

STATE OF ALASKA

SARAH PALIN, GOVERNOR

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

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File: 2100.26.130
Certified Return Receipt
7002 2410 0005 3103 7401

December 10, 2008

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

Re: Record of Decision- Blackard Property
Corrective Action Complete Determination- Institutional Controls

Dear Ms. Schrader

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed review of the environmental records associated with the Blackard Property located at 1749 Ship Avenue in Anchorage. Based on the information provided to date, it has been 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 decision is based on the administrative record for Blackard Property, which is located in the offices of the Alaska Department of Environmental Conservation (ADEC) 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 the Corrective Action Complete Determination.

Introduction

Site Name and Location:

Blackard Property (aka Mat-Su Incorporated)
1749 Ship Ave
Anchorage, Alaska 99501

Name and Mailing Address of Contact Party:

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

SCANNED

Database Record Key and File Number:

ADEC Reckey No. 1990210018402

File: # 2100.26.130

Hazard ID: 24047

Regulatory authority under which the site is being cleaned up:

18 AAC 78 and 18 AAC 75

Background

This site has been impacted by leaks and spills from a 500-gallon waste oil underground storage tank (UST) and two 1,000-gallon diesel USTs. The tanks were removed from separate excavations at the site in July 1990. During the various investigations at the site, soil and groundwater were analyzed for the following: diesel range organics (DRO), gasoline range organics (GRO), residual range organics (RRO), volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX), polychlorinated biphenyls (PCBs), and the metals arsenic, cadmium, chromium, and lead.

Contaminants of Concern

- Diesel Range Organics (DRO)
- Residual Range Organics (RRO)
- Benzene

Cleanup Levels

The 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.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
Diesel Range Organics	250
Residual Range Organics	11,000
Benzene	0.025

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

<u>Contaminant</u>	<u>Site Cleanup Level (mg/L)</u>
Diesel Range Organics	1.5
Residual Range Organics	1.1
Benzene	0.005

Site Characterization and Cleanup Actions

Following the removal of the USTs in 1990, a Phase II investigation was conducted in 1992 that included installation of 6 soil borings and 3 monitoring wells. Diesel range organics (DRO) were detected in soil samples from each of the soil borings up to 8,400 mg/kg and a groundwater sample collected from monitoring well MW-3 contained total petroleum hydrocarbons at 3.7 mg/l.

In 1998, approximately 80 cubic yards of petroleum impacted soil were excavated from the area of the former tanks. Confirmation samples collected from the limits of the excavation at the former diesel USTs contained DRO up to 608 mg/kg. Confirmation samples collected from the limits of the excavation at the former waste oil tank contained DRO up to 8,720 mg/kg, residual range organics (RRO) up to 10,100 mg/kg, and benzene up to 0.22 mg/kg.

A release investigation was conducted in 2005, eight soil borings were advanced and two direct-push monitoring wells were installed. The objective of the soil borings was to delineate the extent of contamination near the former tanks. Soil samples indicated soil was not impacted a significant distance from the tanks and was largely confined to the interval above the smear zone. Groundwater sampling found hydrocarbon impacts in MW-1 located just downgradient from the former waste oil UST. The other three wells did not contain detectable concentrations of hydrocarbons. Trichloroethene (TCE) and cis-1,2-dichloroethene were detected in each of the wells, however there is sufficient documentation to indicate these impacts are from an upgradient offsite source area and are not associated with the former USTs at this property.

A Phase II investigation was conducted in 2007 during which groundwater monitoring wells were installed upgradient and downgradient of the property. This investigation used data collected during an Alaska Railroad Corporation (ARRC) Remedial Investigation (RI) to evaluate potential offsite transport, as well as onsite transport of solvent contaminated groundwater from upgradient areas. Groundwater samples found TCE contamination upgradient of the site, as well as in the onsite monitoring wells, but there was no indication of impacts to Ship Creek. Onsite wells MW-1 and MW-2 did not contain detectable concentrations of hydrocarbons.

A second excavation was conducted at the former waste oil tank in 2007. Approximately 170 cubic yards of petroleum impacted material was excavated and thermally treated at Alaska Soil Recycling. Confirmation soil samples collected from the bottom and sidewalls of the excavation contained DRO up to 10,800 mg/kg, RRO up to 11,700 mg/kg and benzene up to 0.190 mg/kg. Groundwater samples collected from the onsite monitoring wells did not contain detectable concentrations of hydrocarbons.

