FRANK MURKOWSKI, GOVERNOR

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

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File: 2260.26.001

December 6, 2005

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

Re: Record of Decision
ADOT&PF Tazlina Maintenance Station, Glennallen, Alaska

Dear Mr. Mulkey:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed review of the document entitled *Release Investigation ADOT&PF Tazlina Maintenance Station Glennallen, Alaska, received on March 2, 2005.* Based on the information presented in this report and data contained within the administrative case file, ADEC has determined that soil contamination remains at the site above the most stringent 18 AAC 75.341 soil cleanup levels. However, the nature and extent of this contamination do not pose a risk to human health or the environment, and as a result, no further cleanup action is required at this time.

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

Site Description
The ADOT&PF Tazlina Maintenance Facility is located at Mile 110 of the Richardson Highway, approximately 5 miles south of Glennallen, Alaska. The facility is on a terrace about 200 feet above the Tazlina River, which is within about 400 feet of the site. The depth to groundwater is more than 100 feet below the ground surface. The on-site drinking water well, located about 80 feet from the nearest soil contamination is estimated to be 180 feet deep.

Background
In 1993, an 8,000-gallon gasoline underground storage tank (UST) designated as Tank #1 and an 8,000-gallon diesel UST (Tank #2) were removed from the Tazlina Maintenance Station. Soil beneath the tanks was observed to be impacted with petroleum hydrocarbon contamination. Approximately 2,000 cubic yards of contaminated soil were excavated to a depth of 25 feet beneath the diesel UST and 32 feet beneath the gasoline UST. Soil encountered in the excavation consisted of sandy-gravel to a depth of 8 feet and underlain by about 8 feet of gray clay. Soil beneath the clay consisted of 12 feet of sandy-gravel; a frozen silt layer was encountered at the base of the excavation. The excavated soil was stockpiled on site.

In August 1997, a 2,000-gallon used-oil UST and related piping were removed from the site. Approximately 10 cubic yards of contaminated soil were excavated and stockpiled on site. Samples taken from the base of the excavation were analyzed for diesel (DRO), gasoline (GRO), and residual range organics (RRO), benzene, toluene, ethylbenzene, and xylenes (BTEX), arsenic, cadmium, chromium, and lead. The results of these analyses are listed in Table 1 and Table 2. Halogenated volatile organics (HVOCs) and polychlorinated biphenyls (PCBs), potential contaminants of concern, were not detected above laboratory practical quantitation limits (PQLs) in any of the samples.

The soil stockpiles from both the 1993 and the 1997 excavations were spread on site without ADEC approval. In 2003, Shannon & Wilson installed soil borings and collected soil samples where the formerly stockpiled soil had been spread in an effort to further characterize any contamination at the site. The drinking water well was sampled in 1997, and again in 2003, with toluene detected slightly above laboratory PQLs at 0.6 micrograms per liter (µg/L) in 1997.

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.

Table 1, Soil sample results in mg/kg; sample results exceeding cleanup levels are in bold.

Sample Location	Depth (feet)	Benzene	Toluene	Ethyl-benzene	p&m Xylenes	o-Xylenes	GRO	DRO	RRO
TP-1	35	**7.21**	**51.8**	**11.6**	43.6	17.5	217	**1,000**	
TP-1	37.5	**0.848**	2.81	0.481	1.94	0.778	10.4	**1,180**	
TP-1	42.5	**0.676**	2.26	0.319	1.29	0.494	6.98	<PQL	
TP-2	30	**0.345**	1.44	0.286	1.23	0.547	5.29	<PQL	
TP-2	37.5	**0.674**	1.91	0.251	1.06	0.425	5.65	<PQL	
TP-2	42.5	**0.391**	1.18	0.130	0.513	0.192	3.41	<PQL	
Land farmed Soil		<PQL	<PQL	<PQL	<PQL	<PQL	<PQL	73.9	
Base of the 1997 excavation		**0.047**	0.058	<PQL	0.02		<PQL	**1,900**	4,900
ADEC Soil Cleanup Level		0.02	5.4	5.5	(Total) 78		250	300	11,000

Table 2, Metals analysis from the base of the used-oil UST, with the highest value reported from multiple samples (mg/kg)

Analyte	Arsenic	Cadmium	Chromium Total	Lead
Sample Result	**4.5**	<PQL	**28**	4.8
ADEC Soil Cleanup Level	2	5	26	400

Exposure Pathway Evaluation
The exposure pathways evaluated at the site include migration to groundwater; inhalation; and/or ingestion by site workers. The site is a commercial/industrial site used for storage and maintenance of equipment by ADOT&PF employees. The contamination exceeding cleanup levels is located more than 15 feet below ground surface and the inhalation and ingestion pathways are not considered to be complete – unless the soil is excavated. The migration to groundwater pathway was evaluated and site conditions indicate the depth to the drinking water aquifer, presence of permafrost, and the low permeability of subsurface soils allow soil contamination (above the migration to groundwater levels) to remain on site without posing a risk to the environment. The migration to groundwater pathway may be complete but the site specific conditions allow the soil contamination to naturally attenuate without impacting groundwater above 18 AAC 75.345 Table C cleanup levels.

ADEC Decision
The cleanup actions at this site have resulted in the removal of three USTs and over 2,000 cubic yards of contaminated soil. The landspread soil achieved the ADEC cleanup levels established for the site and the removal of the contamination source material from the ground minimized the risk to human health and the environment. There is residual contamination remaining in the ground but its location does not pose a risk and it will naturally attenuate over time.

Based on the information provided to date, ADEC has determined that the cleanup actions employed at the ADOT&PF Tazlina Maintenance Station have been effective in removing the majority of the contamination at the site. The soil contamination remaining beneath the former USTs does not pose a 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 require no further remedial action 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 75.325(i), ADEC approval will be obtained prior to removal and/or disposal of soil or groundwater from this site to an off site location. If excavation is planned for the area of the former USTs, a plan to address the contamination remaining there shall be submitted to ADEC for review and approval.

3. In accordance with 18 AAC 75.380(d)(1) ADEC reserves the right to require additional site assessment, monitoring, remediation, and/or other necessary actions at this facility should new information become available that suggests any contamination at this site may pose a threat to human health or safety, or the environment.

4. ADEC will consider a Site Closure (and removal of institutional controls) only after the soil and/or groundwater achieve 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, 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,

Kim DeRuyter
Environmental Program Specialist

Sincerely,

Jim Frechione
Environmental Program Manager