



SEAN PARNELL, GOVERNOR

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

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File: 2400.26.001

January 21, 2011

Jennifer Hillman  
Environmental Impact Analyst II  
Alaska Department of Transportation & Public Facilities  
P.O. Box 196900 MS-2525  
Anchorage, AK 99519-6900

Re: ADEC Decision Document; ADOT&PF Bethel Maintenance Facility  
Corrective Action Complete Determination

Dear Ms. Hillman:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the ADOT&PF Bethel Maintenance Facility located in Bethel, Alaska. Based on the information provided to date, the ADEC has determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment, and this site will be closed.

This decision is based on the administrative record for the ADOT&PF Bethel Maintenance Facility, which is located in the offices of the Alaska Department of Environmental Conservation (ADEC) in Soldotna, Alaska. This letter summarizes the decision process used to determine the environmental status of this site and provides a summary of the regulatory issues considered in this Corrective Action Complete Determination.

**Introduction**

Site Name and Location:

ADOT&PF Bethel Maintenance Facility  
Chief Eddie Hoffman Highway  
Bethel, Alaska 99559

Name and Mailing Address of Contact Party:

Jennifer Hillman  
Environmental Impact Analyst II  
Alaska Department of Transportation & Public Facilities  
P.O. Box 196900 MS-2525  
Anchorage, AK 99519-6900

Database Record Key and File Number:

ADEC Reckey: 1998250000801  
ADEC File No.: 2400.26.001  
ADEC Hazard ID: 24665

Regulatory authority under which the site is being cleaned up:

18 AAC 75 and 18 AAC 78

**Background**

Petroleum impacted soil was encountered during the removal of one 2,000-gallon diesel and one 2,000-gallon gasoline underground storage tank (UST), the associated piping, and the fuel dispenser island.

**Site Characterization and Cleanup Activities**

During the UST system removals in October of 1997, approximately 43 cubic yards of contaminated soil was excavated and stockpiled at the northeast corner of the property. The excavation that resulted from the removal of the tank systems measured 16 feet long by 15 feet wide by 7 feet deep. Confirmation soil samples were collected from the sidewalls and from the bottom of the excavation (7 feet below ground surface). These samples were analyzed for: benzene, toluene, ethylbenzene and xylenes (BTEX); gasoline range organics (GRO); diesel range organics (DRO); and lead. Benzene was detected at a maximum concentration of 0.15 mg/kg. Xylene was detected at a maximum concentration of 84 mg/kg. The maximum concentration of GRO detected in the soil samples was 1,800 mg/kg. The maximum concentration of DRO detected in these soil samples was 14,000 mg/kg. Lead was detected at a maximum concentration of 6.0 mg/kg. Toluene and ethylbenzene were encountered at concentrations below regulatory cleanup levels.

Analytical samples were also collected from the 43 cubic yards of stockpiled soils and were analyzed for: BTEX; GRO; DRO; and lead. Stockpile analytical samples contained maximum concentrations of 780 mg/kg xylenes, 3,100 mg/kg GRO, and 7,100 mg/kg DRO. Lead was detected at a maximum concentration of 15 mg/kg. Benzene was not detected above the detection limit. Toluene and ethylbenzene were encountered at concentrations below regulatory cleanup levels.

In May of 2006, in an effort to characterize the nature and extent of remaining soil contamination, ADEC contracted with a term contractor to install additional soil borings at the facility. Seven soil borings were drilled within and around the 1997 UST excavation. Soil borings extended to a depth of 42 feet below ground surface. Analytical samples were collected from these borings and were analyzed for: BTEX; GRO; and DRO. The analytical samples contained maximum concentrations of 1.34 mg/kg benzene, 452 mg/kg GRO, and 604 mg/kg DRO. Toluene, ethylbenzene, and xylenes were encountered at concentrations below regulatory cleanup levels.

ADEC's term contractor informed ADEC that the stockpile of contaminated soil no longer existed. The current ADOT&PF Airport Manager confirmed that the soil pile is no longer

present, and has not been present for at least the last several years. While APOT&PF Bethel staff have depicted that the soil pile blew over the years due to the windy conditions in Bethel, the ADOT&PF Airport Manager believes that it is possible that some of the soil may have been inadvertently mixed into the sand pile that was used for sanding operations at the airport.

### Contaminant of Concern

During the investigations at this site, soil samples have been tested for: BTEX, GRO, DRO, and lead. Based on these analyses, and knowledge of the source area, the following Contaminant of Concern may remain in surface and/or subsurface soil at concentrations exceeding the applicable soil cleanup levels:

- Benzene;
- GRO; and
- DRO.

### Cleanup Level

The default soil cleanup level for this site is established in 18 AAC 75.341, Method Two, Tables B1 and B2, Migration to Groundwater, Under 40 Inch Zone.

Contaminant	Site Cleanup Level (mg/kg)
Benzene	0.25
GRO	300
DRO	250

### Pathway Evaluation

Following assessment and cleanup at the site, exposure to the remaining contamination was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De Minimis Exposure or Pathway Incomplete. A summary of this pathway evaluation is included in Table 1.

**Table 1 – Exposure Pathway Evaluation**

Pathway	Result	Explanation
Surface Soil Contact	De-minimis exposure	Residual contamination in surface soil is below ADEC 'ingestion' and 'direct contact' soil cleanup levels.
Sub-Surface Soil Contact	De-minimis exposure	Residual contamination in sub-surface soil is below ADEC 'ingestion' and 'direct contact' soil cleanup levels.
Inhalation – Outdoor Air	De-minimis exposure	Residual contamination in surface and sub-surface soil is below ADEC 'inhalation' soil cleanup levels.

Inhalation – Indoor Air (vapor intrusion)	De-minimis exposure	Residual contamination in surface and sub-surface soil is below ADEC ‘inhalation’ soil cleanup levels and these low concentrations do not pose an unacceptable risk to indoor air quality.
Groundwater Ingestion	Pathway Incomplete	Depth to groundwater exceeds 400 feet. Permafrost exists in the area at depths below 15 feet.
Surface Water Ingestion	Pathway Incomplete	Residual contaminant migration to adjacent wetland areas or surface waters is not anticipated.
Wild Foods Ingestion	Pathway Incomplete	Wild food harvest on this property is not likely.
Exposure to Ecological Receptors	Pathway Incomplete	No impact is anticipated.

Notes to Table 1: “De-minimis exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal mass of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment, contamination has no potential to contact receptors.

### **ADEC Decision**

The cleanup actions and natural attenuation to date have served to reduce residual soil and groundwater contaminant concentrations to acceptable levels. Contamination may remain on site in surface or subsurface soil above an established default soil cleanup level; however ADEC has determined there is no unacceptable risk to human health or the environment. Therefore this site is being issued a Corrective Action Complete determination.

Although a Corrective Action Complete determination has been granted, ADEC approval is still required for off-site soil disposal in accordance with 18 AAC 78.600(h). It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

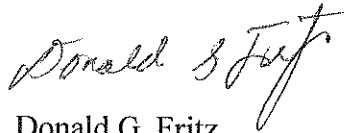
This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

### **Appeal**

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 after receiving the department’s decision reviewable under this section. 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 after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions about this Corrective Action Complete decision, or any other aspect of this project, please contact me at (907) 262-5210 Extension 245, or via e-mail at [don.fritz@alaska.gov](mailto:don.fritz@alaska.gov)

Sincerely,



Donald G. Fritz  
Environmental Program Specialist

Cc: David Cummings ADOT&PF, Bethel