



File: 100.38.154

April 9, 2019

Ashley Jaramillo  
Fairbanks International Airport  
6450 Airport Way, Suite 1  
Fairbanks, AK, 99709

Re: Decision Document: FIA – Passenger Terminal HOT  
Cleanup Complete Determination

Dear Ms. Jaramillo:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the FIA – Passenger Terminal HOT located at the Fairbanks International Airport (FIA). Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action will be required unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the FIA – Passenger Terminal HOT, which is located in the ADEC office in Fairbanks, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

**Site Name and Location:**

FIA- Passenger Terminal HOT  
Passenger Terminal Building  
Fairbanks International Airport

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

Ashley Jaramillo, Environmental Manager  
Fairbanks International Airport  
6450 Airport Way, Suite 1  
Fairbanks, AK, 99709

**ADEC Site Identifiers:**

File No.: 100.38.154  
Hazard ID.: 3073

**Regulatory Authority for Determination:**

18 AAC 75

**Site Description and Background**

The FIA Passenger Terminal HOT site is located off the west side of the terminal building area at the Fairbanks International Airport. A 10,000 gallon heating oil tank (HOT) was removed in 1999 and approximately 160 cubic yards of diesel contaminated soil were removed and later used as backfill

surrounding a new 10,000 gallon HOT that was replaced in the location of the former HOT. In 2006, the new 10,000 gallon HOT was removed and a total of 238 tons of petroleum impacted soils were removed and treated. Confirmation samples indicated remaining contamination below ADEC's Method 2 human health soil cleanup levels but above the migration to groundwater cleanup levels. A monitoring well just north of the excavation limits was tested in 2007 for petroleum contamination but were below the groundwater cleanup levels.

### Contaminants of Concern

During site characterization and cleanup activities at the site, samples were collected from soil and analyzed for diesel range organics (DRO), gasoline range organics (GRO), benzene, toluene, ethylbenzene, total xylenes (BTEX), and polyaromatic hydrocarbons (PAHs). Based on the analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Diesel Range Organics (DRO)

### Cleanup Levels

The approved soil cleanup levels for this site are the most stringent of the levels established in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341(d), Table B2 for the over 40-inch precipitation zone. For DRO, the most stringent levels are based on the potential for contamination to migrate to the groundwater.

The approved groundwater cleanup levels are established in 18 AAC 75.345 Table C.

**Table 1 – Approved Cleanup Levels**

Contaminant	Soil (mg/kg)	Groundwater (mg/L)
DRO	250	1.5

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

### Characterization and Cleanup Activities

The new 10,000-gallon HOT was removed in July 2006 along with 238 tons of contaminated soil. The dimensions of the HOT excavation were approximately 30 feet by 20 feet and there were no observations of stained soil, odor, or sheens during the course of the excavation. Confirmation samples taken from sidewall and the location of the fill and vent sides of the tank indicated low level contamination all below ADEC's Method 2 soil clean up levels. A minimal amount of fuel remained (< 0.5 gallons) in the fuel line that ran underneath the terminal building and this area was found to be contaminated. A sample taken from where the fuel line entered the terminal building showed DRO present above the approved cleanup levels, as shown in Figure 1. The maximum DRO concentration remaining at the site was 548 mg/kg. A total of 238 tons of hydrocarbon-impacted soil was transported to Organic Incineration Technology, Inc. (OIT) for thermal treatment and disposal. The remaining contamination is underneath the current FIA Passenger Terminal Building.

In 2007, a groundwater sample was taken from a monitoring well (MW-32) that was within 100 feet north of the excavation limits and downgradient from the HOT relative to groundwater flow. The well

was associated with the contaminated site known as the FIA – Hydrant Fuel System, Hazard ID 23140. Low levels of DRO were present but did not exceed the groundwater cleanup levels. Based on these results, ADEC has determined that residual soil contamination does not pose an unacceptable migration to groundwater concern.

**Table 2 – Highest Concentrations of Contamination Remaining Onsite**

Contaminant	Soil (mg/kg)
DRO	548

mg/kg = milligrams per kilogram

### Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

### 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, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 3.

**Table 3 – 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 soil cleanup levels established for direct contact with soil.
Inhalation – Outdoor Air	De Minimis Exposure	Contamination remains in the sub-surface, but is below soil cleanup levels established for outdoor air inhalation.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Volatile compounds were not found in the soil.
Groundwater Ingestion	De Minimis Exposure	Groundwater contamination does not exceed Table C cleanup levels.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.

Wild and Farmed Foods Ingestion	Pathway Incomplete	The site is part of an active airport facility where hunting, fishing, and harvesting of wild or farmed foods were not expected activities.
Exposure to Ecological Receptors	Pathway Incomplete	The site is part of an active airport and contains no viable terrestrial or aquatic habitat.

**Notes to Table 3:** “De Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be adversely 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. “Exposure Controlled” means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

### ADEC Decision

Soil contamination at the site has been cleaned up to concentrations suitable for residential land use. This site will receive a “Cleanup Complete” designation on the Contaminated Sites Database, subject to the following standard conditions.

