STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

SEAN PARNELL, GOVERNOR

555 Cordova Street Anchorage, AK 99501 PHONE (907) 269-8685 FAX (907) 269-7649 www.dec.state.ak.us

File No: 150.38.042 Return Receipt Requested Article No: 7009 2820 0001 7169 6705

January 7, 2011

Russell Grandel Alaska Railroad Corporation (ARRC) P.O. Box 107500 Anchorage, Alaska 99510-7500

Re: Decision Document; ARRC Broad Pass Railroad Station

Cleanup Complete-Institutional Controls

Dear Mr. Grandel:

The Alaska Department of Environmental Conservation (ADEC), Contaminated Sites Program, has completed a review of the environmental records associated with the ARRC Broad Pass Railroad Station. 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 no further remedial action will be required as long as the site is in compliance with established institutional controls.

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 with Institutional Controls Determination.

Introduction

Site Name and Location:
ARRC - Broad Pass Railroad Station
ARRC Milepost 304.5
Broad Pass, Alaska 99729

Name and Mailing Address of Contact Party: Russell Grandel Alaska Railroad Corporation (ARRC) P.O. Box 107500 Anchorage, Alaska 99510-7500

ADEC Site Identifiers:

File: # 150.38.042 Hazard ID: 25593

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

Background

A previously unknown 500-gallon underground heating oil (HOT) storage tank was discovered in 2009 during a surface water sampling effort conducted at an adjacent leaking underground storage tank (LUST) site (ARRC Broad Pass Railroad Station, ADEC File # 150.26.036). The top of the HOT was visible at the surface of the gravel pad and was found to be filled with water. The gravel pad was constructed on the native surface and was historically used as a section house with associated facilities. Currently the site is vacant with the exception of two storage sheds.

Contaminants of Concern

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

Benzene

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B1, Soil Cleanup Levels, and Migration to Groundwater (MTG) *Under 40 Inch Zone*.

Contaminant	MTG Site Cleanup Level (mg/kg)
Benzene	0.025

Site Characterization

In 2010, the HOT was purged of water and excavated from the site. Three soil samples collected 6 inches below the former HOT, at 3.75 feet below ground surface (bgs), contained benzene up to 0.387 mg/kg. The excavation was then backfilled with stockpiled soil and clean fill.

In 2007, soil samples were collected from four test pits excavated on the adjacent LUST site which is located downgradient of subject HOT site. These sample results associated with the LUST site did not contain benzene, which indicates the benzene associated with the HOT is limited in extent and not migrating. Additionally, the drainage ditch at the base of the gravel pad was evaluated for the potential migration of contaminants from the pad in 2009. The drainage ditch

water sample collected at the outfall of the culvert did not contain detectable concentrations of any contaminants of concern.

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	Pathway Incomplete	The excavation was brought back to grade with clean fill, therefore the surface soil pathway is incomplete.
Sub-Surface Soil Contact	De- minimis exposure	Benzene contamination remains in the subsurface, but is below direct contact cleanup levels.
Inhalation – Outdoor Air	De- minimis exposure	Contamination remains in the subsurface, but is below inhalation cleanup levels. Clean fill overlying the remaining contamination will mitigate exposure via this pathway.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	The only buildings on site are storage sheds located 50 feet cross gradient and remaining contamination is below inhalation cleanup levels. Clean fill overlying the remaining contamination will mitigate future exposure via this pathway.
Groundwater Ingestion	De- minimis exposure	Contamination remains in the subsurface soil above migration to groundwater cleanup levels at 3.75 feet bgs. The HOT has been removed and remaining contamination is considered de minimis. Furthermore this site has been cleared of all structures, is located on the rail belt with no permanent residents, and groundwater is not a current source of drinking water.
Surface Water Ingestion	Pathway Incomplete	A surface water sample collected in 2009 during a drainage ditch sampling effort for the ARRC - Broad Pass Railroad Station (File:# 150.26.036) did not contain detectable levels of contaminants.

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 the 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

There is contamination remaining above the most stringent cleanup levels at the ARRC Broad Pass Railroad Station, but ADEC has determined there is no unacceptable risk to human health or the environment. Therefore this site will be granted a Cleanup Complete- Institutional Controls Determination subject to the following:

- 1. Any future change in land use may impact the exposure assumptions cited in this document. If land use and/or ownership changes, current institutional controls may not be protective and ADEC may require additional remediation and/or institutional controls. Therefore, ARRC will report to ADEC every five years to document land use, or as soon as ARRC becomes aware of any change in land ownership and/or use. The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov
- 2. A Notice of Residual Contamination will be recorded on the ADEC database to document that there is contamination remaining on site above the most stringent ADEC cleanup levels.
- 3. Any proposal to transport soil or groundwater off site requires ADEC approval in accordance with 18 AAC 75.325(i). A "site" [as defined by 18 AAC 75.990 (115)] means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. (see Attachment B).
- 4. Movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.
- 5. Installation of groundwater or drinking water wells at this site will require approval from ADEC.

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 Program Specialist

Attachment A:

Cleanup Complete-ICs Agreement and Signature Page

Attachment B:

Site Figure

Attachment A: Cleanup Complete-ICs Agreement and Signature Page*

ARRC agrees to the terms of this Cleanup Complete determination as stated in this Closure Decision Document dated <u>January 7, 2011</u> for the ARRC Broad Pass Railroad Station. Failure to comply with the terms of this agreement may result in ADEC reopening this site and requiring further remedial action in accordance with 18 AAC 75.380(d).

Russell Grandel E	Environmental Engine	ev
Signature of Russell Grandel or Authorized Represer	ntative, Title	
ARRC RUSSell Evandel 1/2	26/11	
Printed Name of Russell Grandel or Authorized Repu	resentative, Title	
ARRC		

Note to Responsible Person (RP):

After making a copy for your records, please return a signed copy of this form to the ADEC project manager at the address on this correspondence within 30 days of receipt of this letter.

ADEC File:#

150.38.042

Hazard ID:

25593

ADEC Project Manager:

Grant Lidren

For Internal Use Only

- *Attention ADEC Administration Staff: Please follow the procedure below after Attachment A is signed/returned to ADEC.
 - 1. Log-in and Date Stamp Attachment A
 - 2. Scan and Save to the appropriate electronic folder on the network Drive
 - 3. File the hard copy in the appropriate project/site file Correspondence Folder (blue in Anchorage).
 - 4. Provide the Correspondence folder (with the filed *Attachment A* hard copy) to the ADEC Project Manager so that the PM can update the CS database.

Attachment B: Site Figure

