

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: 212.26.001

July 5, 2006

Darren Mulkey
Alaska Department of Transportation and Public Facilities (ADOT&PF)
2301 Peger Road
Fairbanks, AK 99709

Re: ADOT&PF Slana Maintenance Station
Mile 60 Tok Cutoff
ADEC Facility No. 558

Dear Mr. Mulkey:

The Alaska Department of Environmental Conservation, Contaminated Sites Program, (ADEC) reviewed the 2005 Shannon and Wilson report titled *ADOT&PF Northern Region LUST Sites, Soil Stockpiles and Water Well Sampling, Slana Maintenance Station*. Based on the information from this report and the administrative file, ADEC has determined that soil contamination remains at the site above the most stringent 18 AAC 75.341 soil cleanup levels but the nature and extent of the contamination does not pose an unacceptable risk to human health or the environment. This determination is subject to site specific conditions and, if complied with, will require no further action at this time.

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

Site Background

The ADOT&PF Slana Maintenance Station is located at Mile 60 of the Tok Cutoff and about ½ mile along the Nabesna Road. It is a fenced facility on a terrace above the Copper River, which passes approximately ¼ mile south of the site. The site has a metal shop/office building, a generator building, and material storage sheds.

Four underground storage tanks (USTs) were removed in 1997: one 2,000-gallon diesel UST, one 8,000-gallon diesel UST, and two 2,000-gallon gasoline USTs. A dispensing island was located above the diesel and gasoline tanks. One of the gasoline tanks had a split seam from the bottom of the tank to within 2 feet of its top and it reportedly been taken out of service following a release of approximately 1,000 gallons of gasoline in 1979.

Approximately 1,200 cubic yards of soil were excavated and stockpiled on site. This soil was later determined to meet ADEC cleanup levels and was approved for use in non-environmentally sensitive areas.

All four tanks were removed from a single excavation that extended 18 feet below ground surface (bgs). Soil samples from the limits of excavation detected diesel range organics (DRO) at 5,160 milligrams per kilogram (mg/kg) and gasoline range organics (GRO) at 1,890 mg/kg. The benzene, toluene, ethyl benzene, and total xylenes (BTEX) levels were below ADEC cleanup levels but above detection limits. Highest levels of GRO and BTEX contamination were detected under the former tank where the gasoline release occurred.

There is a drinking water well at the site with an estimated depth of 80 feet bgs. It was sampled in 2005 and detected benzene at 0.00265 mg/L and toluene at 0.00331 mg/L which are below ADEC cleanup levels.

Exposure Pathway Evaluation

The site is a commercial/industrial facility used for storage and maintenance of equipment by ADOT&PF employees. It is fenced and not accessible to the public.

Exposure pathways evaluated at the site include: ingestion (soil and water), inhalation (indoor and outdoor air). The migration pathways included migration to groundwater and indoor air. All of the pathways are considered complete.

The GRO contamination remaining on site exceeds ADEC Method 2 cleanup levels for ingestion/inhalation. The GRO and DRO levels exceed the migration to groundwater levels but water samples did not detect these contaminants. Based on the nature of the use of this site (industrial – non-residential), the contaminants remaining on site do not pose an unacceptable risk provided site specific conditions are incorporated into site management practices.

ADEC 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.

Table 1, Soil sample from the 2003 excavation and test pits. Concentrations are listed in mg/kg; sample results exceeding cleanup levels are in bold.

Sample ID	DRO	GRO	Benzene	Toluene	Ethyl-benzene	p&m Xylene	o-Xylene
1125-070902-002	107	1890	<PQL	<PQL	2.52	502	291
1125-071002-006	972	181	<PQL	1.38	3.59	25	15.8
1125-071002-009	5160	61	<PQL	<PQL	<PQL	0.409	0.374
1125-071002-010 (dup of -009)	4350	55.5	<PQL	<PQL	<PQL	0.364	0.350
ADEC Cleanup Level	250	300	0.02	5.4	5.5	78 Total	

Table 2. Groundwater Sample Results from MW 1 in August 2005. Concentrations are listed in mg/L; sample results exceeding PQL's are in bold.

Analyte	2003 sample 1125SL-0531-well (mg/L)	2005 sample 1192SL-071405-01WA (mg/L)	ADEC Groundwater Cleanup Level (mg/L)
GRO	<0.0900	<0.0900	1.3
DRO	<0.505	<0.300	1.5
Benzene	<0.000500	0.00265	0.005
Toluene	<0.00200	0.00331	1.0
Ethylbenzene	<0.00200	<0.00200	0.7
p- & m- Xylenes	<0.00200	<0.00200	10.0 (total Xylenes)
o - Xylene	<0.00200	<0.00200	

ADEC Decision

The cleanup actions at this site resulted in the removal of four USTs and 1200 cubic yards of contaminated soil. There is soil remaining above the ADEC cleanup levels (for DRO and GRO) established for the site but further removal was not practicable due to the depth and scope of the excavation.

Based on the information provided to date, ADEC has determined that the soil contamination remaining at the ADOT&PF Slana Maintenance Station does not pose an unacceptable risk to human health or the environment provided site specific conditions and/or controls are attached to the property. ADEC will require no further remedial action and the site will be conditionally closed subject to the following conditions:

1. A Notice of Residual Contamination will be noted on the ADEC Contaminated Sites Database identifying the nature and extent of contamination remaining on site.
2. In accordance with 18 AAC 78.274(b), ADEC approval is required prior to the excavation of contaminated soil to ensure worker safety issues are addressed and if soil or groundwater is proposed for transport off site.
3. The drinking water well shall be monitored during the summer of 2006 for GRO, DRO, and BTEX 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.

Site closure (without conditions) can be achieved when soil sampling confirms that all soil meets the most stringent 18 AAC 75.341 Method Two, migration to groundwater, Under 40 Inch Zone, cleanup levels.

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, P.O. Box 111800, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, within 15 days of the decision.

Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, P.O. Box 111800, 410 Willoughby Avenue, Suite 303, Juneau, Alaska 99811-1800, 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