STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE
CONTAMINATED SITES PROGRAM

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File: 2113.26.001

March 15, 2010

Susan Schrader
Alaska Railroad Corporation
P.O. Box 107500
Anchorage, Alaska 99510-7500

Re: Decision Document – ARRC Portage
Corrective Action Complete Determination

Dear Ms. Schrader:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has completed a review of the environmental records associated with Alaska Railroad Corporation (ARRC) Portage. 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 the ARRC Portage, which is located in the offices of the Alaska Department of Environmental Conservation 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 this Corrective Action Complete Determination.

Introduction

Site Name and Location:
ARRC Portage
Intersection of Seward Hwy & Portage Glacier Road
Girdwood, AK 99587

Name and Mailing Address of Contact Party:
Susan Schrader
Alaska Railroad Corporation
P.O. Box 107500
Anchorage, Alaska 99510-7500

ADEC Site Identifiers
ADEC Reckey: 1990210029603
File#: 2113.26.001
Hazard ID: 23041

Regulatory authority under which the site is being cleaned up:
18 AAC 75 and 18 AAC 78

Background
In 1990, visually contaminated soil was encountered during the removal of a regulated 500 gallon gasoline underground storage tank (UST). The former UST, located south of the former section house, was used for vehicle fueling activities. Currently the site, which is located northeast of the Seward Highway and Portage Glacier Road next to the railroad tracks, is vacant with the exception of an electrical box and a concrete pad.

Contaminants of Concern
During the investigations at this site, soil samples were analyzed for the following: total volatile petroleum hydrocarbons (TVPH) which is roughly equivalent to gasoline range organics (GRO); and benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminant of Concern was identified:

- Gasoline Range Organics
- Benzene
- Ethylbenzene
- Toluene
- Xylenes

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*.

Contaminant	Site Cleanup Level (mg/kg)
Gasoline Range Organics	300
Benzene	0.025
Ethylbenzene	6.9
Toluene	6.5
Xylenes	63

Site Characterization and Cleanup Actions
In 1990, 30 cubic yards of contaminated soil were removed during the excavation of the 500 gallon UST and thermally remediated. The excavation was limited due to the proximity of railroad tracks to the west, a 500 gallon above ground storage tank to the north, and wetlands to the east. Five soil samples collected to a depth of 7 feet below ground surface (bgs) from the bottom and sidewalls of excavation, with the exception of the eastern sidewall, contained total

volatile petroleum hydrocarbons (TVPH) up to 1,390 mg/kg, benzene up to 0.152 mg/kg, ethylbenzene up to 15.7 mg/kg, toluene up to 8.19 mg/kg, and total xylenes up to 247.6 mg/kg. After sampling, a PVC gallery was installed and the soil was than backfilled with fertilizer and microbes to promote natural attenuation.

In 2010, seven soil samples collected from three borings were analyzed for BTEX and GRO, with two of the seven samples containing benzene above cleanup levels. One soil sample collected 10 to 12 ft. bgs, just south of the former UST, contained 0.0349 mg/kg benzene. Another soil sample collected 5 to 7 ft. bgs, just north of the former UST, contained 0.0366 mg/kg benzene. Soil samples collected from the boring located adjacent to the wetlands east of the former UST did not contain detectable concentrations of contaminants. Four groundwater samples collected from three temporary monitoring wells adjacent to the three soil borings did not contain detectable concentrations of contaminants. Groundwater was encountered at 12.5 feet bgs.

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	The removal action served to remove contaminated surface soil.
Sub-Surface Soil Contact	De Minimis Exposure	The removal action served to remove the majority of contaminated soil, and any remaining contaminant concentrations in the subsurface are below direct contact cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	The remaining soil contaminant concentrations are below inhalation cleanup levels, therefore this pathway is considered incomplete.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	There are no buildings at the site; any remaining contamination is well below inhalation cleanup levels and covered by fill material.
Groundwater Ingestion	Pathway Incomplete	Groundwater samples collected from a temporary well did not contain detectable concentrations of contaminants
Surface Water Ingestion	Pathway Incomplete	Nearby surface water is brackish, tidally-influenced marsh and is not suitable for drinking water.
Wild Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.

Exposure to Ecological Receptors	Pathway Incomplete	There are no complete exposure pathways to ecological receptors at this site. This site is on a gravel pad with no evidence of offsite migration.

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 petroleum contaminated soil from the site. Based on the information available, ADEC has determined no further assessment 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 Corrective Action Complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 78.600(h) and 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 closure determination is in accordance with 18 AAC 78.276(f) 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 decision document, please contact the ADEC Project Manager, Grant Lidren at (907) 269-8685.

Approved By,

for

Linda Nuechterlein
Environmental Manager

Recommended By,

Grant Lidren
Environmental Specialist