

**ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF SPILL PREVENTION AND RESPONSE  
CONTAMINATED SITES PROGRAM**

**RECORD OF DECISION**

**ADOTPF 7 Mile Maintenance Station  
Mile Post 62 Dalton Highway**

**June 2007**

This Record of Decision (ROD) is based on available data and applies to the property described as the Alaska Department of Transportation & Public Facilities (ADOTPF) 7 Mile Maintenance Station. This decision document addresses an 18 AAC 78 regulated tank (500 gallon used oil) site and several petroleum release sites under 18 AAC 75.

**Site name and location**

ADOTPF 7 Mile Maintenance Station is located approximately 7 miles north of the Yukon River at Mile 62 of the Dalton Highway within Section 8, Township 13 North, Range 11 West, Fairbanks Meridian.

**CS file number**

File Number: 330.38.111

Reckey: 1989720102401

File Number: 330.26.003

Reckey: 1995720011701

**Regulatory authority**

18 AAC 75 and 18 AAC 78.

**Physical characteristics of site**

The property is a former gravel pit used to construct the Dalton Highway. There is approximately 5 feet of gravel, sandy silt material underlain by sandy silt with gravel to 20 feet below ground surface (bgs). The area is vegetated by native stands of aspen and spruce forest. A road cut identified a thin soil cover (1 foot) underlain by weathered bedrock. The nearest surface water is a creek approximately 1/2 mile away.

The maintenance station is constructed on a gravel pad and includes: a maintenance shop building; employee housing; on site sewage lagoon; drinking water well; generator building; above ground fuel tanks and dispenser; and an incinerator. The facility is fenced and gated.

**BACKGROUND**

The ADOTPF 7 Mile Maintenance Station is located on the Dalton Highway at Mile 62. It was developed as a gravel extraction area and currently serves as a state maintenance facility. The activities require it to store fuel for power generation; heating and/or vehicle use. There have

been numerous spills documented over the years of substantial volumes. It was estimated that 18,000 gallons of fuel product was released in the 1980s during various spill events with minor amounts of the fuel recovered. There was also a used oil tank (and contaminated soil) removed in 1995 and this area was subsequently buried beneath a new portion of the shop building. There was contaminated soil left in place because it could not be excavated due to building foundation and the utilities located there. It was suspected that the contaminated soil originated from surface spills versus the used oil tank.

A 2006 site investigation installed three soil borings that were converted into groundwater monitor wells. The locations were intended to assess soil and groundwater around the shop building and the drinking water well. The soil contamination was detected in all of the borings and included diesel range organics (DRO) from 1500 to 4740 mg/kg. BTEX and PAHs were detected but mostly below cleanup levels. Groundwater was encountered 8 to 14 feet below ground surface (bgs) and had DRO ranging from 1.9 to 3.6 mg/L; GRO from 1.8 to 4.7 mg/L; and benzene from 0.033 to 0.027 mg/L. The drinking water well was sampled with no detection of contamination.

The site investigation identified shallow groundwater approximately 8 to 14 feet bgs that had been impacted but the drinking water aquifer approximately 165 feet bgs (and reportedly artesian) had no evidence of contamination. This indicates a confining layer of soil and/or permafrost in the area that would limit the vertical migration of contamination.

### **Contaminants of Concern**

Contaminants of concern at this site include: DRO; GRO; and benzene, toluene, ethylbenzene, xylene (BTEX).

### **Current and expected future land use**

Current and future use is expected to be industrial.

### **Current and expected future use of groundwater**

The shallow groundwater (suprapermafrost) is not a drinking water source but the deeper (confined) aquifer is.

### **Pathway Evaluation**

The exposure pathways evaluated at the site included ingestion and inhalation. The DRO soil contamination did not exceed the risk based levels established for the protection of human health and does not pose an unacceptable risk to human health.

The migration to groundwater pathway was assessed and the shallow groundwater at the site has been impacted. However, the deeper (confined) aquifer used for drinking water was not. The site is remote and the surrounding area is not populated. There are no other groundwater receptors in the area and the nearest surface water is approximately ½ mile south of the site.

## **CLEANUP LEVELS**

The soil cleanup levels established for this site are the 18 AAC 75.341 Method 2, under 40 inch precipitation zone, migration to groundwater pathway levels.

The groundwater cleanup levels for this site are the 18 AAC 75.345 Table C levels.

## **ADEC DECISION**

Based on the information provided to date, ADEC has determined that residual soil contamination remaining on site does not pose an unacceptable risk to human health or the environment provided site specific conditions and/or controls are attached to the property.

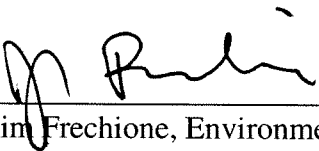
Based on the information provided to date, ADEC conditionally closes both the used oil tank site and the numerous fuel spill areas subject to the following conditions:

1. In the event the contaminated soil becomes accessible or if it is determined to pose a risk, then ADOTPF shall contact ADEC and develop a work plan to ensure the contaminated soil is properly managed.
2. In accordance with 18 AAC 75.325(i) and 18 AAC 78.274(b), ADEC approval will be obtained prior to removal and/or disposal of soil or groundwater from this site to an off-site location.
3. The drinking water well should be sampled periodically to ensure there are no impacts from residual contamination remaining on site.
4. The shallow groundwater aquifer shall not be used without prior approval from ADEC.
5. A Notice of Environmental Contamination will be recorded on the ADEC database that identifies the nature and extent of the contamination remaining on the site. It will also notify future owners/operators of the property of the environmental status of the site and the need to comply with any conditions established by this decision document.

This determination is also subject to 18 AAC 75.380(d) and 18 AAC 78.276(f) whereby additional investigation and cleanup may be required if new information indicates contamination remaining on site poses an unacceptable risk to human health or the environment.

Site closure (without conditions) will be considered when sampling confirms that soil and groundwater meet the 18 AAC 75 cleanup levels established for this site.

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 15 days of the decision. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99801, within 30 days of the decision. If a hearing is not requested within 30 days, the right to appeal is waived.

  
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Jim Frechione, Environmental Program Manager

6-6-07  
Date