



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of  
Environmental Conservation

DIVISION OF SPILL PREVENTION & RESPONSE  
Contaminated Sites Program

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File No: 1516.26.038

December 23, 2013

Vic Winters  
Alaska Department of Transportation and Public Facilities  
P.O. Box 112500  
Juneau, AK 99811

**Re: Decision Document: ADOT&PF Ketchikan Airport Ferry Terminal  
Corrective Action Complete Determination**

Dear Mr. Winters,

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the referenced site. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

**Site Name and Location:**

ADOT&PF Ketchikan  
Airport Ferry Terminal Vic Winters  
4233 Tongass Avenue  
Ketchikan, Alaska 99901

**Name and Mailing Address of Contact Party:**

ADOT&PF  
P.O. Box 112500  
Juneau, AK 99811

**DEC Site Identifiers:**

File No: 1516.26.038  
Hazard ID: 26169

**Regulatory Authority for Determination:**

18 AAC 75 and 18 AAC 78

**Site Description and Background**

A 500-gallon diesel underground storage tank (UST) was installed at your property on August 1, 1988. The UST was located adjacent to the north side of the generator building. On October 9, 2013, the UST and its associated piping runs were removed by R&M Consultants, Inc. (R&M) and Alaska Fuel Systems, Inc. (AFS).

During the UST removal activities, soils were removed from the excavation, screened for volatile constituents utilizing a photoionization detector (PID), and placed on a temporary stockpile located north of the excavation area. Seven confirmation soil samples were collected from this site (four from the base of the excavation and under the ends of the UST, one from within two feet beneath the piping runs, and two from the soil stockpile). Additionally, a duplicate soil sample was collected from the soil stockpile.

All soil samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), and benzene, toluene, ethylbenzene, and total xylenes (BTEX). Four of the soil samples, including the samples collected from beneath the piping runs and the stockpile were also analyzed for polynuclear aromatic hydrocarbons (PAHs).

None of the samples (except the duplicate soil sample) exhibited concentrations of analytes that exceeded the laboratory's limit of quantitation (LOQs) or the most stringent ADEC cleanup criteria. The duplicate soil sample, collected from the soil stockpile, exhibited concentration of PAHs that were detected above the laboratory's LOQs; however, were well below the most stringent ADEC cleanup levels.

Based on visual and olfactory field screening, the contaminated soils from the temporary soil stockpile were placed back in the excavation for use as fill. The excavation was completed with D-1 gravel and compacted.

### Contaminants of Concern

As discussed above, contaminated soils remain below the approved cleanup levels following the removal of the UST and its associated piping at this site. The primary contaminants of concern (COCs) at this site were PAHs.

### Cleanup Levels

Concentrations of PAHs were detected in soil below the approved Method Two migration to groundwater cleanup levels for the over 40-inch precipitation zone, established in 18 AAC 75.341(c), Table B1. Groundwater was not encountered during field activities.

**Table 1 – Cleanup Levels**

Contaminant	Soil- Method Two, Direct Contact/ Ingestion (mg/Kg)	Soil- Method Two, Migration to Groundwater (mg/Kg)	Maximum Concentrations of Analytes Remaining Onsite (mg/Kg)
Benzo(a)Anthracene	4.0	3.6	0.0120
Benzo[a]pyrene	0.40	2.1	0.00787
Benzo[b]Fluoranthene	4.0	12	0.0155
Benzo[g,h,i]perylene	1,100	38,700	0.00581
Chrysene	400	360	0.0120
Fluoranthene	1,500	1,400	0.0342
Phenanthrene	16,800	3,000	0.0171
Pyrene	1,100	1,000	0.0309

mg/Kg = milligrams per kilogram

## Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants 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 2.

**Table 2 – Exposure Pathway Evaluation**

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is below direct contact, ingestion, and migration to groundwater cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	No soil/gas data was collected; however, all analytes were detected at concentrations well below the most stringent cleanup levels.
Groundwater Ingestion	Pathway Incomplete	Groundwater contamination is not present.
Surface Water Ingestion	Pathway Incomplete	Surface water is not contaminated and is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals. Also, the site is not in an area that could be reasonably used for hunting.
Exposure to Ecological Receptors	Pathway Incomplete	No ecological or terrestrial pathways are present.

**Notes to Table 2:** “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors.

## ADEC Decision

Remaining petroleum contamination in soil is below approved cleanup levels. This site will receive a “Closed” designation on the Contaminated Sites Database, subject to the following standard conditions.

### Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 78.600(h). A “site” [as defined by 18 AAC 75.990 (115)] means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. (See attached site figure.)

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
3. Groundwater in the state of Alaska is protected for aquaculture use. In the event that an aquaculture facility uses groundwater from this site in the future, additional testing may be required to ensure that aquatic life criteria under 18 AAC 70 are not exceeded.

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 closure decision, please feel free to contact me at (907) 269-7691.

Sincerely,



Joshua Barsis  
Environmental Program Specialist III