Because hydrocarbon impacts remained in the area of the former waste oil tank, in-situ soil treatment was conducted in 2008 using RegenoxTM, a proprietary chemical oxidation material. The material was injected in slurry form under pressure at 33 locations across a 1,700 square foot area. Pre- and post-treatment soil samples were collected to document the effectiveness of the treatment and indicated DRO concentrations were reduced in several areas, while other areas did not see as significant a reduction in DRO concentrations. Post treatment samples contained DRO up to 4,380 mg/kg and RRO up to 8,000 mg/kg.

This area is within a TCE plume identified as GW 1 in the ARRC RI. It is anticipated that further activities will be conducted by ARRC in the future to address groundwater contamination in this area.

Pathway Evaluation

The exposure pathways for human health that were evaluated include the following: ingestion of soil and groundwater, indoor and outdoor inhalation of vapors, and dermal contact with soil. The inhalation and ingestion exposure risk is acceptable as the remaining contaminant concentrations are below inhalation and ingestion cleanup levels and groundwater at the site is not used as a drinking water source. The nearest potable water well is located approximately 2,000 feet downgradient on the other side of Ship Creek and a sample collected from this well in 2006 did not indicate the presence of contaminants. The dermal contact pathway is considered incomplete as the majority of the contamination remaining at the site is below the surface and is not available to receptors.

The exposure pathway analysis above was supported by the most recent ADEC Exposure Tracking Model (ETM) ranking. The ETM results showed all pathways to be Incomplete, De Minimis Exposure, or Exposure Controlled

ADEC Decision

The ADEC has determined there is no unacceptable risk to human health or the environment, and this site will be granted a Corrective Action Complete 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 ICs may not be protective and ADEC may require additional remediation and/or ICs. Therefore the ARRC shall report to ADEC every five years to document land use, or report as soon as ARRC becomes aware of any change in land ownership and/or use, if earlier. **The report can be sent to the local ADEC office or electronically to DEC.ICUnit@alaska.gov.**
2. Installation of groundwater wells will require approval from ADEC in accordance with 18 AAC 75.375.
3. The monitoring wells installed at the property and the surrounding area may be utilized for area-wide groundwater monitoring as part of the ARRC Feasibility Study that resulted from the RI. However, any monitoring wells that are not needed for area-wide monitoring must be decommissioned in accordance with ADEC guidance as soon as it is determined they are no longer needed.
4. Any proposal to transport soil or groundwater off site requires ADEC approval in accordance with 18 AAC 78.600(h). 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 attached site figure.)
5. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

The ADEC Contaminated Sites Database will be updated to reflect the change in site status as detailed above and a description of the contamination remaining at the site will be provided. When the site meets the requirements for a Cleanup Complete determination, then the Institutional Controls will be terminated.

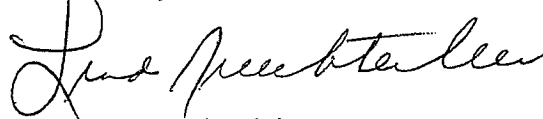
This determination is in accordance with 18 AAC 78.276 (f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

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.

Please sign and return *Attachment A* to ADEC within 30 days of receipt of this letter. If you have questions about this closure decision, please contact the ADEC project manager, Bill O'Connell at 269-3057.

Sincerely,



Linda Nuechterlein
Environmental Manager

Attachment A: Cleanup Complete-ICs Agreement Signature Page
Attachment B: Site Figures 1-3

ADEC File No.

Attachment A: Cleanup Complete-ICs Agreement and Signature Page

The Alaska Railroad Corporation agrees to the terms of this Cleanup Complete-ICs determination as stated in this Record of Decision (ROD) document dated December 9, 2008 for the Blackard Property, Hazard ID 24047. 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)(2).

