

# STATE OF ALASKA

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

**SEAN PARNELL, GOVERNOR**

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File: # 330.38.119  
Return Receipt Requested  
Article No: 7008 1830 0002 6349 4715

July 12, 2010

Jan Shifflett  
Alyeska Pipeline Service Company  
Mail Stop 507  
PO Box 196660  
Anchorage, AK 99519-6660

Re: Decision Document; Five Mile Airstrip  
Cleanup Complete Determination - Institutional Controls

Dear Mr. Shifflett:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program (CSP) reviewed the environmental records associated with the Alyeska Five Mile Airstrip located at Milepost 60.7 Dalton Highway near Minto, Alaska. 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. No further remedial action will be required as long as the site is in compliance with established institutional controls (ICs).

This decision is based on the administrative record for Alyeska Five Mile Airstrip site which is located in the offices of the ADEC in Anchorage, 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 the ADEC determination.

## **Introduction**

### Site Name and Location

Alyeska Five Mile Airstrip  
Milepost 60.7 Dalton Highway  
Near Minto, AK

### Name and Mailing Address of Contact Party:

Jan Shifflett  
Alyeska Pipeline Service Company  
Mail Stop 507  
PO Box 196660  
Anchorage, AK 99519-6660

Database Record Key and CS file number:

Hazard ID # 25387

CS file # 330.38.119

Regulatory authority under which the site is being cleaned up:

18 AAC 75

**Background**

This site is the location of a gravel airstrip which was used by Alyeska Pipeline Services Company until 1997. Although Alyeska is the only official occupant, access to the site is not controlled and has had unauthorized use such as recreational camping.

**Contaminants of Concern**

During the investigations at the site, soil samples were analyzed for the following contaminants: gasoline range organics (GRO); diesel range organics (DRO); residual range organics (RRO); polynuclear aromatic hydrocarbons (PAH); as well as benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified:

- Gasoline range organics (GRO)
- Diesel Range Organics (DRO)
- Benzene
- Ethylbenzene
- 1-Methylnaphthalene
- 2-Methylnaphthalene
- Naphthalene

**Cleanup Levels**

The default soil cleanup levels for this site are established in 18 AAC 75.341 Tables B1 and B2, Under 40 Inch Zone, *Migration to Groundwater*.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
GRO	300
DRO	250
Benzene	0.025
Ethylbenzene	6.9
1-Methylnaphthalene	6.2
2-Methylnaphthalene	6.1
Naphthalene	20

**Site Characterization and Cleanup Actions**

In 2008, a Phase I site assessment was conducted for this site which identified stained soil. Heated headspace screening with a photoionization detector (PID) was used to further assess the stained areas at 6 inches below ground surface. Two samples were collected from an area of concern by PID readings and olfactory observations. Analytical results were up to 3,560 mg/kg DRO and 25,900 mg/kg RRO. The area of concern which included these samples was later excavated.

In July of 2009, approximately 60 cubic yards of contaminated soil were excavated and removed from the site. In addition, test pits were advanced around the perimeter of the excavation to further delineate the extent of contamination. Thirteen samples and two duplicates were collected to characterize the remaining soil. Of the fifteen total samples collected, in five or less GRO, DRO, benzene, ethylbenzene, 1-methylnaphthalene, 2-methylnaphthalene, and naphthalene exceeded Method Two Migration to Groundwater levels. However, sample results did not exceed Ingestion and Inhalation levels with the exception of one naphthalene result.

Groundwater was not sampled at this location but well log information supports the presence of thick, deep permafrost bounding this area. The closest drinking water (DW) well, located about 1,500 feet to the south of the site, is screened from about 255 to 275 feet below ground surface (bgs). This DW well was installed in May of 1975 and the well log showed frozen material from 5 to 250 feet bgs. A second log from a soil boring installed about 800 feet to the northwest, showed frozen ground the entire depth of the boring which was drilled to a depth of 30 feet.

