# ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE

Managing Petroleum-Contaminated Soil, Water, or Free Product during Public Utility and Right-of-Way Construction and Maintenance Projects

#### **Technical Memorandum**

Date: September 2018

## Purpose

This Technical Memorandum outlines procedures for managing petroleum-contaminated soil or water<sup>1</sup>, or free-phase petroleum product related to either documented or unknown sources, as it may be encountered during the course of construction projects in utility corridors and rights-of way. The objectives are to prevent delays in the construction activities but also to prevent the migration and improper management of contaminated media which could exacerbate environmental problems. Further, while it is ideal to remove accessible contaminated soil, water, or free-product when it is encountered in a utility right-of-way, the Department of Environmental Conservation (DEC) recognizes that there are circumstances where this may not be practical. Under the conditions described in this Technical Memorandum, Contaminated Sites Program (CSP) or Prevention, Preparedness, and Response Program (PPRP) staff may approve petroleum-contaminated soil to be returned to an excavation from where it originated as long as it does not present a risk to a public water system.

# **Applicability**

This Technical Memorandum applies only to petroleum-contaminated soil and water and free-phase petroleum product. It does not apply to non-petroleum contamination, nor the transport, treatment, or disposal of soil regulated as hazardous waste under the Resource Conservation and Recovery Act (RCRA) or other federal environmental and hazardous waste requirements, where additional agency coordination and disposal requirements may be warranted or stipulated. Additionally this guidance does not apply to landowners or operators of contaminated sites who conduct or direct excavation activities on their own property; such activities are subject to the regulatory requirements of 18 AAC 75 and 18 AAC 78.

### **Project Planning and DEC Coordination**

- 1. Prior to the start of any construction or excavation project, identify all contaminated sites and active spills in the area by querying the Contaminated Sites Database and the Spills Database:

  (<a href="http://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/Search">http://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/Search</a>)
  (<a href="http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch">http://dec.alaska.gov/Applications/SPAR/PublicMVC/PERP/SpillSearch</a>).
- 2. During construction, if contaminated soil, groundwater, or free phase petroleum product is encountered and determined to be associated with a known contaminated site, the construction contractor or other project representative shall contact the appropriate DEC staff to ensure that contamination in the corridor is managed and documented as deemed necessary.
- 3. For planned construction or maintenance activities in an area or depth where contaminated media may be encountered, the utility company or their contractors must develop a contaminated

<sup>&</sup>lt;sup>1</sup> "Contaminated soil or groundwater" means concentrations of petroleum exceed applicable cleanup levels as determined under the site cleanup rules at 18 AAC 75.325.

soil/groundwater management plan in advance for review and approval by CSP under 18 AAC 75.325(i) so that the appropriate procedures and materials are in place prior to the beginning of the project. Drinking water utility excavation projects may require additional consideration and should be coordinated with a DEC drinking water program engineer. In some cases the contaminated area may be addressed with a current or future remediation or product recovery system.

4. If contaminated soil, groundwater, or free-product are encountered and the source is unknown, the construction contractor or other project representative shall immediately contact PPRP staff in accordance with spill reporting requirements under 18 AAC 75.300, and coordinate management of all contaminated media with emergency response personnel.

## **Project Implementation**

# Management of Contaminated Water and Free Product

Construction activities must not increase the potential for contamination to migrate, or otherwise adversely affect human health or the environment. Engineering controls may be required in the utility excavation to prevent the creation of a preferential pathway for the migration of contaminated water and free product.

If contaminated water is encountered and must be removed as part of the construction activities, the PPRP or CSP project manager must be notified immediately to determine what actions are required to containerize or manage, properly treat and/or dispose of the contaminated water to prevent contaminant migration.

If free-phase petroleum product is encountered in soil or groundwater, the CSP or PPRP staff must be notified immediately to determine necessary response actions for collecting and containerizing the product to prevent contaminant migration.

#### Leaving or Returning Contaminated Material to the Excavation

PPRP or CSP staff may grant approval for petroleum-contaminated soil to be returned to a public utility or right-of-way excavation subject to the following conditions:

- 1. The owner/responsible party of the property identified as the source of the contamination should be consulted and afforded an opportunity to collect samples and/or concur with the plan to return the contaminated soil to the excavation because installation of utilities may limit future remedial options. However, the owner/responsible party may not delay or stop the utility or construction work.
- 2. As appropriate and feasible, the PPRP or CSP may request sampling to document concentrations of in-situ contamination.
- 3. The CSP may determine that Institutional Controls under 18 AAC 75.375 are necessary to protect other parties from future exposure to contamination left in place following the project.
- 4. If a drinking water distribution main or circulating service line is within the excavation limits, clean material must be placed, extending at least 18 inches around the pipe, or an alternative protective measure must be proposed and coordinated with a DEC drinking water program engineer.
- 5. Any contaminated soil returned to the excavation must be returned to approximately the same depth and location from which it was excavated, provided the top two feet of fill is clean material. Mixing of contaminated excavated soil with uncontaminated material is not approved.

- 6. When previously unknown areas of contamination are discovered, the location of the contamination must be documented with GPS coordinates in decimal degrees with six decimal places of precision using either WGS 1984 or NAD 1983 horizontal datum (be sure to specify which are used).
- 7. Any contaminated soil removed from a construction excavation may be stockpiled temporarily on a week-by-week basis as needed to facilitate construction objectives such as installing equipment, piping, or necessary structures. Stockpiled soil must remain in the immediate area (on site) and be on a liner, asphalt or concrete, and securely covered with 6-mil HDPE minimum, pursuant to 18 AAC 75.370, to prevent contaminant migration into storm water runoff.

## Soil not returned to the Excavation

Any contaminated soil that is not returned to the excavation must be stored, transported and disposed of in accordance with 18 AAC 75.370 following DEC approval (see attached form).

This technical memorandum is not intended to allow avoidance of the duties of responsible persons to investigate, contain, and clean up a discharge or release of a hazardous substance, or to interfere with, hinder, or obstruct the containment or cleanup of a hazardous substance conducted under 18 AAC 75 and/or 18 AAC 78. DEC reserves all rights to require responsible persons to take further action.

## DEC Contaminated Sites Program (CSP) Offices:

Juneau Anchorage

Phone: (907) 465-5390/Fax: (907) 465-5245 Phone: (907)269-7503/Fax: (907) 269-7687

Fairbanks Soldotna/Kenai Office

Phone: (907) 451-2143/ Fax: (907) 451-5105 Phone: (907) 262-5210/Fax: (907) 262-2294

DEC Prevention Preparedness and Response (PPRP) Offices (Report a Spill):

**Southeast** (Juneau) Phone: (907) 465-5340/Fax (907)465-5245

Central (Anchorage/Kenai/Soldotna) Phone: (907)269-3063/Fax (907)269-7648

**Northern** (Fairbanks) Phone: (907) 451-2121/Fax (907)451-2362

After hours reporting Phone: 1-800-478-9300

**DEC Drinking Water Program Engineering Offices:** 

**Kenai/Soldotna/Southeast/Mat-Su** Phone: (907) 262-5210

Anchorage/Western/Prudhoe Bay Phone: (907)269-7656

If outside of Anchorage: 1-866-956-7656

Fairbanks/Northern Phone: (907) 451-2108

If outside of Fairbanks: 1-800-770-2137