

# Petroleum Surface Spill-Cleanup by Excavation Checklist

November 2021

This checklist is intended to assist environmental cleanup contractors and members of the regulated community who perform cleanup of petroleum surface spills by means of excavation and disposal of petroleum-contaminated soils. This list is not to be considered all-inclusive. Call for a utility locate and submit application(s) for required permit(s) ASAP so as not to delay cleanup. If cleanup can be completed quickly, NDEE's general guidance is to remove all petroleum-contaminated soils based upon visual and olfactory evidence. In cases where cleanup is delayed, confirmation soil samples from the excavation will be necessary.

## **To do before mobilizing to job site**

- Complete utility locate: <https://www.ne1call.com/> or call (800) 331-5666
- Obtain permission from landowner to perform cleanup (NDOT Right to Occupy permit for state hwy/I-80)
  - o <https://dot.nebraska.gov/business-center/permits/row/> or call (402) 471-4567
- Develop soil management plan
  - o Amount of soil to be excavated: goal is to remove ALL petroleum-contaminated soils
  - o Traffic control/lane closure when needed to safely complete cleanup
  - o Licensed landfill that will accept soils (landfill may require TCLP or other tests prior to acceptance)
    - Diesel-contaminated soils are special waste: non-hazardous waste
    - Gasoline-contaminated soils: test (including benzene) to determine if it is hazardous waste
    - Landfill scale tickets: include copies in Final Report to NDEE
  - o Alternative to landfill disposal is landfarming: submit form to NDEE for land application approval
  - o Clean fill soil acceptable to landowner delivered to site to refill excavation
  - o Means to demonstrate spill is not threat to surface water, threat to ground water, or damaging to property if infrastructure prevents complete cleanup through excavation
    - Soil sample screening/lab analysis to demonstrate attenuation with depth
    - Risk-based Corrective Action Tier 1 investigation
- Skid-steer loader/excavator appropriate for job: fueled and serviced prior to mobilization
- Sufficient dump truck/trailers or roll-off containers to complete job in timely manner
  - o Be aware of landfill closing time and time of travel to landfill

## **To take to the job site**

- Camera to document cleanup: before, during, and after photographs
- GPS to obtain latitude/longitude location of spill (some smart phones have this feature)
- Tape measure and graph paper to draw site sketch
- Grass seed and erosion control materials to restore the excavation area

## **Not required in all situations**

- Field screening of soil samples (strongly encouraged for all cleanups)
  - o Charged and calibrated photo-ionization detector
  - o Wide-mouth jars and aluminum foil to cover mouth of jars
  - o Means to warm samples for 30 minutes in cold weather: usually dash of truck
- Laboratory analysis of soil samples (necessary when cleanup has been delayed)
  - o Appropriate glassware obtained from laboratory
    - Diesel/motor oil spill-analysis method OA-2
    - Gasoline spill-analysis method OA-1 or 8260
  - o Cooler to store/ship samples to laboratory