

567—68.10(455B) Standards for disposal. Disposal of septage from private sewage disposal systems shall be carried out in accordance with the rules established by the department.

68.10(1) Waste from toilet units shall be disposed of by discharge to a publicly owned treatment works or other permitted wastewater treatment system with the treatment works owner's approval.

68.10(2) Septage from septic tanks or other types of private sewage disposal systems that normally discharge effluent for further treatment (such as mechanical/aerobic treatment tanks, siphon tanks or distribution boxes) shall be disposed of by utilizing one or more of the following methods:

a. Septage shall be discharged to a publicly owned treatment works or other permitted wastewater treatment system with the treatment works owner's approval.

b. Septage shall be discharged to permitted septage lagoons or septage drying beds with the septage system owner's approval.

c. Septage shall be land-applied in accordance with the following requirements:

(1) The maximum application rate is 30,000 gallons of septage per acre of cropland per 365-day period. The nitrogen application rate shall be no more than is utilized by the crop. A crop capable of using the nitrogen applied must be grown and harvested from the site after application of the maximum annual allocation or, at a minimum, every third year.

(2) The following site restrictions shall be met when septage is applied to land:

1. Septage shall not be applied to a lawn or a home garden.

2. Septage shall not be applied to land where there is a bedrock layer or seasonal high water table within 3 feet of the soil surface. Determination of these confining layers may be ascertained by consulting the soil types noted in the county USDA soil surveys.

3. Land application sites shall have soil pH maintained above 6.0, unless crops prefer soils with lower pH conditions. If the soil pH is below 6.0, it is acceptable to use agricultural lime to increase the pH to an acceptable level. Soil pH shall be measured and reported as part of the annual waste management plan.

4. The septage shall not be applied to ground that has greater than 9 percent slope.

5. If application on frozen or snow-covered ground is necessary, it shall be limited to land areas of less than 5 percent slope and application rates of less than 2,500 gallons per acre per day.

6. Septage shall not be applied to land that is 35 feet or less from an open waterway. If septage is applied within 200 feet of a stream, lake, sinkhole or tile line surface intake located downgradient of the land application site, it shall be injected or applied to the surface and mechanically incorporated into the soil within 48 hours of application.

7. If the septage is applied to land subject to flooding more frequently than once in ten years, the septage shall be injected or shall be applied to the surface and mechanically incorporated into the soil within 48 hours. Information on which land is subject to flooding more frequently than once in ten years is available from the department.

8. Septage shall not be applied within 750 feet of an occupied residence, except the residence of the owner of the septic tank that was pumped, nor within 500 feet of a well.

9. Crop harvesting restrictions:

- Food crops with harvested parts that touch the septage/soil mixture and are totally above ground shall not be harvested for 14 months after application of domestic septage.

- Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of domestic septage.

- Animal feed, fiber, and those food crops with harvested parts that do not touch the soil surface shall not be harvested for 30 days after application of the domestic septage. Animals shall not be allowed to graze on the land for 30 days after application of septage.

(3) One of the following vector attraction reduction requirements shall be met when septage is applied to land:

1. Septage shall be injected below the surface of the land. 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 six hours after application to or placement on the land.

3. Septage shall be stabilized by adding and thoroughly mixing sufficient alkaline material such as hydrated or quick lime to produce a mixture with a pH of 12. For example, adding and thoroughly mixing approximately 50 pounds of lime with each 1,000 gallons of septage is usually sufficient to bring the pH to 12 for 30 minutes. A minimum of 30 minutes of contact time shall be provided after mixing the lime with the septage prior to applying to land. Each container of septage shall be monitored for compliance by testing, using a pH meter or litmus paper, two representative samples of the batch of lime-treated domestic septage taken a minimum of 30 minutes apart to verify that the pH remains at 12 or greater for the minimum 30-minute time period.

(4) When septage is applied to land, the person who applies the septage shall develop the following information and shall retain the information for five years and include it in the annually submitted waste management plan:

1. The location, by either street address or latitude and longitude, of each site on which septage is applied.

2. The number of acres and precise application area in each site on which septage is applied.

3. The gallons of septage applied each time.

4. The total gallons applied at each site to date for the year.

5. The date and time septage is applied to each site.

6. The rate, in gallons per acre, at which septage is applied to each site.

7. A description of how the vector attraction reduction requirements are met.

8. The following certification statement shall be provided with the records when the records are submitted to or requested by the department:

“I certify, under penalty of law, that the pathogen requirements and the vector attraction reduction requirements have been met. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment.”

(5) Other methods of stabilization may be acceptable if shown to be equivalent to 68.10(2)“c”(3)“3” above.

d. Septage shall be discharged (with owner approval) to a permitted sanitary landfill in accordance with 567—Chapters 102 and 103 and the following requirements:

(1) Septage shall be stabilized by adding and thoroughly mixing sufficient lime to produce a mixture with a pH of 12.

(2) A minimum of 30 minutes of contact time shall be provided after mixing the lime with the septage prior to discharging to the landfill.