

# STATE OF ALASKA

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

**SARAH PALIN, GOVERNOR**

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Certified Return Receipt  
Article No: 7007 3020 0000 1948 8643

March 10, 2009

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

Re: Record of Decision (ROD); Alyeska PS 03 Gas Condensate Spill  
Cleanup Complete Determination

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) 03 Gas Condensate Spill located at Mile 311.8, Dalton Highway. 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 Alyeska PS 03 Gas Condensate Spill, which is located in the offices of the Alaska Department of Environmental Conservation (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 Determination.

### Introduction

#### Site Name and Location:

Alyeska PS 03 Gas Condensate Spill  
Mile 311.8  
Dalton Highway  
Alaska

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

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

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Database Record Key and File Number:

ADEC Rekey: 2007720124001

File: 330.38.115

Hazard ID: 4644

Regulatory authority under which the site is being cleaned up:

18 AAC 75

**Background**

During the cleanup of a surface spill of oily water and gas condensate on August 27, 2007, Alyeska personnel discovered stained soil with an odor in the subsurface of a small excavation. The location is west of the Gas Building and south of the Gas Condensate knock out vessel. The release was determined to be historical and the exact cause unknown. In 2007, confirmation samples analyzed for GRO, DRO, RRO, PAHs and BTEX contained concentrations below the most conservative applicable Method One and Method Two cleanup levels with the exception of one RRO sample result. This RRO sample concentration of 2,820 mg/kg exceeded the Method One, Arctic Zone petroleum hydrocarbon cleanup level for RRO of 2000 mg/kg which is established in Table A2, 18 AAC 75.

Soil samples collected at this site have been tested for: diesel range organics (DRO); residual range organics (RRO); gasoline range organics (GRO); benzene, toluene, ethylbenzene and xylene (BTEX); and polynuclear aromatic hydrocarbons (PAHs).

**Contaminants of Concern**

- Residual range organics (RRO);

**Cleanup Levels**

The cleanup levels for petroleum hydrocarbon-contaminated soil on manmade gravel pads and roads in the Arctic Zone are established in 18 AAC 75.341 Method One, Table A2; and 18 AAC 75.341 Method Two, Tables B1 and B2.

A number of factors are considered by ADEC when evaluating site specific cleanup levels in the Arctic Zone including:

- human health (ingestion/inhalation);
- ecological impacts (contamination impacting ecological species other than humans);
- groundwater and surface water quality;
- presence of free phase product;
- other factors that might cause a deleterious impact to the environment.

In the Arctic Zone, the migration to surface water pathway is evaluated as the primary migration pathway because the migration to groundwater pathway is not considered applicable due to the presence of continuous permafrost. Impacted surface water can adversely affect both human and ecological receptors, depending on the location of the contaminant source, its proximity to surface waters, and water usage in the impacted area. Therefore the migration to surface water pathway is evaluated as a possible risk to human health (drinking water source) and/or for compliance with Alaska Water Quality standards (18 AAC 70). In addition, the

migration to surface water is evaluated as a possible exposure pathway for ecological receptors because of the tundra wetland ecosystem that exists throughout the Arctic region. Potential future use of the property must also be taken into account when determining closure status. Differentiating between a "Cleanup Complete" and a "Cleanup Complete with Institutional Controls" determination will be based on site specific conditions and exposure pathways as determined by ADEC.

#### **Cleanup and Characterization Activities**

In 2008, the area excavated in 2007 was relocated and expanded horizontally and vertically. Three confirmation samples were collected and analyzed for GRO, DRO, RRO, BTEX, and PAHs. All confirmation sample results were below the most conservative applicable Method One and Method Two cleanup levels established in 18 AAC 75.341.

#### **Pathway Evaluation**

The exposure pathways for human health that were evaluated include the following: ingestion of soil; indoor and outdoor inhalation of vapors, and dermal contact with soil. These pathways may be complete but the remaining contaminant concentrations do not exceed the most conservative Method One (Table A2), and "Migration to Groundwater" Method Two cleanup levels in Tables B1 and B2 established in 18 AAC 75.341.

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 De Minimis Exposure, Exposure Controlled, or Pathway Incomplete.

#### **ADEC Decision**

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Although a Cleanup Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i). However, since this site has met the most conservative soil cleanup levels, this letter will serve as your approval for future off-site movement and disposal of soil associated with this release. 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 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.

If you have questions about this closure decision, please contact the ADEC project manager, Keather McLoone at (907) 269-7526.

Sincerely,

A handwritten signature in cursive script, appearing to read "Linda Nuechterlein".

Linda Nuechterlein  
Environmental Manager

CC: Gary Shultz, ADNR