### 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 1.

**Table 1 – Exposure Tracking Model Results**

Pathway	Result	Explanation
Surface Soil Contact	De minimis exposure	The removal action is presumed to have removed contaminated surface soil; therefore, the extent of contamination remaining in the surface soil is considered de minimis in volume.
Sub-Surface Soil Contact	De minimis exposure	The extent of contamination remaining in the subsurface soils is considered de minimis in volume. Furthermore, the site is an abandoned airport with no residential receptors.
Inhalation – Outdoor Air	De minimis exposure	Extent of contamination above inhalation levels is considered de minimis in volume.
Inhalation – Indoor Air (vapor intrusion)	De minimis exposure	Extent and volume of contamination is considered de minimis; therefore does not pose a significant risk via this pathway.

Groundwater Ingestion	De minimis exposure	There is no onsite potable water source; thick/deep permafrost bounds the area; and the extent of contamination is de minimis in volume; therefore, the potential for this exposure is considered de minimis.
Surface Water Ingestion	Pathway Incomplete	There are no surface water bodies within 1/4 mile; therefore, this pathway is considered incomplete.
Wild Foods Ingestion	Pathway Incomplete	Compounds do not have the potential to bioaccumulate in plants or animals; therefore, this pathway is considered incomplete.
Exposure to Ecological Receptors	Pathway Incomplete	Site is a gravel airstrip and there is no evidence of off-site migration; therefore, this pathway is considered incomplete.

Notes to Table 1: "De-minimis exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact receptors. "Exposure controlled" means there is an administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

### **ADEC Decision**

There is contamination remaining above established cleanup levels at the Alyeska Five Mile Airstrip but ADEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Cleanup Complete- ICs determination subject to the following.

1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, current ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore the Alyeska Pipeline Services Company shall report to ADEC every five years to document land use, or report as soon as Alyeska Pipeline Services Company becomes aware of any change in land ownership and/or use, if earlier. **The report can be sent to the local ADEC office or electronically to [DEC.ICUnit@alaska.gov](mailto:DEC.ICUnit@alaska.gov).**
2. Installation of groundwater wells will require approval from ADEC.
3. Any proposal to transport soil or groundwater off site 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.)

4. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above, and will include a description of the contamination remaining at the site. When the site meets the requirements for a Cleanup Complete determination, then the Institutional Controls will be terminated.

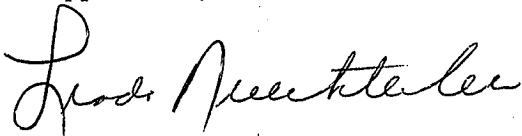
This determination is in accordance with 18 AAC 75.380(d) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

### 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.

**Please sign and return *Attachment A* to ADEC within 30 days of receipt of this letter.** If you have questions about this closure decision, please contact the ADEC project manager, Keather McLoone at (907) 269-7526.

Approved By,



Linda Nuechterlein  
Environmental Manager

Recommended By,



Keather McLoone  
Environmental Specialist

Attachment A: Cleanup Complete-ICs Agreement Signature Page  
Attachment B: Site Figures

Cc: Scott Rose, SLR

**Attachment A: Cleanup Complete-ICs Agreement and Signature Page\***

Alyeska Pipeline Service Company agrees to the terms of this Corrective Action Complete with Institutional Controls determination as stated in this Closure Decision Document for *Alyeska Five Mile Airstrip* dated **July 12, 2010**. Failure to comply with the terms of this agreement may result in ADEC reopening this site and requiring further remedial action in accordance with 18 AAC 75.380(d).

