

## WM-8 CONTAMINATED SOIL MANAGEMENT



### BMP Objectives

- Perimeter Control
- Slope Protection
- Borrow and Stockpiles
- Drainage Areas
- Sediment Trapping
- Stream Protection
- Temporary Stabilizing
- Permanent Stabilizing

### Definition and Purpose

These are procedures and practices to minimize or eliminate the discharges of pollutants to the drainage system or to watercourses from contaminated soil.

### Appropriate Applications

- Contaminated soil management is implemented on construction projects where soil contamination may have occurred due to spills, illicit discharges, and leaks from underground storage tanks. Limitations

The procedures and practices presented in this BMP are general. The Contractor shall identify appropriate practices and procedures for the specific contaminants known to exist or discovered on-site.

### General Considerations

#### Identifying Contaminated Areas

- Contaminated soils are often identified during project planning and development, with known locations identified in the plans and specifications.
- The Contractor shall review applicable reports and investigate appropriate callouts in the plans and specifications.
- The Contractor may further identify contaminated soils by investigating the following:
  - Past site uses and activities.
  - Spills and leaks.
  - Look for contaminated soil as evidenced by discoloration, odors, differences in soil properties, abandoned underground tanks or pipes, or buried debris.

- Test suspected soils at a certified laboratory.

### **Education**

- Prior to performing any excavation work at the locations containing material classified as hazardous, employees and subcontractors shall complete a safety training program which meets 29 CFR 1910.120 covering the potential hazards as identified.
- Employees and subcontractors shall be educated in identification of contaminated soil and on contaminated soil handling and disposal procedures.
- Regular meetings shall be held (or incorporated into regular safety meetings) to discuss and reinforce disposal procedures.

### **Handling Procedures for Contaminated Soils**

- Minimize the on-site storage time by disposing of the contaminated soil regularly and properly in accordance with all applicable regulations.
- Test suspected soils at a certified laboratory.
- If the soil is contaminated, work with the state regulatory agencies to develop options for treatment and/or disposal.
- Avoid temporary stockpiling of contaminated soils or hazardous material. If temporary stockpiling is necessary:
  - Cover the stockpile with plastic sheeting or tarps.
  - Install a berm around the stockpile to prevent runoff from leaving the area.
  - Do not stockpile in or near storm drains or watercourses.
- Remove contaminated material and hazardous material on exteriors of transport vehicles prior to the vehicle leaving the exclusion zone.
- Monitor the air quality continuously during excavation operations at all locations containing hazardous material.
- Procure all permits and licenses, and give all notices necessary and incident to the work, including registration for transporting vehicles carrying the contaminated material and the hazardous material.
- Collect water from decontamination procedures and treat and/or dispose of it at an appropriate disposal site.
- Collect non-reusable protective equipment, once used by any personnel, and dispose of at an appropriate disposal site.
- Install temporary security fence around the exclusion zone. Remove fencing when no longer needed.
- Excavate, transport, and dispose of contaminated material and hazardous material in accordance with the rules and regulations of the following agencies (the specifications of these agencies supersede the procedures outlined in this BMP):
  - United States Department of Transportation.

- United States Environmental Protection Agency.
- Occupational Safety and Health Administration.
- State or Local regulatory agencies.

### **Procedures for Underground Storage Tank Removals**

- Prior to commencing tank removal operations, obtain the required underground storage tank removal permits and approval from the federal, state, and local agencies, which have jurisdiction over such work.
- Arrange to have tested, as directed by the Engineer, any liquid or sludge found in the underground tank prior to its removal to determine if it contains hazardous substances.
- Following the tank removal, take soil samples beneath the excavated tank and perform analysis as required by the local agency representative(s).
- Remove the underground storage tank, any liquid and/or sludge found within the tank, and all contaminated/hazardous substances and/or soils during the tank removal, and transport to disposal facilities permitted to accept such waste.

### **Water Control**

- All necessary precautions and preventive measures shall be taken to prevent the flow of water, including groundwater, from mixing with hazardous substances or underground storage tank excavations. Such preventative measures may consist of, but are not limited to: berms, cofferdams, grout curtains, or any combination thereof.
- If water does enter an excavation and becomes contaminated it must be treated as a hazardous waste. If necessary to proceed with the work, the water shall be dewatered consistent with NS-2 (Dewatering Operations).

### **Maintenance and Inspection**

- Inspections shall be conducted as required by the NPDES permit or contract specifications.
- The Contractor's Water Pollution Control Manager, foreman, and/or construction supervisor shall monitor on-site contaminated soil storage and disposal procedures.
- Air quality shall be monitored continuously during excavation operations at all locations containing hazardous material.
- Contaminated soils and hazardous substances/waste management shall be coordinated with the appropriate federal, state, and local agencies.