

## **9.0 DISPOSAL OF PETROLEUM CONTAMINATED MATERIALS AND TANK CONTENTS**

### **9.1 Introduction**

Petroleum contaminated materials may be generated by assessment, clean up, monitoring, or construction activities. Contaminated materials can include soils, water, product, and other residues. Information regarding the volumes and final disposal status of all contaminated materials must be reported to the department.

### **9.2 Disposal of soil cuttings**

The ARSD 74:02:04:70 states, “test holes that encounter no water or only low permeability formations such as clays, shales, and till must be backfilled”. It further states the backfill material must be free of contamination. Cuttings that are free of contamination and have a permeability equal to or less than the permeability of the formation encountered in the borehole may be used as backfill

Contaminated soil cuttings must be disposed in a manner that will not result in impacts to surface or ground waters or create risks to human health or the environment. Contaminated cuttings must be containerized, or stockpiled in accordance with department rules, and properly disposed. Stockpiling of contaminated soil must be in accordance with ARSD 74:56:05:21 or 74:56:05:22. In brief, these rules require stockpiled soils be placed on a liner and to be covered by a liner. In most cases soils may only be stockpiled on site for 30 days. Longer storage time is only allowed if prior permission is received from the department.

**(Note:** If the borehole intercepts an aquifer, cuttings may only be used to fill the top three feet of the borehole. The remainder of the borehole must be abandoned in accordance with ARSD 74:02:04:67, 74:02:04:68, or 74:02:04:69, whichever are appropriate.)

Clean cuttings may be disposed in a manner that does not create a public nuisance.

Contaminated cuttings must be disposed of properly as described in the following sections.

### **9.3 Disposal of contaminated soil**

ARSD 74:56:05 requires that all visibly contaminated soil in the excavation area be removed and properly disposed. Contaminated soils that are generated during corrective actions or construction activities that are removed from the release site must also be properly disposed. Disposal must be done in accordance with the following sections:

- Contaminated soils with total petroleum hydrocarbon (TPH) concentrations greater than 10 parts per million (ppm) and removed from the release site must be disposed in accordance with the permitting requirements of the Department’s Waste Management Program.
- Soils with contaminant concentrations of less than 10 ppm TPH but exceeding the Tier I action levels that are removed from the site must be taken to a department approved disposal facility.

- Contaminated soils of any TPH concentration may be disposed at permitted landfarms. Soils must be tested for TPH prior to disposal at landfarms. The landfarm operator may require additional testing requirements to ensure the soils do not contain other contaminants.
- Contaminated soils with TPH concentrations equal to or less than 100 may be disposed in a municipal solid waste landfill where it is to be used for daily cover. Some municipal solid waste landfills also operate landfarms that would allow for the disposal of soils with any TPH concentration.
- Contaminated soils with TPH concentrations of less than 100 ppm could possibly be disposed at a permitted restricted use disposal facility, but only under very specific conditions. Department approval must be secured prior to disposal at a permitted restricted use facility. The waste generator or restricted use facility operator must contact the Waste Management Program at 605-773-3153 prior to disposal at a restricted use facility site.
- Contaminated soils with TPH concentrations of less than 500 ppm and below Tier I action levels that are generated at a release site, may be disposed of on-site, provided that the disposal does not create any new exposure pathways, cause impacts to surface or ground waters, cause risk to human health or the environment, or cause a public nuisance. Corrective actions will be required for these soils if these conditions cannot be met.

#### **9.4 Disposal of contaminated water from storage tanks, de-contamination activities and de-watering activities.**

Contaminated water may not be discharged to the surface of the land, surface waters or storm water systems without a permit. Information regarding surface water discharge permits may be obtained from the department's Surface Water Program at 605-773-3351. Applications for discharge permits may also be obtained from the department's webpage. Contaminated water may be discharged to public sanitary sewers with the permission of city and/or state officials. Testing of the waters may be required by the city.

**(Note:** The exact language dealing with the disposal of contaminated water from tanks has not been settled. This will be corrected in future updates.)

#### **9.5 Disposal of product from storage tanks**

Product from tanks being abandoned must be removed and properly disposed to prevent releases to the environment and to protect human health. Product must be removed in accordance with acceptable safety procedures. Depending on the volume and type of product remaining in the tank a recycler may take the product. Free phase product may not be disposed at permitted petroleum contaminated soil treatment facilities.

#### **9.6 Tank Contents**

In some instances, material remaining in a tank may be regulated under the state's hazardous waste rules if that material is destined for disposal. However, a tank will be considered empty, and the tank and its contents will not be regulated under the state's hazardous waste program if the following conditions are met:

- All waste has been removed that can be removed using the practices commonly employed to remove material from a tank or container, e.g., pouring, pumping and aspirating, *and* no more than one inch of residue remains on the bottom of the container.

OR

- Should the tank have a total capacity of more than 110 gallons, any remaining residue makes up no more than 0.3 percent by weight of the total capacity of the tank. If a tank is less than 110 gallons in size and contains no more than 3 percent of the tank total capacity, that tank is also considered empty, and its contents would not be regulated under the state's hazardous waste rules.

Tank contents satisfying the above may be disposed in the same manner as construction derived contaminated soil.

Should a tank hold material that is destined for disposal, in an amount that exceeds the one inch of residue or exceeds the 3 percent or 0.3 percent levels specified above, please contact the state's hazardous waste program for assistance. Staff can then assist you in determining whether the material would be considered a hazardous waste and outline some disposal options. The department's hazardous waste staff can be reached at 605-773-3153.

### **9.7 Disposal of contaminated water from wells**

Contaminated water from wells may occur during the well development or during purging. Contaminated water may not be discharged to sanitary or storm sewers without appropriate department or city approval. Contaminated water must be disposed in a manner that will not result in the creation of new exposure pathways or cause run-off problems. Contaminated water cannot be discharged in an area where it will interfere with the evaluation or cleanup of a release.