STATE OF ALASKA

SEAN PARNELL, GOVERNOR

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

555 Cordova Street
Anchorage, AK 99501
PHONE: (907) 269-8685
FAX (907) 269-7649

File No: 2100.38.522
Return Receipt Requested
Article No: 7010 2780 0000 2178 4858

August 10, 2011

Micaela Jones
Regional Director of Real Estate & Development Legacy LLC
3760 Piper Street
Anchorage, AK 99508

Re: Decision Document: Residence - 4010 Piper Street
Cleanup Complete Determination

Dear Ms. Jones:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has completed a review of the environmental records associated with the Residence - 4010 Piper Street. Based on the information provided to date and the administrative record, 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 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 - 4010 Piper Street
4010 Piper Street
Anchorage, AK 99508

Name and Mailing Address of Contact Party:
Micaela Jones, Regional Director of Real Estate & Development
Legacy LLC
3760 Piper Street
Anchorage, AK 99508

ADEC Site Identifiers:
File #: 2100.38.522
Hazard ID: 25612

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

Background
Tetrachloroethylene (PCE) impacted soil was encountered at the property during a limited Phase II site assessment in 2010. This 2.5 acre property is located in a mixed residential/ commercial area. It has historically been used for residential purposes. Currently, the property is serviced by two drinking water wells. Improvements to the property include a home office, shed, connex, garage, and a Quonset hut.

Contaminants of Concern
During the investigations at this site, soil and groundwater samples were analyzed for the following: diesel range organics (DRO); gasoline range organics (GRO); residual range organics (RRO); metals; and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminant of Concern was identified in soil:

- Tetrachloroethylene (PCE)

Cleanup Levels
The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2, under 40 inch Zone, *Migration to Groundwater (MGW).*

Contaminant	MGW Cleanup Level (mg/kg)
Tetrachloroethylene (PCE)	0.024

Site Characterization
Three soil borings were advanced 10 feet below ground surface (bgs) during the Phase II investigation in 2010. One soil sample was collected from each of the three borings from the groundwater interface at 8.5 feet bgs or at the interval with the highest PID field screening results. Only one soil sample, collected at 7.5 to 10 feet bgs from boring B2, contained detectable levels of contaminants with PCE at 0.055 mg/kg.

In 2011 five soil borings were advanced 13 to 20 ft. bgs to evaluate the extent of PCE contamination associated with boring B2. Two of the borings were completed as monitoring wells and sampled. Groundwater was encountered at 6 feet bgs and did not contain contaminants above ADEC Table C cleanup levels. Soil samples collected from the groundwater interface and the interval with the highest PID field screening result did not contain detectable levels of contaminants. Additionally, two groundwater samples collected from the two onsite drinking water wells did not contain detectable levels of contaminants.

Pathway Evaluation
Following investigation and cleanup at the site, exposure to the remaining contaminants were 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 Tracking Model Results

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contaminated soil was not located at the surface and it is assumed all potential source areas are located in the subsurface.
Sub-Surface Soil Contact	De Minimis Exposure	Confirmation sub-surface soil samples were below direct contact cleanup levels and de minimis in volume. Therefore risk via this pathway is insignificant.
Inhalation – Outdoor Air	De Minimis Exposure	The remaining soil contaminant concentrations are below inhalation cleanup levels; de minimis in volume with clean soil above the impacted area which would mitigate exposure via this pathway. Therefore risk via this pathway is considered insignificant.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	The remaining soil contaminant concentrations are below inhalation cleanup levels and de minimis in volume with clean soil above the impacted area which would mitigate exposure via this pathway. Therefore risk via this pathway is insignificant.
Groundwater Ingestion	De Minimis Exposure	Groundwater samples from monitoring wells did not contain contaminants above ADEC cleanup levels, and contaminants were not detected in samples collected from the two drinking water wells on site. Therefore risk via this pathway is insignificant.
Surface Water Ingestion	Pathway Incomplete	Surface water is not utilized as a drinking water source in this area
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals. This area is not used for harvesting wild foods.
Exposure to Ecological Receptors	Pathway Incomplete	There are no complete exposure pathways to ecological receptors at this site.

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

Further investigation at the site indicated PCE was not present is groundwater and was detected in soil at de minimis amounts. Based on the information available, ADEC has determined no further assessment and/or cleanup action is required. There is no

unacceptable 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, Grant Lidren at (907) 269-8685.

Approved By,

Linda Nuechterlein
Environmental Manager

Recommended By,

Grant Lidren
Environmental Specialist

CC: Lindsey Lloyd, Project Manager Legacy LLC