



# **Management of Petroleum Contaminated Materials**

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**Updates to the Special Waste Characterization  
and Land Disposal Request Form**

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# Contaminant Management

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## Management of Petroleum Contaminated Material

- Usually Soils
- Often associated with Underground Storage Tanks (USTs)

## Petroleum refers to fuels and oils

- Gasoline
- Diesel
- Used Oil



# Is Testing Required?

Analytical testing of petroleum contaminated material is mandated depending on the nature of the source, the type of petroleum that has contaminated the media, and the intended disposal site.

DISPOSAL SITE	CONTAMINANT	SOURCE	BENZENE ONLY	LEAD ONLY	RCRA METALS <sup>1</sup>
LANDFILL	Gasoline <sup>2</sup>	UST	NA	NA	NA
		NON-UST	YES	NA	NA
	Other Petroleum <sup>3</sup>	UST	NA	NA	NA
		NON-UST	NA	NA	NA
	Used Oil <sup>4</sup>	UST	NA	See →	YES
		NON-UST	NA	See →	YES
LANDFARM	Gasoline <sup>2</sup>	UST	YES	NA	NA
		NON-UST	YES	NA	NA
	Other Petroleum <sup>3</sup>	UST	NA	NA	NA
		NON-UST	NA	NA	NA



# Contaminated Material

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## UST Waste:

- If the contaminated material is from a UST excavation and subject to corrective action\*; the media can be taken to an Municipal Solid Waste (MSW) landfill without sampling and analysis.
- Must be contaminated **only** with Diesel or Gasoline, no other contaminants.

## Non-UST Gasoline Contamination:

- If contaminated with Gasoline only, it must be sampled and tested for Benzene before disposal.

\*Contact your State Fire Marshal in the Fuels Division



# Contaminated Material (cont'd)

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## **Non-UST Diesel contamination:**

- If you can show that the media is contaminated with diesel fuel only; it does not require analysis before disposal at an MSW landfill

## **Materials contaminated with used oil:**

- Due to the potential for contamination with metals from the oil, used oil contaminated media must be tested for the RCRA metals before disposal.

**Regardless of analytical requirements, any contaminated media must be solid with no free liquid before disposal at a MSW landfill (Paint Filter Test)**



## Land-farming:

- The application of petroleum contaminated materials to a tract of land with the intent to allow volatilization, oxidation and microbial action to break down the petroleum content of that media.
- Usually a one-time event.
- Requires that the land meet certain requirements to minimize contamination to the surrounding environment.



# Setback Requirements

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## Setback requirements:

- Area must accommodate all contaminated material in a layer no more than 4 inches thick;
- Site must be 1000 feet from:
  - Inhabited residences, businesses, facilities/lands frequented by the public;
  - Man-made or natural structures that may collect vapors;
  - Drinking water wells;
  - Surface water (lakes, streams, etc.);
- Site must be 100 feet from other wells (livestock, irrigation);



# Setback Requirements (cont'd)

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## Setback requirements:

- Not located within a wellhead protection area;
- No highly permeable soils (sand, gravel);
- Not in a 100-year floodplain or area designated as wetlands;
- Should have minimum distance from surface to groundwater of 25 feet;
- Not in a quarry, gravel pit, or mine;
- Nor on land with a slope of more than 6%.





## Volumes of soil

- Larger projects for land farming will need to address the amount of land surface required to accommodate the amount of contaminated soil.
- Areas used for land farming may only have a layer of contaminated soil up to 4 inches deep.
- A cubic yard will cover 81 square feet to a depth of 4 inches!
- An acre can only accommodate 537 cu. yards at this thickness.



## We've been updating our Guidance Documents

- “Management of Petroleum-Contaminated Materials” was revised in September of last year
- The Special Waste Characterization form, still used by many landfills to assess the nature of wastes they don't often handle, was no longer required by the DEQ.
- The Land Application form contained much of the same information as the Special Waste Characterization form, so...
- The Special Waste Characterization form and the Land Disposal Request form have now been combined into a single document attached to the back of the Management of Petroleum-Contaminated Materials Guidance Doc.



# Thank You for your Time!

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For more information visit the NDEQ website at:  
<http://deq.ne.gov/>

Look for the updated Guidance Document  
“Management of Petroleum-Contaminated Materials”  
and many more under the link *Publications & Forms*

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# Questions?

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