# ENVIRONMENTAL





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# **Management of Municipal Roadway Soils**

Municipal roadway soils, a subset of soils with contamination, are soils and sediments generated during roadway maintenance activities such as street sweeping, ditch reestablishment (ditching), catch basin cleaning, and removal of storm-generated sediment. Due to the presence and breakdown of asphalt pavement, the normal operation of motor vehicles, and other non-point sources of pollution ubiquitous in the roadway network, municipal roadway soils are assumed to contain contamination unless analytical results demonstrate contamination is not present. The levels of contaminants detected in soil determine whether the soil is a non-hazardous contaminated soil or a hazardous waste. Non-hazardous contaminated soils are a solid waste.

Municipalities should plan the characterization, storage and transportation of roadway soils prior to sweeping, removal, digging up or otherwise generating the soils. This will allow municipalities to protect public health, safety and the environment by ensuring compliance with applicable hazardous and solid waste rules. NHDES recommends municipalities work with a qualified professional experienced in contaminated soil management.

### **Roadway Soils without Contamination**

Soils generated during roadway maintenance activities may be reused if the soils are free of contamination caused by human activities and only contain metals at concentrations that are representative of naturally occurring background conditions. Soils meeting this standard can be reused as general construction fill with no limitations. For more information on background metals, see the <u>Background Concentration Study for New Hampshire Soils</u>.

#### **Roadway Soils with Contamination**

Soils generated during roadway maintenance activities that have contamination must be characterized pursuant to Env-Hw 502.01 of the New Hampshire Hazardous Waste Rules. If the soils are characterized as a hazardous waste, they must be managed in accordance with Env-Hw 500. If the soils are not a hazardous waste but have contamination above naturally occurring background concentrations, the soils are a solid waste and must be managed in accordance with Env-Sw 903 of the New Hampshire Solid Waste Rules. Management options for non-hazardous roadway soils are identified below.

**Reuse:** The New Hampshire Solid Waste Rules do not allow for the reuse of contaminated soils

unless they are decontaminated by treatment processes pursuant to Env-Sw 1503.11 and reused in accordance with Env-Sw 903.05(a) and Env-Sw 1503.11; or unless they are reused as alternative daily cover at authorized, operating landfills in accordance with Env-Sw 806.03.

**Storage:** Pursuant to Env-Sw 408.07, non-hazardous roadway soils collected from highway rights-of-way may be temporarily stored at a staging area pending transfer to an authorized facility when the following conditions are met:

- The soils are stored at a location controlled by the state or local highway agency that controls the right-of-way.
- The temporary storage facility is operated by the same state or local highway agency.
- The soils are stored in accordance with Env-Sw 903.02.

If the above-specified conditions are not met, a solid waste permit is required.

**Processing/Treatment:** Processing/treatment of non-hazardous roadway soils requires a solid waste permit.

**Disposal:** Roadway soils must be disposed of at an authorized facility, such as a permitted landfill.

**Waiver:** Municipalities have the option to apply for a waiver to the New Hampshire Solid Waste Rules to manage non-hazardous roadway soils using methods or procedures other than those outlined above. The process to apply for a waiver and criteria for NHDES to issue an approval are outlined in <a href="Env-Sw 202">Env-Sw 202</a>. A waiver from the New Hampshire Solid Waste Rules may allow for the reuse of roadway soils in a prescribed fashion, such as reuse within a permanently owned municipal right-of-way construction project that will not negatively impact human health, safety or the environment.

# **Testing and Characterization of Roadway Soils**

A hazardous waste determination should be made as described in section <a href="Env-Hw 502.01">Env-Hw 502.01</a> of the New Hampshire Hazardous Waste Rules to ensure roadway soils are non-hazardous (and thus fall under New Hampshire's Solid Waste Rules). The New Hampshire Solid Waste Rules do not have specific requirements for soil sampling or characterization. The procedures described in <a href="Env-Or 611">Env-Or 611</a> may be used as guidance for municipal roadway soil sampling. NHDES also recommends assessing waste soil collection areas for spills, releases, or other potential sources of contamination prior to generating waste soils.

NHDES may request documentation of hazardous waste determinations, soil characterizations, or copies of analytical results, to ensure compliance with New Hampshire rules. Documentation of waste characterizations and analytical results should be kept in a secure location for at least three years following the date that the waste is removed from the site. Maintaining records is particularly important if soils from multiple sources or areas are co-mingled.

#### **Additional Information**

For guidance on submitting an application for either a solid waste permit or waiver, send an email to <a href="mailto:swmbpermitting@des.nh.gov">swmbpermitting@des.nh.gov</a>.

## For more information, contact:

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