

# STATE OF ALASKA

SARAH PALIN, GOVERNOR

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

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MAILED CERTIFIED RETURN RECEIPT #7006-0100-0004-5418-7342

February 14, 2008

FILE COPY

Mr. Steve Hartung  
Reeve Aleutian Airways  
4700 West International Airport Road  
Anchorage, AK 99502

Re: Conditional Closure Decision  
Frosty Fuels Inc., / Reeve Aleutian Airways – Port Heiden Airport  
Lot 1A, Block 100, Port Heiden Airport  
ADEC Spill #1997250022701, UST Facility #2547, Event ID #661

Dear Mr. Hartung:

On December 6, 2007, the Alaska Department of Environmental Conservation, Contaminated Sites Program, (ADEC) received the November 2007 Groundwater Monitoring Report, for the above referenced site. This report was prepared and submitted by ChemTrack, LLC, on your behalf. The report covered the September 23, 2007 groundwater sampling event and provided the history of the groundwater sampling data collected by ChemTrack since 2003.

Based upon the completion of this groundwater quality sampling and assessment work, and upon review of our administrative file for this site, ADEC has determined that hazardous substance contamination to the soil and groundwater remains at the site, but that it should not pose an unacceptable risk to human health or the environment. Please note that this determination is subject to site specific conditions which must be complied with in order to validate this conditional closure decision.

This letter summarizes the information considered in making this decision regarding the environmental status of this site.

## **Introduction**

### ADEC site name, and site location:

Frosty Fuels, Inc. – Port Heiden, located at the Port Heiden Airport, Alaska

### Legal Description:

Lot 1, Block 100, Port Heiden Airport.

Regulatory authority:

This project was reviewed under the applicable regulatory authority in 18 AAC 75, Article 3, as amended through October 16, 2005, and 18 AAC 78, Articles 2 and 6, as amended through January 30, 2003.

Responsible Party:

Reeve Aleutian Airways  
4700 West International Airport Road  
Anchorage, AK 99502

Property Owner:

Alaska Department of Transportation and Public Facilities

**Background**

In 1997, two 23,000-gallon underground fuel storage tanks (USTs) were removed from this site by Frosty Fuels Incorporated. The 23,000-gallon tanks reportedly held aviation gasoline. Historically, approximately 13 additional above ground fuel storage tanks and one additional UST have also been staged and used at this site. The above ground tanks held Jet-A-50 fuel, aviation gasoline and potentially, other fuels. The site was used as a commuter airline, airport fueling, and air charter business. No fuel tanks remain on the property at this time, and this business is no longer in operation; however a building (historically used as a warehouse/cargo building) is still present on the property.

Fuel releases associated with these various above and underground fuel tank systems resulted in petroleum contamination of the soil and groundwater at this site. Groundwater at this site is encountered at a depth of approximately 15 feet beneath the ground surface. In 1998, an environmental consultant (Hart Crowser, Inc.) estimated that approximately 9000 cubic yards of soil were contaminated to the south, south-west of the warehouse building. Later, an additional area of soil contamination was identified a short distance (less than 25 feet) to the west of the warehouse building. Approximately 170 cubic yards of contaminated soil was excavated to remove the two USTs. This contaminated soil was stockpiled to the east and west of the warehouse building.

A soil treatment cell was constructed for purposes of treating the stockpiled contaminated soil, and these excavated soils were eventually shown to meet ADEC soil cleanup levels and disposed of onsite.

In 2003, ChemTrack, LLC, initiated a surfactant-enhanced product recovery remediation effort to remove contaminant source in an effort to help ensure that no groundwater contaminant migration would occur and that the remaining fuel contamination would biodegrade to acceptable levels by natural attenuation. No product was recovered, and the treatment system operated for less than two months.

Since 2003, groundwater quality sampling has been conducted 5 separate times. The water sample data indicates that contaminated groundwater remains onsite. The contaminant plume appears to be stable and/or decreasing and is not migrating off site.

A water well search in the area identified two (2) drinking water wells within 1000 feet of this site. However these drinking water wells are installed into a deeper aquifer that does not appear to be hydraulically connected to the contaminated aquifer.

### **Contaminants of Concern**

Contaminants at the site include petroleum hydrocarbon compounds associated with aviation gasoline, jet fuel, and other motor or heating fuel products:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX)
- Gasoline range organics (GRO)
- Diesel range organics (DRO)

### **Soil Contamination**

Soil contamination at this site remains in the upper two feet of the soil profile and could exceed ADEC ingestion, dermal contact, or inhalation soil cleanup levels for residential exposures. Soil contamination from two to fifteen feet below the ground surface may also exceed ADEC ingestion, dermal contact, and inhalation soil cleanup levels for residential exposures. Residual soil contamination remains in the area of the former UST and above ground storage tank systems from near the ground surface to the groundwater, approximately 10 to 15 feet beneath the ground surface.

