

STATE OF ALASKA

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

SEAN PARNELL, GOVERNOR

610 University Avenue
Fairbanks, AK 99709-3643
PHONE: (907) 451-2117
FAX: (907) 451-5105
www.dec.state.ak.us

File: 100.38.231

December 14, 2011

Bud Marschner
Fairbanks North Star Borough
809 Pioneer Road
P. O. Box 71267
Fairbanks, Alaska 99707

Re: Decision Document; Steese Volunteer Fire Station #1
Cleanup Complete Determination

Dear Mr. Marschner:

The Alaska Department of Environmental Conservation (DEC), Contaminated Sites Program has completed a review of the environmental records associated with the Steese Volunteer Fire Station #1 located at 500 Farmers Loop Rd, Fairbanks, Alaska. Based on the information provided to date, DEC 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 Steese Volunteer Fire Station #1, which is located in the offices of the Alaska Department of Environmental Conservation in Fairbanks, 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:

FNSB - Steese Volunteer Fire Station #1
500 Farmers Loop Road
Fairbanks, Alaska 99712
Tax Lot 2325, Section 23, Township 1 North, Range 1 West, Fairbanks Meridian

Name and Mailing Address of Contact Party:

Bud Marschner
Fairbanks North Star Borough
809 Pioneer Road
P. O. Box 71267
Fairbanks, Alaska 99707

Database Record Key and File Number:

File: 100.38.231

Hazard ID: 25541

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

This site formerly housed a volunteer fire station on a 1.79-acre property. The fire station was demolished in 2010 and no buildings remain on site. During the building demolition, a buried 1,000-gallon heating oil tank was removed and associated soil was placed into a stockpile. Soil samples collected at this site have been tested for: diesel range organics (DRO); residual range organics (RRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX).

Characterization and Cleanup Activities

During the heating oil tank removal in 2010, approximately 38 cubic yards of soil were excavated and stockpiled. One sidewall sample, two bottom samples, and a field duplicate were obtained from the excavation. Groundwater was not encountered. Excavation was to approximately 10 feet below ground surface (bgs).

Confirmation soil samples taken in the excavation did not exceed DEC 18 AAC 75.341 cleanup levels for RRO and BTEX, but a bottom excavation sample and its duplicate were slightly above DEC migration to groundwater cleanup levels for DRO (up to 380 milligrams per kilogram (mg/kg)). As a result, an additional 18 inches of soil were removed from the bottom of the excavation later in 2010 and 2 cubic yards of soil were added to the stockpile. A lab sample collected at the new bottom of the excavation contained DRO, RRO, and BTEX concentrations below DEC cleanup levels.

The stockpiled soil was considered to be contaminated with DRO and was removed to the local treatment facility (OIT) and thermally remediated.

Contaminants of Concern

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

- Diesel Range Organics (DRO)

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2, Migration to Groundwater.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
DRO	250

Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC'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 Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-minimis exposure	There has been no evidence of surface soil contamination, and all excavated soil has been removed off-site and thermally remediated.
Sub-Surface Soil Contact	De-minimis exposure	Contamination remaining beneath the excavation is non-detect, or well below direct contact and ingestion levels.
Inhalation - Outdoor Air	De-minimis exposure	Contamination remaining beneath the excavation is non-detect, or well below outdoor inhalation levels.
Inhalation - Indoor Air (vapor intrusion)	Pathway Incomplete	BTEX were non-detect and DRO and RRO are below migration to groundwater cleanup levels and do not need to be evaluated under the vapor intrusion pathway.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during the investigations. Excavation was to 10 feet below ground surface. Remaining contamination is below migration to groundwater cleanup levels.
Surface Water Ingestion	Pathway Incomplete	There is no surface water located within ¼ mile of the site.
Wild Foods Ingestion	Pathway Incomplete	The soil stockpile has been transported off-site and thermally treated. Ecological receptors are not likely to contact contamination.
Exposure to Ecological Receptors	Pathway Incomplete	The soil stockpile has been transported off-site and thermally treated. Ecological receptors are not likely to contact contamination.

Notes to Table 1:

De-minimis exposure means that in DEC's judgment receptors are unlikely to be affected by the minimal volume of remaining contamination.

Pathway incomplete means that in DEC'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

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, DEC 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, DEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(i).

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 DEC 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.

Cost Recovery

Please note that Alaska Statutes 46.04.010 and 46.08.070 require that recovery be sought for certain costs, including oversight activities, incurred by the State in responding to pollution incidents. If you are determined to be a responsible party, the State will bill you at a later date for State expenditures associated with the pollution incident. Billable State expenditures include the direct cost of State staff time and indirect State overhead costs, as well as contractual and material costs. Billable State staff time includes all time spent on activities related to the incident, including site visits, response and report reviews, telephone conversations, meetings, legal services and interest.


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 DEC project manager, Janice Wieggers at (907) 451-2127.

Approved By,


For Rich Sundet
Environmental Manager

Recommended By,


Janice Wieggers
Environmental Program Specialist

cc: Ron Reitano, Moonlighting Construction/Fairbanks
Peter Beardsley, Nortech/Fairbanks