



29 Hazen Drive, Concord, New Hampshire 03301 • (603) 271-3503 • www.des.nh.gov

WEB-16

2022

Permitting a Sludge Facility in New Hampshire

What is a Sludge Facility?

The New Hampshire Water Management and Protection Law, RSA 485A:2 XI-a defines sludge as: "the solid or semisolid material produced by a water and wastewater treatment processes, excluding domestic septage; provided, however, sludge which is disposed of at solid waste facilities permitted by the department shall be considered solid waste and regulated under RSA 149-M. This includes industrial sludge and sludge mixed with another sludge or another material."

A *sludge facility* is defined in Env-Wq 802.17 as: "a location or system for storing sludge for longer than 8 months or for the processing, treatment, or disposal of sludge, other than land application. Facilities include, but are not limited to, lagoons, sludge treatment facilities, sludge monofills, sludge transfer stations, and locations where sludge is treated or mixed with other sludge or other material for shipment off site..." Other types of sludge facilities involve the use of treated sludge for soil and compost manufacturing.

Why permit a sludge facility?

As population and businesses increase in New Hampshire, so does the volume of wastewater that must be processed, both at municipal and industrial wastewater treatment facilities (WWTFs). Options to further manage the sludge produced by these facilities, include landfilling, incineration, land application for beneficial use; or out-of-state disposal.

Treating and land applying sludge/biosolids involves the recycling of nutrients and other beneficial organic matter, which improves soil fertility in New Hampshire. Biosolids are "any sludge derived from a sewage wastewater treatment facility that meets the standards for beneficial reuse specified by the department." Land application of sludge/biosolids must be at agronomic rates (not more than annual plant/crop nutrient requirements).

Sludge treatment is typically performed by the generator of the sludge, but further stabilization may be required to meet the federal and state regulations (e.g. composting) at a permitted Sludge Facility. Sludge must receive a NHDES *Sludge Quality Certification (SQC)* per Env-Wq 809 in order to distribute bulk biosolids within New Hampshire.

When is a Sludge Facility Permit needed?

The person or entity proposing to undertake sludge management activities at their own facility, shall apply for and receive a *Sludge Facility Permit* through NHDES Wastewater Engineering Bureau's Residuals Management Section. The permit application process requires the applicant to provide: sludge facility design/construction plans and specifications; and a description of the proposed facility, including the intended capacity and facility life, the

disposition of the sludge managed, and whether Sludge Quality Certification (SQC) for land application will be sought. The application process also requires the applicant to evaluate the facility location for suitability and provide supporting information, including: existing soils characteristics; proximity to surface waters; presence of threatened or endangered species, designated rivers, groundwater protection areas, and other sensitive receptors; and surrounding land uses.

The *Sludge Facility Permit* applicant must also provide a Sludge Facility Management Plan. This plan describes: the proposed treatment, stockpiling and storage provisions; the quantity of sludge expected to be received/managed annually; on-site measures to control vectors; an Odor Control Plan; a Contingency Plan; Groundwater Monitoring Plan and a Closure Plan.

If a *Sludge Facility Permit* is issued by NHDES, the permit holder must adhere to very specific federal and state regulations and standards, best management practices, groundwater monitoring, and permit conditions that protect human health and the environment and meet annual reporting requirements.

Are there facilities exempt from a Sludge Facility Permit?

The Sludge Management Rules are not applicable to most sources if generators are conducting activities "incidental to their operation" and are permitted under separate authority. These include wastewater treatment facilities (permitted under RSA 485-A); water treatment facilities (permitted under RSA 485:8) and Solid Waste facilities (permitted under RSA 149-M).

How do I obtain additional information?

Additional information related to septage and sludge can be found at the <u>NHDES Sludge and Septage</u> page. You may also contact us via email at: <u>SludgeandSeptage@des.nh.gov</u> or call (603) 271-7888.