### **Groundwater Contamination**

Groundwater was encountered 10 to 15 feet below the ground surface, and has been monitored from 2003 to 2007. This monitoring data detected benzene, GRO, and DRO above ADEC cleanup levels. However, the data also indicates that contaminant concentrations are stable or decreasing, and that contamination is not migrating offsite.

### **Exposure Pathways Identified**

The following exposure and/or migration pathways were considered in this decision document.

The exposure pathways for human health that were evaluated include: indoor and outdoor inhalation; ingestion of soil; dermal contact with soil; and ingestion of groundwater or surface water.

Residual soil contamination remains in the area of the former underground and above ground storage tank systems. The human exposure pathways of ingestion, dermal contact, and outdoor inhalation could be complete if this soil is excavated or otherwise exposed. To minimize human health risk and ensure worker safety, any soil excavation activities on site will require prior notification to ADEC and may require the oversight of a qualified third-party environmental consultant.

The groundwater ingestion pathway could be complete at this site, but is not expected to pose an unacceptable risk to human health provided any water wells are installed into a deeper aquifer. Furthermore, a condition of this decision document will require ADEC notification prior to any proposed installation of groundwater wells.

The contaminant migration pathways that were evaluated include: migration to groundwater; migration to surface water; and migration to indoor air.

The migration to groundwater pathway is considered complete because BTEX, GRO, and DRO contamination is present in groundwater.

The indoor air and surface water exposure pathways were evaluated but not considered at risk, provided the conditions of this decision document are complied with. Vapor intrusion into the existing building is not an issue due to the separation distance from the building to the GRO contaminated soil and groundwater. DRO contaminated soil is located closer to the building, but is not considered a risk because of the low vapor pressure of weathered DRO. In order to minimize future risks associated with vapor intrusion, this decision document will stipulate that the construction of future buildings within the area of known residual GRO contamination consider design and construction features to prevent subsurface vapor infiltration. This may include the ability to depressurize the subsurface building envelope.

The surface water migration pathway is not an issue since surface water is not present.

### **Cleanup Levels**

The soil cleanup levels established for this site are the 18 AAC 75.341, Tables B1 and B2, 'migration to groundwater' pathway (under 40 inch zone). The 'migration to groundwater' pathway is the most stringent soil cleanup level and will allow unrestricted closure if the levels are achieved.

The groundwater cleanup levels established for the site are the 18 AAC 75.345 Table C levels.

### **ADEC Decision**

Based on the information provided to date, ADEC has determined residual soil and groundwater contamination remain at this site; however with appropriate controls and restrictions, it should not pose an unacceptable risk to human health or the environment. Therefore, no further remedial action is required at this time and this site is approved for conditional closure, subject to the following conditions:

1. The construction of future buildings within the area of known residual GRO contamination shall consider design features to prevent contaminant vapor intrusion.
2. The installation of groundwater wells is prohibited on this property without the prior approval of ADEC.
3. In accordance with 18 AAC 78.274(b), contaminated soil or groundwater may not be moved or disposed without ADEC's prior written approval. The excavation of soil on this property in the vicinity of the former USTs and above ground tank systems may expose contaminated soil or water requiring proper safety, management, and disposal practices. Any person(s) excavating soil or moving soil or water from the vicinity of the former UST systems shall notify the Alaska Department of Transportation and Public Facilities, and ADEC. The services of an impartial qualified person, as required in 18 AAC 78, may be required in order to properly monitor, assess, manage, treat, and dispose of any contaminated media.
4. The groundwater monitoring wells at this site shall be preserved and sampled and reported to ADEC once every two years, in accordance with an ADEC approved work plan, until the groundwater meets the ADEC groundwater cleanup level for a minimum

of two consecutive samplings (over a period spanning two or more years). Should wells be damaged or destroyed, Reeve Aleutian Airways is responsible for the repair or replacement of the well as approved by ADEC.

Reeve Aleutian Airways remains liable for the residual petroleum contamination identified at this site. These conditions remain in effect until a written determination from ADEC is issued stating that soil and groundwater at the site have been shown to meet the applicable soil and groundwater cleanup levels. Failure to comply with these conditions may nullify this decision, and may result in an ADEC requirement to perform additional site assessment and/or cleanup action.

In accordance with 18 AAC 78.276(f)(2), ADEC may require additional assessment and/or cleanup action if future information leads to a revised determination that this site poses an unacceptable risk to human health or the environment.

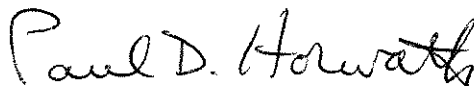
Site closure (without conditions) can be achieved when soil and groundwater sampling confirms that soil and groundwater meets the applicable ADEC soil and groundwater cleanup levels.

#### **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 or concerns about this decision, or any of the attached conditions, please contact me at (907) 262-5210, extension #250.

Sincerely,



Paul D. Horwath, P.E.  
Environmental Engineer

Cc: Charles B. Ronan, ChemTrack, Incorporated, Anchorage  
James Thorsness, ADOT&PF, Anchorage