Septage applied to the land surface shall be incorporated into the soil within 6 hours after application to or placement on the land.
- **3.** The pH of septage shall be raised to 12.0 or higher by alkali addition and, without the addition of more alkali, shall remain at 12.0 or higher for 30 minutes. When this option is utilized, each container of septage that is applied shall be monitored for compliance.

Wis. Admin. Code Department of Natural Resources § NR 113.07

Cr. Register, September, 1996, No. 489, eff. 1-1-97; r. and recr. (1) (b), (c), am. (1) (d) and (3) (b) 1., Register, January, 1999, No. 517, eff. 2-1-99; corrections in (1) (e), (g) and (2) (b) 2. made under s. 13.93(2m) (b) 6 and 7., Stats., Register September 2001 No. 549; correction in (1) (e) made under s. 13.92(4) (b) 6, Stats., Register January 2012 No. 673. Amended by, CR 20-046: am. (intro.), renum. (1) (a) to (1) (a) (intro.), 2. and am., cr. (1) (a) 1., am. (1) (b) (intro.), 1. (intro.), 2., 3., (d), (e), (f) (intro.), 1. to 4., 5. (intro.), renum. (1) (g) to (1) (g) (intro.) and am., cr. (1) (g) 1. to 3., am. (3) (a), (b) 1. Table, 6., r. and recr. (3) (b) 11., am. (3) (b) 12. Table 3, (c) 2., r. and recr. (3) (c) 3., am. (3) (d) 1. a., b., 2. (intro.), (e) 3. Register September 2021 No. 789, eff. 10-1-21; correction in (1) (b) 1. a., (c) 1., (3) (b) 3., (c) 4., (e) (intro.) made under s. 35.17, Stats., Register September 2021 No. 789, eff. 10/1/2021

