

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

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File: # 330.38. 057

Return Receipt Requested

Article No: 7008.1830.0002.6349.4296

March 26, 2010

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

Re: Record of Decision (ROD); Alyeska PS 10 Booster Pump Bldg
Cleanup Complete Determination-Institutional Controls

Dear Mr. Shifflet:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with Alyeska Pump Station (PS) 10 Booster Pump Bldg located at Mile 218 Richardson Highway. 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 as long as the site is in compliance with established institutional controls (ICs).

This decision is based on the administrative record for the Alyeska PS 10 Booster Pump Bldg 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 Cleanup Complete with ICs determination.

Introduction

Site Name and Location

Alyeska PS 10 Booster Pump Bldg
Mile 218 Richardson Hwy.
Near Paxson, AK

Name and Mailing Address of Contact Party:

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

Database Record Key and CS file number:

Hazard ID # 1727
CS file # 330.38,057

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

A spill of residual oil occurred in the booster pump enclosure of PS 10 due to a broken seal in a return line originating at the Topping Unit. It was later discovered that some of the spilled material had escaped the enclosure and migrated underneath the building.

In May 1992, approximately 15 yards of contaminated gravel were removed with a super sucker from the south wall of the booster pump enclosure. Additional contamination was left in place due to concerns of building integrity.

The Alyeska PS 10 Booster Pump 1995128 site is a cleanup complete site that resulted from a 1995 spill from a pressure safety valve during a restarting of the Trans Alaska Pipeline. This site borders the Booster Pump Building site to the south and was investigated after the investigation conducted closer to the building.

Contaminants of Concern

During the investigations at this site, soil samples were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), volatile petroleum hydrocarbons (VPH), and total recoverable petroleum hydrocarbons (TRPH). The following Contaminants of Concern were identified:

- Residual Range Organics (RRO)

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>
RRO	11,000

Site Characterization and Cleanup Actions

At a location directly adjacent to the subject site, another site called the Booster Pump 1995128 site was excavated in 1995 and a closure without institutional controls letter was issued in 2000. All samples for this bordering site were well below Method Two cleanup levels and reportedly within several feet of the subject site, PS 10 Booster Pump Building.

In 1992, the PS 10 Booster Pump Building site was excavated. Following excavation, six soil samples were collected from approximately 1.75 feet below the floor of the excavation and analyzed for BTEX, TRPH, and a hydrocarbon scan performed. All samples were well below Method Two cleanup levels with the exception of sample PS10BP-2. This sample resulted in 1,600 mg/kg of diesel with a crude oil pattern. The estimated concentration of RRO in this sample was 14,000 mg/kg. Therefore, the data for this site and the bordering site suggests that the extent of contamination remaining can be considered very limited.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: ingestion of soil and groundwater, indoor and outdoor inhalation of vapors, and direct contact with soil.

Exposure pathways are the conduits by which contamination may reach human or ecological receptors. Potential exposure pathways, presented in Table 1, were evaluated using ADEC's Exposure Tracking Model (ETM).

All potential exposure pathways are either de minimis, incomplete, or controlled. "De minimis exposure" means that in ADEC's judgment humans or wildlife will be minimally affected by the small volume of remaining contamination. "Pathway incomplete" means that in ADEC's judgment contamination has no potential to contact humans or wildlife. "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.

RRO concentrations remaining in the soil may be above cleanup levels for ingestion, direct contact and inhalation pathways, and migration to groundwater. However the exposure risk for these pathways is considered acceptable, primarily because of the current land use and extent of contamination remaining. The groundwater ingestion exposure pathway is further protected by clay layers above the lower clay layer in which the drinking water well at PS 10 is screened.

The exposure pathway analysis above was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be one of the following: De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

Table 1 – Exposure Tracking Model Results

Pathway	Result	Explanation
Surface Soil Contact	De minimis exposure	Soil contamination remaining is below surface and below former building. Any remaining soil contamination at the surface is de minimis in volume.
Sub-Surface Soil Contact	De minimis exposure	Confirmation samples showed extent of contamination above direct contact levels is de minimis.
Inhalation – Outdoor Air	De minimis exposure	Volume of contamination remaining is considered de minimis. Contaminants remaining are not in the volatile fraction.
Inhalation – Indoor Air (vapor intrusion)	De minimis exposure	This is a pump station and no occupied buildings are present or expected to be occupied in the future. Furthermore remaining volume of contamination remaining is considered de minimis in volume. Contaminants remaining are not in the volatile fraction.
Groundwater Ingestion	De minimis exposure	Amount of remaining contaminated soil is considered to be de minimis in extent. Furthermore, there are clay layers protecting the lower gravel layer in which the drinking water well at PS 10 is screened.
Surface Water Ingestion	De minimis exposure	No evidence of offsite migration and the amount of contamination remaining considered de minimis.
Wild Foods Ingestion	Pathway Incomplete	Site is a gravel pad in a fenced, secure area; contaminants of concern do not have the potential to bioaccumulate in plants or animals; and wild foods are not harvested in this area. Therefore this pathway is incomplete.
Exposure to Ecological Receptors	Pathway Incomplete	Site is a gravel pad in a fenced, secure area; no evidence of off-site migration; and wild foods are not harvested. Therefore this pathway is considered incomplete.

