



Land Application of Septage for Homeowners

Office of Land Quality

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This document provides guidance for homeowners who clean their own sewage disposal system and land apply the septage on their own ground. In Indiana, septage management is governed by Indiana Code (IC) 13-18-12, 327 Indiana Administrative Code (IAC) 7.1, and 40 Code of Federal Regulations (CFR) 503. Under IC 13-18-12-7, homeowners are exempt from the need to get a septage management permit when cleaning out their own system. However, the statute requires that disposal, including land application, must be done in accordance with the law.

Applicable definitions under IC 13-11-2:

- **Septage** means the following:
 - Human excreta, water, scum, sludge, sewage, or incidental or accidental seepage from sewage disposal systems.
 - Retained contents of sewage holding tanks and portable sanitary units.
 - Grease, fats, and retained wastes from grease traps or interceptors.
 - Human wastes carried in liquid from ordinary living processes.
- **Sewage disposal system** means septic tanks, septic tank soil absorption systems, septage holding tanks, seepage pits, cesspools, privies, composting toilets, interceptors or grease traps, portable sanitary units, and other equipment, facilities, or devices used to store, treat, make inoffensive, or dispose of human excrement or liquid carrying wastes of a domestic nature.
- **Land application** means the disposal of septage by burial (injection) or incorporation into the soil within 6 hours of placement (surface application).

Treatment:

(See 327 IAC 7.1-8-9)

In order to be used for land application, **septage must be treated to reduce pathogenic organisms.**

Sufficient quantities of lime must be added to the septage to raise the pH of the septage to 12 or higher and to keep it at a pH of 12 or higher for 30 minutes or longer.

Prohibitions:

- The contents of chemical toilets or Type III marine sanitation devices must not be land applied. See 327 IAC 7.1-7-1(d)(2).
- Land application of septage is prohibited when the ground is saturated, frozen, and/or snow covered. See 327 IAC 7.1-8-9(a)(4).
- Surface application of septage is prohibited unless it is incorporated into the soil within six hours of surface application. See IC 13-11-2-114 and 40 CFR 503.33(a)(1) and (b)(10)(i).

Site Restrictions for Land Application:

- The water table must be more than 3 feet from the soil surface at the time of application. See 327 IAC 7.1-8-1(c)(5)(A).
- The permeability of the soil must be slower than 6 inches per hour within the first 3 feet from the soil surface. See 327 IAC 7.1-8-1(c)(5)(c).
- Septage must be land applied evenly over the area; no spot dumping. See 327 IAC 7.1-8-7(a)(5).
- Septage must be land applied so that it does not run off (move from) the area applied. See 327 IAC 7.1-8-9(a)(4)(c).
- Check the weather forecast before land applying; do not apply septage when heavy rain is imminent or expected.

- Septage must not enter waters of the state such as rivers, lakes and streams. If it does, it is a violation subject to penalty under state law. See 327 IAC 7.1-8-9(a)(5).
- Access to the site by the public must be prohibited for 12 months following land application. See 327 IAC 7.1-8-10.
- Access by animals whose products are consumed by humans must be prevented for at least 30 days following land application. See 327 IAC 7.1-8-10.
- Septage must not be applied or allowed to drain closer to the following features than the minimum setbacks under 327 IAC 7.1-8-8 as indicated below:

Features of Interest	Injection	Incorporation
Potable water supplies	500 feet	500 feet
Lakes, ponds, streams, intermittent waterways, surface water impoundments, wetlands, or other bodies of water	100 feet	200 feet
Drainage inlets, tile systems, sinkholes, undrained depressions, and property lines or easements	50 feet	50 feet
Residences, places of business, or public gathering places	500 feet	600 feet
Public roads	200 feet	300 feet
Public water supply well or public water supply surface intake structure	1,000 feet	1,000 feet

Crop Restrictions for Land Application:

(See 327 IAC 7.1-8-10)

- Food crops for direct human consumption must not be grown for 18 months following land application.
- Food crops with harvested parts below the surface of the land must not be harvested for 38 months after application of septage.
- Food crops with harvested parts that touch the septage and soil mixture and are totally above ground must not be harvested for 14 months after application of septage.
- Animal feed, fiber, and those food crops whose harvested parts do not touch the soil surface must not be harvested for 30 days after application of the septage.
- Turf grown on land where septage is applied must not be harvested for one year after application of septage when the harvested turf is placed on either a lawn or land with a high potential for public exposure.
- Examples of crops impacted by septage pathogen requirements, as provided by the U.S. Environmental Protection Agency:

Harvested Parts Which...		
Usually do not touch the ground	Usually touch the ground	Are below the ground
Peaches, Apples, Wheat, Oats, Barley, Oranges, Grapefruit, Cotton, Soybeans, Corn	Melons, Eggplant, Squash, Hay, Tomatoes, Lettuce, Cucumbers, Celery, Strawberries, Cabbage	Potatoes, Yams, Rutabaga, Beets, Sweet Potatoes, Peanuts, Onions, Leaks, Radishes, Turnips

Land Application Rates:

(See 327 IAC 7.1-8-7)

The annual application rate for septage must not exceed the following:

- 76,000 gallons per acre based on 200 pounds of nitrogen, on land being prepared for growing corn, during the next growing season;
- 38,000 gallons per acre based on 100 pounds of nitrogen, on land being prepared for growing soybeans, wheat, or hay, during the next growing season;
- 19,000 gallons per acre based on 50 pounds of nitrogen, on land that is grass, pasture, set aside or otherwise idle for continued growth.
- For more information, please contact Thomas Kreke at (317) 233-9468 or by email at tkreke@idem.IN.gov.