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Signature of Authorized Representative, Title  
Jan Shifflett/ Alyeska Pipeline Service Company

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Printed Name of Authorized Representative, Title  
Jan Shifflett/ Alyeska Pipeline Service Company

**Note to Responsible Person (RP):**

After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

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ADEC File No.: 330.38.119  
Hazard ID: 25387  
ADEC Project Manager: Keather McLoone

**For Internal Use Only**

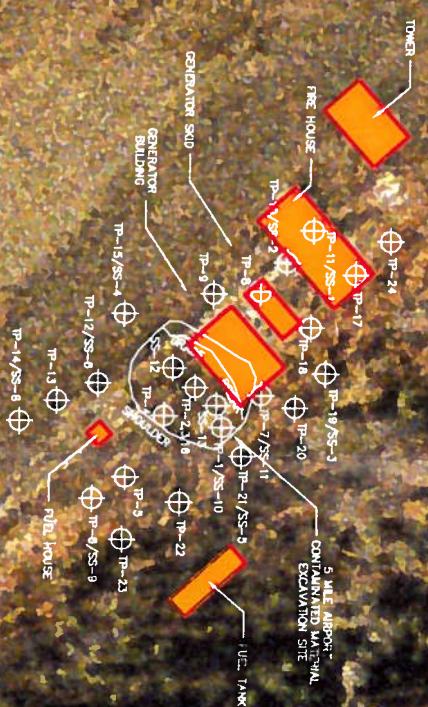
**\*Attention ADEC Administration Staff:** Please follow the procedure below after Attachment A is signed/returned to ADEC.

1. Log-in and Date Stamp Attachment A
2. Scan and Save to the appropriate electronic folder on the network Drive
3. File the hard copy in the appropriate project/site file Correspondence Folder (blue in Anchorage).
4. Provide the Correspondence folder (with the filed Attachment A hard copy) to the ADEC Project Manager so that the PM can update the CS database.





1. BASIS OF COORDINATES AND BEARING: CP-22597503A & CP-22597503B. (NO SCALE FACTOR REDUCTIONS WERE MADE)
2. BASIS OF ELEVATION: SITE 1063477 OFFSET NAD AT AWC 289N; ELEV. 482.12 (NAD 83 DATUM)
3. DATE OF SURVEY AND FIELD BOOKS: JULY 29, 2009. FIELD BOOK 225-975 PAGES 3-6. DATA FILE: 22597503C
4. BASIS OF STATIONING: N/A



SCALE: 1" = 50'  
WHEN PLOTTED AT 11 x 17 PAGE SIZE

0 50 100 150'

Date	June 28, 2010
File	SMile_F2
Scale	1 inch = 50 feet
Project No.	006.1289.09022
Fig. No.	2

TP	NORTHING	EASTING
0/SS-9	N 4359022.17	E 1085910.25
9	N 4359071.89	E 1085954.14
11/SS-1	N 4359091.27	E 1085937.09
12/SS-9	N 4359023.16	E 1085953.79
13	N 4359071.57	E 1085939.41
14/SS-6	N 4359023.57	E 1085940.57
17	N 4359023.23	E 1085944.50
18/SS-3	N 4359071.24	E 1085974.77
20	N 4359023.40	E 1085924.94
21	N 4359023.26	E 1085921.49
22	N 4359023.87	E 1085911.10
23	N 4359023.13	E 1085921.12
24	N 4359102.43	E 1085940.49

Legend

- TP-2 TEST PIT LOCATION
- Buildings (Present)

CONTOUR INTERVAL = 1 FOOT  
EXCAVATION SITE VOLUME = 99 CUBIC YARDS

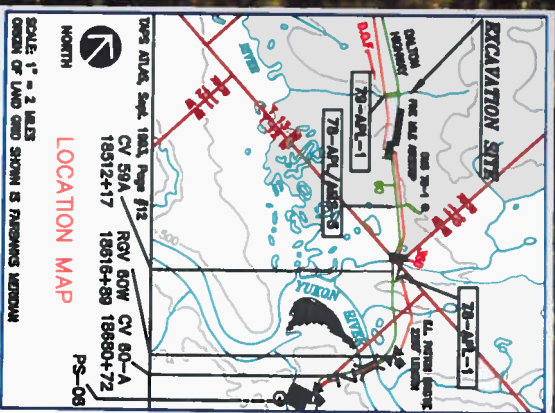


Figure SITE DETAIL MAP