ADEC Decision

There is contamination remaining above established cleanup levels at the Alyeska PS 10 Booster Pump Bldg 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.**
2. 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.)
3. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
4. Soil contamination is located in the area of PS 10 Booster Pump Bldg (see attachment B). When the soil in this area becomes accessible, such as during pipeline decommissioning, the soil must be evaluated and contamination addressed in accordance with an ADEC approved work plan.

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 Figure.

Cc: Scott Rose, SLR
Jerry Brossia, JPO
Gary Reimer, Anchorage District Manager, BLM

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 for the Alyeska PS 10 Booster Pump Bldg site as stated in this Closure Decision Document dated **March 26, 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).

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

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

For Internal Use Only

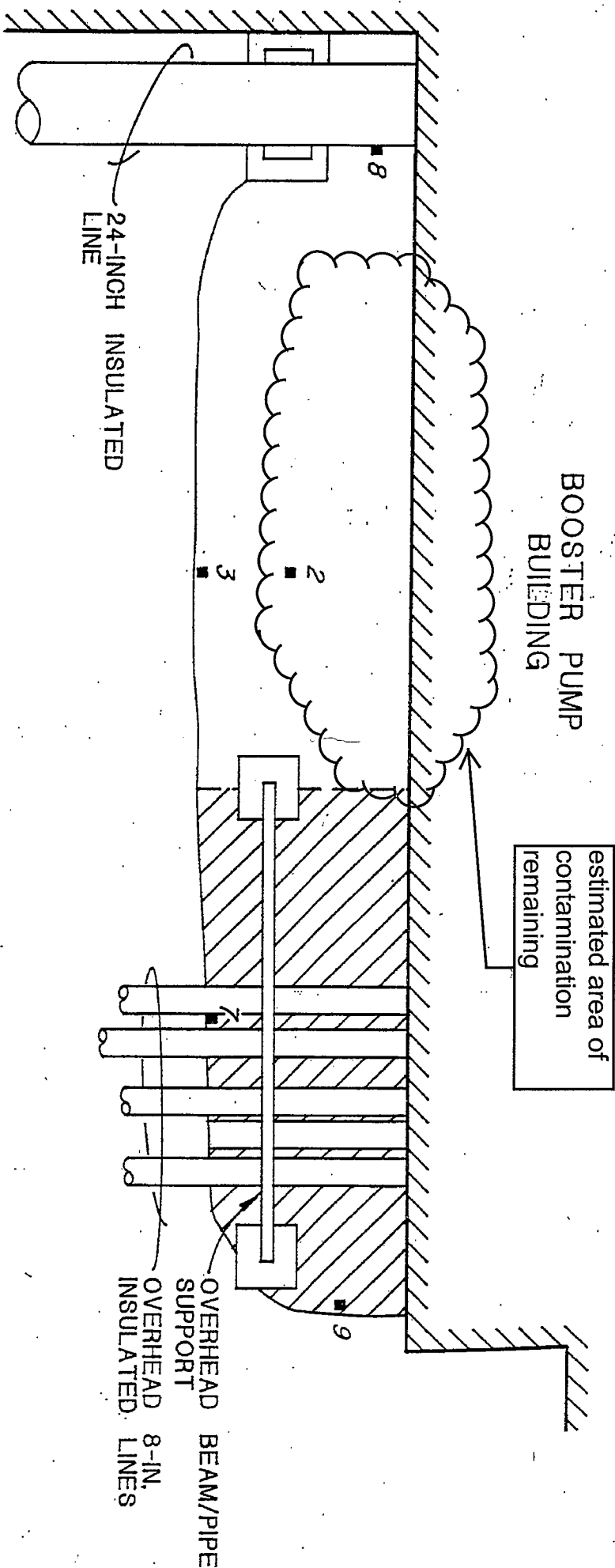
ADEC File No.: 330.38.057

Hazard ID: 1727

ADEC Project Manager: Keather McLoone

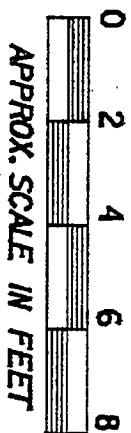
***Attention ADEC Administration Staff:** Please follow the procedure below after Attachment A is signed/returned to ADEC.

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.



EXPLANATION

- SOIL SAMPLE
- ▨ AREA UNDERLAIN BY CONCRETE FOUNDATION (● APPROX. 5' B.G.S.)



DATE SEPT. 1992
 DWN. CDS92071SD
 CKD R/R

PUMP STATION #10
 BOOSTER PUMP BUILDING
 RESIDUAL OIL SPILL ASSESSMENT

FIGURE