### Standard Conditions

1. Any proposal to transport soil or groundwater from a site that is subject to the site cleanup rules or for which a written determination from the department has been made under 18 AAC 75.380(d)(1) that allows contamination to remain at the site above method two soil cleanup levels or groundwater cleanup levels listed in Table C requires ADEC approval in accordance with 18 AAC 75.325(i). 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 throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to 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, 555 Cordova Street, Anchorage, Alaska 99501-2617, within 20 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, P.O. Box 111800, Juneau, Alaska 99811-1800, 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.

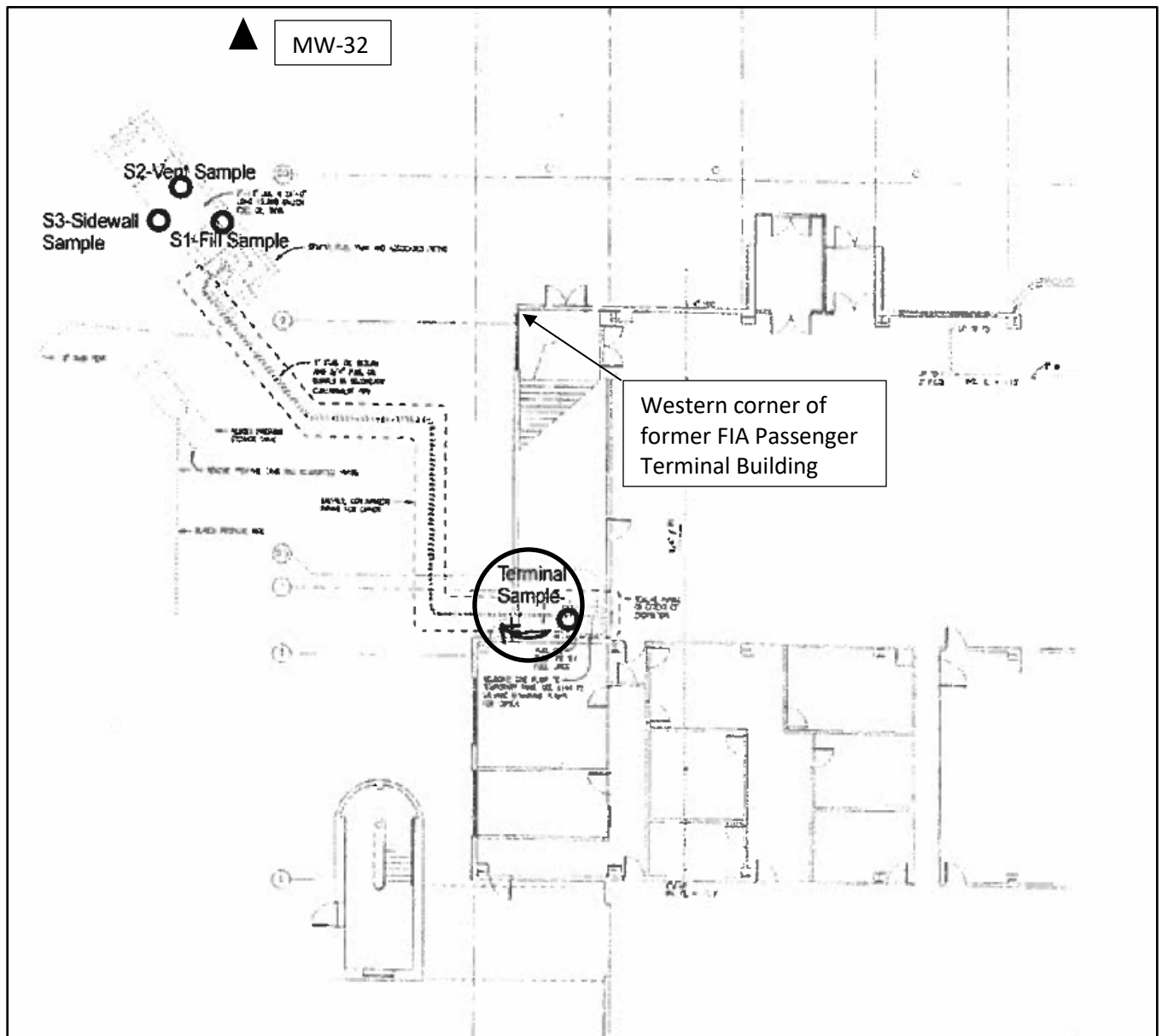
If you have questions about this closure decision, please feel free to contact me at (907) 451-2131, or email at [megan.roberts@alaska.gov](mailto:megan.roberts@alaska.gov).

Sincerely,

A handwritten signature in black ink that reads "Megan Roberts". The signature is written in a cursive style with a long horizontal stroke at the end.

Megan Roberts  
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit



**Figure 1.** Circled area indicates location of remaining petroleum above the approved cleanup levels. The monitoring well (MW-32) is indicated by the black triangle. The western corner of the FIA Passenger Terminal Building is indicated for orientation purposes. Adapted from Travis/Peterson Environmental Consulting, Inc., April 2008.



**Figure 2.** The star indicates the approximate location of remaining soil contamination underneath the new FIA Passenger Terminal. The black triangle indicates the location of the former monitoring well (MW-32) that was sampled in 2007. Image sourced from Google Earth, 2017.