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) 451-2752
FAX: (907) 451-5105
www.dec.state.ak.us

File: 180.26.006

September 27, 2006

Mr. Darren Mulkey
M & O Environmental Compliance Coordinator
Alaska Department of Transportation & Public Facilities
2301 Peger Road
Fairbanks, AK 99709-5399

Re: ADOT&PF Manley Maintenance Station
Mile 150 Elliott Highway
Reckey 1999310008102

Dear Mr. Mulkey:

The Alaska Department of Environmental Conservation, Contaminated Sites Program, (ADEC), reviewed the February 2003 document entitled Underground Storage Tank Corrective Action, Alaska Department of Transportation & Public Facilities (ADOT&PF) Manley Maintenance Station. Based on the information presented in this report and data contained within the administrative case file, ADEC has determined that soil and groundwater contamination remains at the site above the most stringent 18 AAC 75 cleanup levels. However, the nature and extent of this contamination does not pose a risk to human health or the environment, and as a result, no further cleanup action is required at this time subject to conditions outlined in the following pages.

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

Site Background
The ADOT&PF Manley Maintenance Station is located about 1 mile east of Manley Hot Springs at Mile 150 of the Elliott Highway. The site is developed with a metal shop building and a small storage shed. A water well is located adjacent to the north wall of the shop reportedly drilled to 80 feet, with a static level of about 40 feet. There are semi-artesian groundwater conditions in the Manley community well, about 500 feet northeast of the site.

The area surrounding the facility is sparsely populated with the nearest residence located about 400 feet south west of the shop building. The closest surface water bodies are the Hot Springs Slough which is approximately 1,500 feet south of the site, and the Tanana River is about 2.5 miles to the south. Contaminant sources at the site include releases from a dispenser island, and two leaking underground storage tanks (USTs) containing diesel and gasoline.

1998 UST Removal

Two USTs, one 3,000 gallon diesel tank (Tank #1) and one 4,000 gallon gasoline tank (Tank #2) were removed from a single excavation at the Manley facility in July 1998. The dispenser island was located immediately above the USTs and soil samples from beneath the USTs detected 2,950 mg/kg diesel range organics (DRO), 11,500 mg/kg gasoline range organics (GRO), 451 mg/kg benzene, 913 mg/kg toluene, 342 mg/kg ethylbenzene and 1,836 mg/kg xylenes (BETX). Approximately 130 cubic yards of contaminated soil was excavated and stockpiled on site.

2002 Release Investigation and Excavation

A site assessment in July 2002 was conducted to define the nature and extent of contamination. There was no groundwater contamination detected in the on-site well or the residential well. Three soil borings were drilled near the former UST locations with samples collected at 15, 20, and 30 feet below ground surface (bgs) where bedrock was encountered. The soil sample results did not detect DRO or GRO but BETX analytes were detected at 15 and 20 bgs. BTEX analytes were not detected in the samples from the 30 foot depth.

In August 2002, an estimated 1,600 cubic yards of soil was excavated from the former UST area and stockpiled at the Manley landfill. A test pit was excavated to 31 feet bgs to determine the effectiveness of the soil removal action. Groundwater was not encountered during the excavation and 15 soil samples were collected from the base and sidewalls of the excavation. DRO and GRO did not exceed the ADEC cleanup levels in any of the samples but benzene, toluene, and ethylbenzene were detected above cleanup levels in several of the samples. The sample results are presented in Table 1.

Table 1. Soil sample results and ADEC Cleanup Levels (mg/kg).

Sample No.	Depth	Benzene	Toluene	Ethyl-benzene	Xylenes	GRO	DRO
1125-006	31	**0.469**	0.338	<0.0669	0.177	<3.34	<35.0
1125-008	23	**0.811**	1.15	<0.483	1.30	<24.1	<24.5
1125-009	22	**1.82**	1.51	0.107	0.603	9.14	<25.0
1125-010	19	**0.552**	1.06	0.221	1.21	9.19	<24.8
1125-011	22	**5.59**	4.44	0.286	1.44	24.1	<23.8
1125-012	19	**7.96**	**7.35**	<0.553	2.92	42.5	<24.8
1125-013	20	**5.71**	**5.87**	0.492	2.07	33.8	<26.0
1125-014	20	**8.87**	**8.73**	0.701	2.92	48.9	<25.9
1125-015	6	**<0.125**	<0.050	<0.050	0.100	<2.5	<23.8
1125-016	17	**3.57**	3.90	0.304	1.66	20.5	<23.3
1125-017	22	**7.03**	**5.61**	<0.583	1.92	34.3	<23.5
1125-023	9	**1.62**	1.27	0.101	0.601	8.09	<24.5
1125-024	8	**3.52**	**15.6**	**5.82**	33.5	155	25.7
1125-025	15	**0.904**	1.03	0.0755	0.758	6.70	<22.9
1125-026	15	**0.761**	0.856	0.069	0.640	5.49	<22.4
ADEC Cleanup levels		**0.02**	**5.4**	**5.5**	**78**	**300**	**250**

The onsite well was sampled again in 2003 and 2004 with no contaminants detected.

Soil Stockpile

The soil stockpile was sampled in 2003, 2004, and 2005. Based on sample results, ADEC allowed the top 1.5 feet to be used as landfill cover in 2004, and again in 2005. The remaining stockpile was then distributed into two smaller stockpiles to reduce the overall thickness and allow natural attenuation to degrade the remaining contamination. 2005 sample results from the smaller stockpiles, detected GRO and BTEX above migration to groundwater but below the inhalation and ingestion cleanup levels protective of human health. In 2006, ADEC approved the remaining stockpiled soil for use as landfill cover.

Contaminants of Concern

Contaminants of concern at the site are GRO, DRO, and BTEX.

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.

Pathway Evaluation

The site is an industrial/commercial maintenance facility operated by ADOT&PF. The exposure pathways evaluated at the site include: ingestion (soil and water) and inhalation (indoor and outdoor air). The contamination remaining on site does not exceed ingestion or inhalation levels and therefore, does not pose an unacceptable risk to human health at the site.

The migration pathways included migration to groundwater and indoor air. The benzene, toluene, and ethylbenzene were detected above the 18 AAC 75.341 migrations to groundwater levels but groundwater has not been impacted.

It should be noted that the use of this site (industrial – non-residential) was considered in determining the contamination remaining there does not pose an unacceptable risk provided site specific conditions are incorporated into site management practices.

ADEC Decision

Based on the information provided to date, ADEC has determined that the cleanup actions (soil removal and product recovery) employed at the ADOT&PF Manley Maintenance Station has been effective in removing the majority of the contamination. The contamination remaining beneath the former USTs does not pose an unacceptable risk to human health or the environment and it will naturally attenuate over time.

It is ADEC's decision to not require further remedial action provided site specific conditions and/or controls are attached to the property. This determination is subject to the following conditions:

1. An Institutional Control will be added to 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 must be obtained prior to removal and/or disposal of soil or groundwater from this site to an off-site location. In addition, the ADEC should be notified prior to any excavation in the impacted area as screening for impacted material and the use of properly trained excavation personnel may be required.
3. In accordance with 18 AAC 78.276(f)(2), additional investigation and cleanup may be required if new information is discovered which leads the ADEC to make a determination that the cleanup described in this decision is not protective of human health, safety, and welfare or the environment.

ADEC will consider a Site Closure (and removal of institutional controls) only after the soil and groundwater achieves the established cleanup levels for the 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, 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 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,

Kim DeRuyter
Environmental Program Specialist

Sincerely,

Jim Frechione
Environmental Program Manager

cc: Mark Lockwood