STATE OF ALASKA
DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

610 University Ave
Fairbanks, AK 99709
PHONE: (907) 451-2127
FAX: (907) 451-5105
www.dec.state.ak.us

File: 102.38.162

August 25, 2011

Jim Little
Greater Fairbanks Memorial Community Hospital Foundation
PO Box 71396
Fairbanks, Alaska 99707

Re: Decision Document; Residence – 1235 19th Avenue
Cleanup Complete Determination

Dear Mr. Little:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with Residence – 1235 19th Avenue located at 1235 19th Avenue, Fairbanks, AK. 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 Residence – 1235 19th Avenue, which is located in the offices of the Alaska Department of Environmental Conservation (ADEC) 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:
Residence – 1235 19th Avenue
1235 19th Ave
Fairbanks, Alaska 99701

Name and Mailing Address of Contact Party:
Jim Little
Greater Fairbanks Memorial Community Hospital Foundation

PO Box 71396
Fairbanks, Alaska 99707

Database Record Key and File Number:
File: 102.38.162
Hazard ID: 25567

Regulatory authority under which the site is being cleaned up:
18 AAC 75

**Background**
Petroleum impacted soil was encountered during the removal of a 300-gallon underground heating oil tank. Soil and groundwater samples collected at this site have been tested for: gasoline range organics (GRO); diesel range organics (DRO); and benzene, toluene, ethylbenzene and xylene (BTEX).

**Characterization and Cleanup Activities**
The triplex located at 1235 19th Ave was demolished and an underground 300-gallon heating oil tank was removed in August 2010. DRO-contaminated soil was discovered and 20 cubic yards of contaminated soil were excavated and thermally treated at OIT. Groundwater was encountered at the limits of excavation (14 feet below ground surface). Both soil and groundwater analytical samples were collected and tested for GRO, DRO, and BTEX. Soil was contaminated with DRO up to 6,590 mg/kg, and groundwater was found to be contaminated with GRO up to 11.1 mg/L and DRO up to 2,890 mg/L. However, the groundwater samples were not considered to be representative of groundwater quality at the site due to the method of collection.

In October 2010, two soil borings were advanced for the installation of groundwater monitoring wells. One boring was drilled in the location of the former heating oil tank (MW-1), and the other was drilled 100 feet northwest of the first boring to delineate down-gradient contaminant migration (MW-2). Soil and groundwater analytical samples were taken and none of the samples showed GRO, DRO, or BTEX to be above the laboratory limits of quantification (LOQ), which were below applicable cleanup levels.

Groundwater was sampled again in May 2011 and all contaminants were found to be below their LOQs except for DRO in MW-1, which was found up to 1.06 mg/L, below the groundwater cleanup level.

**Contaminants of Concern**
During the investigations at this site, soil samples were analyzed for gasoline range organics (GRO); diesel range organics (DRO); and benzene, toluene,

ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminant of Concern was identified:

- Diesel Range Organics (DRO)

**Cleanup Levels**

The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels.

| Contaminant | Site Cleanup Level (mg/L) |
|---|---|
| DRO | 1.5 |

**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 Pathway Evaluation**

| Pathway | Result | Explanation |
|---|---|---|
| Surface Soil Contact | De-minimis exposure | Potentially contaminated surface soil has been removed and thermally treated off-site. The excavation has been backfilled with clean material. |
| Sub-Surface Soil Contact | De-minimis exposure | Residual contamination may remain in the subsurface, but sampling shows it is below migration to groundwater cleanup levels. |
| Inhalation – Outdoor Air | De-minimis exposure | Residual contamination may remain in the subsurface, but sampling shows it is below migration to groundwater cleanup levels. |
| Inhalation – Indoor Air (vapor intrusion) | De minimis exposure | There are currently no buildings at the site and any remaining contamination is below vapor intrusion screening levels. |
| Groundwater Ingestion | De-minimis exposure | Groundwater is contaminated with DRO below migration to groundwater cleanup levels. Most of the area is on city drinking water. |

| | | |
|---|---|---|
| Surface Water Ingestion | Pathway Incomplete | There is no surface water located within ¼ mile of the site. |
| Wild Foods Ingestion | Pathway Incomplete | The site is in a residential/commercial area and is not likely to be used for wild foods harvesting. |
| Exposure to Ecological Receptors | Pathway Incomplete | Any remaining contamination is below applicable cleanup levels. The site is in a residential/commercial area with little impact to ecological receptors. |

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**
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) . 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, Jim Fish at (907) 451-2117.

Approved By,

Janice Wiegers
Environmental Manager

Recommended By

Jim Fish
Environmental Program Specialist

cc: David McDowell, Shannon and Wilson (via e-mail)