

5.0 Special Waste Management

Special wastes are wastes that typically require special handling, storage, and often diversion through special processing or backhaul. Special wastes are not typical household garbage and need to be handled separately. In many cases, these wastes also pose a greater risk to human health and the environment than household garbage.

5.1 Petroleum Polluted Soil

Class III landfills are not required to accept polluted soil even if the request meets all the regulatory requirements.

This section only discusses the requirements for accepting petroleum polluted soil from a small spill within the community. To accept polluted soil from a larger spill or from soil that is contaminated with anything other than petroleum, contact your Rural Landfill Specialist for options.

A request for disposal must be signed by both the landfill permittee and the generator of the polluted soil, and must include the applicable laboratory data report(s). An approval letter from the ADEC Solid Waste Program must have been obtained prior to accepting polluted soil at the landfill.

What is petroleum polluted soil?

Petroleum polluted soil is soil impacted by fuel that either spilled onto the ground or that leaked from an above ground or underground storage tank.

What should the landfill operator think about before accepting polluted soil?

Polluted soil is a special waste and no landfill is required to accept it. In fact, there are many factors to consider prior to agreeing to accept any polluted soil.

Understand the risks

- Polluted soil is not just dirt. It is soil that has been deemed too contaminated to stay in place, and placing it into a landfill does not eliminate the risks.
- Once the polluted soil is accepted at the landfill, the landfill owner then becomes responsible for the soil. If the soil at the landfill contaminates the surrounding environment, the landfill owner is responsible. This responsibility includes all the financial costs to clean up the contamination.

Does the landfill have good access control?

- If the landfill is a self-haul facility or has no access controls, access to the polluted soil disposal area will need to be controlled to protect the landfill users. Some components of fuel are known to cause cancer and other diseases, so it is important to limit exposure.

Does the landfill have the equipment to handle it?

- A cubic yard may not seem like much soil, but one cubic yard weighs about 2000 lbs and will fill approximately 203 one-gallon buckets.
- If the landfill does not have heavy equipment to move and handle polluted soil, then it will be difficult to properly manage.
- Before agreeing to accept polluted soil consider how much can be easily managed with the equipment available at the landfill.

Does the landfill have the capacity?

- 500 cubic yards of soil will provide approximately six inches of cover to $\frac{1}{2}$ acre or about half a football field.
- Before agreeing to accept polluted soil, consider how much space is available at the landfill. Landfills are expensive, so the space in the landfill is valuable. Polluted soil takes up valuable space that may be needed for other wastes and can easily fill up and overwhelm a small landfill.

Can the responsible party help?

- If heavy equipment is unavailable, consider asking the responsible party (the person disposing of the polluted soil) to help place and manage the soil in the landfill.
- The responsible party often has heavy equipment and thus can spread the soil in the landfill or help consolidate and compact other waste in exchange for the landfill accepting the polluted soil.

Do you have approval?

- An approval for accepting polluted soil at the landfill comes in the form of an official letter from the assigned landfill specialist from the ADEC Solid Waste Program.
- There are other forms associated with polluted soil that people think of as an approval for disposal. However, without direct communication with the Solid Waste Program, the soil is not approved for disposal in the landfill.

What are the regulatory requirements for accepting polluted soil under 18 AAC 60.025(b)?

- The landfill must be permitted.
- The polluted soil must originate from the cleanup of a single spill incident (not consolidated from multiple sites) within the community served by the Class III landfill.
- The volume of polluted soil is less than 500 cubic yards.
- The soil contains only petroleum hydrocarbons at concentrations that do not exceed the following maximum concentrations (as confirmed by laboratory testing results submitted with the disposal request):
 - Gasoline-Range Organics (GRO) – 900 mg/kg
 - Diesel-Range Organics (DRO) – 2,000 mg/kg
 - Residual-Range Organics (RRO) – 4,500 mg/kg

Other options for polluted soil:

Other options for handling polluted soil include landfarming to remediate the soil locally, or shipping it out to another facility for treatment or disposal.

Helpful tips:

- Contaminants in polluted soil can result in long term pollution and have long term negative human and environmental health effects. ADEC will only allow disposal if it is clear that the contaminants in the polluted soil are not likely to migrate to groundwater or surface water.

Examples:



Polluted soil used to help close out a section of the landfill.