

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

FRANK MURKOWSKI, GOVERNOR

610 University Avenue
Fairbanks, AK 99709-3643
PHONE: (907) 451-2104
FAX: (907) 451-5105
www.dec.state.ak.us

File: 150.26.032

May 4, 2006

Darren Mulkey
Alaska Department of Transportation and Public Facilities
2301 Peger Road
Fairbanks, Alaska 99709

Re: ADOT&PF ~~East Fork Maintenance Station~~
Mile 185 Parks Highway
Event ID: 2412
Facility ID: 1549

Dear Mr. Mulkey:

The Alaska Department of Environmental Conservation, Contaminated Sites Program, (ADEC) reviewed the report titled "*Northern Region LUST Site Cleanup, ADOT & PF East Fork Maintenance Station, Mile 185 Parks Highway, Alaska*" dated September 7, 2005. Based on the information presented in this report and the administrative project file, ADEC has determined that contamination remains at the site above the most stringent 18 AAC 75.341 soil cleanup levels. However, the nature and extent of the contamination does not pose an unacceptable risk to human health or the environment and this site will be conditionally closed subject to site specific conditions presented in this document.

Please note the following information that was considered in making the determination on the environmental status of the site.

Site Background

The Alaska Department of Transportation & Public Facilities (ADOT&PF) East Fork Maintenance Station was located at Mile 185 of the Parks Highway, south of Cantwell, Alaska. It is no longer used as a maintenance station and the shop buildings and residence trailers have been removed. The on-site water well was decommissioned in 2003.

There were six underground storage tanks (USTs) previously located on-site and they are listed in the following table:

Tank	Size (gallons)	Type	Date removed
1	1,000	heating oil	2005
2	3,000	diesel	1998
3	3,000	diesel	1998
4	1,000	gasoline	1998
5	1,000	heating oil	2005
6	500	used oil	1998

Approximately 800 cubic yards of soil was removed from the UST excavations and stockpiled on site. Following the demolition of all buildings on site in 2005, tanks 1 and 5 were removed and the excavations were backfilled with material previously stockpiled on site. ADEC later approved the transport of the stockpile soil to the ADOT&PF Cantwell maintenance station for land spreading.

Soil samples from the tanks 3 and 4 excavation detected gasoline range organics (GRO) at 325 milligrams per kilogram (mg/kg) and diesel range organics (DRO) at 6,430 mg/kg. There was also 1,170 mg/kg DRO and 0.0229 mg/kg benzene detected near the maintenance station foundation under tank 6.

Four groundwater monitoring wells were installed in May 2001. The groundwater reportedly ranged from 1.5 to 6 feet below ground surface (bgs), with static water level in the drinking water well at 11.3 bgs. Groundwater encountered during excavation may be a perched aquifer separate from the aquifer tapped by the drinking water well. Groundwater flow direction is to the southwest.

Groundwater samples collected in 2001 and 2002 did not detect contamination in excess of the cleanup levels with the exception of MW-4, where DRO was detected at 1.69 mg/L in September 2002. Shannon & Wilson note that there was approximately 0.25 inch of floating product observed during the sampling event.

The monitoring data in 2003 and 2005 detected DRO in all monitoring wells at levels above practical quantitative limits but below ADEC cleanup levels, with the exception of MW-5 which showed DRO levels at 2.28 mg/L. However, low groundwater levels (5 feet bgs) and poor recharge were encountered and the sample was very turbid.

Exposure Pathway Evaluation

Exposure pathways evaluated at this site include incidental ingestion of soil and groundwater; and the inhalation of outdoor air. Contamination remaining on site is below ADEC cleanup levels for ingestion and inhalation, but above groundwater levels for DRO.

The migration to groundwater pathway is complete but contamination associated with the USTs is not widespread and is likely restricted to the zone of groundwater fluctuation.

Cleanup Levels

The soil cleanup levels established for this site are the 18 AAC 75.341 Tables B1 and B2 Method Two, "under 40 inch zone" migration to groundwater levels.

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

Table 1. Soil samples exceeding cleanup levels from the UST excavations and test pits.

Sample Number	Tank	DRO Levels (mg/kg)	Depth (feet)
119EF-072905-08	1	2080	6
119EF-072905-09	1	1000	6
119EF-072905-06	5	4310	7
119EF-072905-07	5	4420	7
1035-0910-E04	6	1170	8.5
1035-0911-E05	6	1070	8
1035-0911-E06	6	731	8.5
ADEC cleanup levels (migration to groundwater)		250	

Table 2. Groundwater sample results exceeding cleanup levels from monitoring wells.

Well	Date	Depth to water (feet)	GRO (mg/L)	DRO (mg/L)
MW-4	9/12/2002	3.36	0.191	1.69
MW-5	7/30/2005	5.69	<PQL	2.28
ADEC cleanup levels			1.3	1.5

ADEC Decision

The cleanup actions at this site have resulted in the removal of six USTs and over 800 cubic yards of contaminated soil. Soil and groundwater contamination remains on site above established cleanup levels. However, based on the information provided to date, ADEC has determined that the cleanup actions employed at the ADOT&PF East Fork Maintenance Station have removed contamination to the extent practicable at this site and no further action is required.

The 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. As a result of this determination, ADEC will conditionally close this site subject to the following conditions:

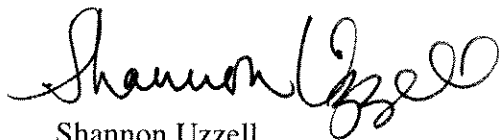
1. A Notice of Residual Contamination will be added to the ADEC Database identifying the nature and extent of contamination remaining on site.
2. In accordance with 18 AAC 78.274(b), ADEC approval must be obtained prior to the transport of soil and/or groundwater from this site to an off-site location.
3. ADEC shall be notified prior to installation of any drinking or other groundwater extraction wells.
4. The groundwater shall be monitored during the summer of 2006 for GRO and DRO compounds.

In accordance with 18 AAC 78.276(f)(2) ADEC may require additional site assessment, monitoring, remediation, and/or other necessary actions at this facility should new information become available that indicates contamination at this site may pose a threat to human health or the environment.

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.

If you have any questions, please contact Kim DeRuyter at 907-451-2752 or via e-mail at Kim_DeRuyter@dec.state.ak.us.

Sincerely,



Shannon Uzzell

Environmental Program Specialist



Jim Frechione

Environmental Program Manager