

What is the difference between septage and biosolids?

Septage is the liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar storage or treatment works that receives only domestic septage. Domestic septage mainly consists of water, sewage, grit, and organic fecal matter. While biosolids contain many of the same ingredients contained in domestic septage, biosolids are different from septage in the way they are produced. Biosolids are a residual byproduct generated when municipal sewage is treated at a wastewater treatment plant. Through proper treatment, biosolids can become a valuable agricultural product and is sold for its nutrient value; whereas septage is a raw, untreated waste product directly removed from septic tanks and other sources as listed above.

Are septage haulers allowed to discharge septage on the ground?

Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended requires the discharge of domestic septage at authorized wastewater treatment plants, now referred to as septage receiving facilities, if that septage is pumped from a location within 15 radial miles of the facility. If none are available, then domestic septage can be land-applied at approved sites.

In order to land-apply septage waste, the septage hauler must first obtain approval from the Michigan Department of Environmental Quality (DEQ). DEQ regulates the land application of septage in accordance with Part 117 which limits application rates, slope, groundwater depth, and isolation distances.

When properly followed, Part 117 provides the following benefits when septage waste is disposed on land:

- Reduces the likelihood of human contact with disease-causing microorganisms through treatment and by limiting public access to the site.
- Protects the groundwater and surface waters by ensuring isolation distances, soil type, and slope requirements of the land application site are met prior to the application of septage.
- Reduces odor and insect attraction either by tilling soils within six hours of application or through subsurface injection of domestic septage.
- Provides beneficial recycling of nutrients.
- Maximizes crop uptake of nutrients contained in domestic septage by controlling the amount that can be applied to the application site.

- On October 12, 2006, a new prohibition of septage disposal on land when the soil is frozen and a requirement to screen all septage prior to it being land applied became effective.

In addition to Part 117, septage land application is regulated under 40 CFR 503, "Standards for the Use or Disposal of Sewage Sludge." These federal regulations apply when domestic septage is land-applied to both non-public and public contact sites. These requirements include pathogen and vector reduction management techniques, which can include the injection of domestic septage into the soil, surface application with tilling of the soil within six hours, or even the addition of an alkaline material to raise the pH of septage. 40 CFR Part 503 can be read in its entirety at www.access.gpo.gov/nara/cfr/waisidx_00/40cfr503_00.html.

For further information on the septage program, contact DEQ, Water Bureau, Septage Program's Web site at www.michigan.gov/deqwater and select "Surface Water" then "Septage." You can also contact the Environmental Assistance Center at 800-662-9278 or deq-ead-env-assist@michigan.gov.