Jim Kubitz U.P. Real Estate

Signature of Authorized Representative
Alaska Railroad Corporation

Jim Kubitz U.P. Real Estate

Printed Name of Authorized Representative
Alaska Railroad Corporation

Note to Responsible Person:

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

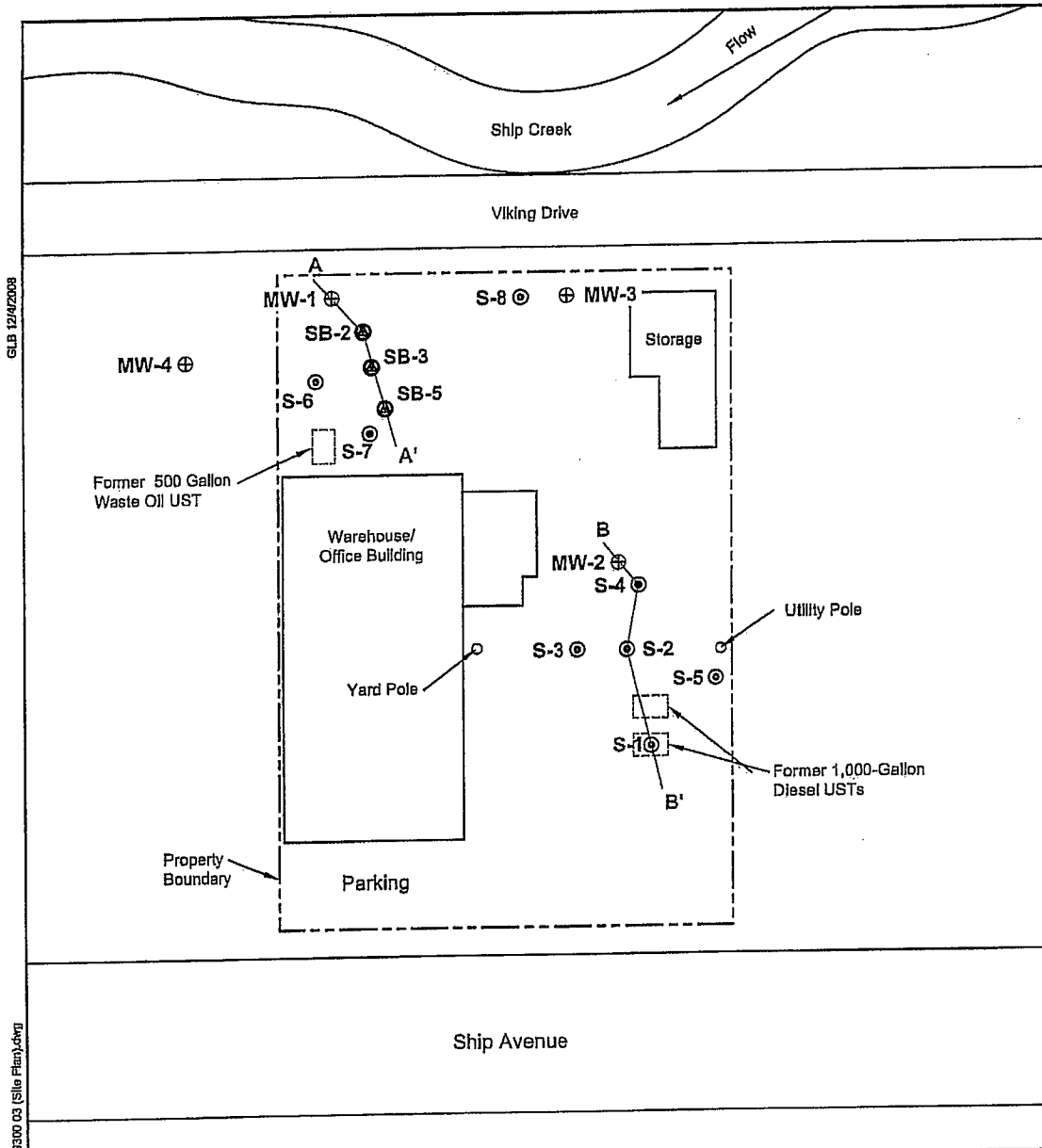
RECEIVED

DEC 15 2008

**DEPT. OF ENVIRONMENTAL
CONSERVATION**

Attachment B: Site Figures

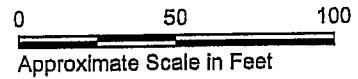
Site Plan
1749 Ship Avenue, Anchorage, Alaska



GLB 12/04/2008

895500 03 (Site Plan).dwg

Source: Rockwell Engineering & Construction Services, Inc. Site Map.



- MW-1 ⊕ Monitoring Well Location and Number
- S-3 ⊙ Soil Boring Location and Number (April 2005)
- SB-2 ⊕ Soil Boring Location and Number (June 2008)
- A — A' Cross Section (See Figures 2 and 3)

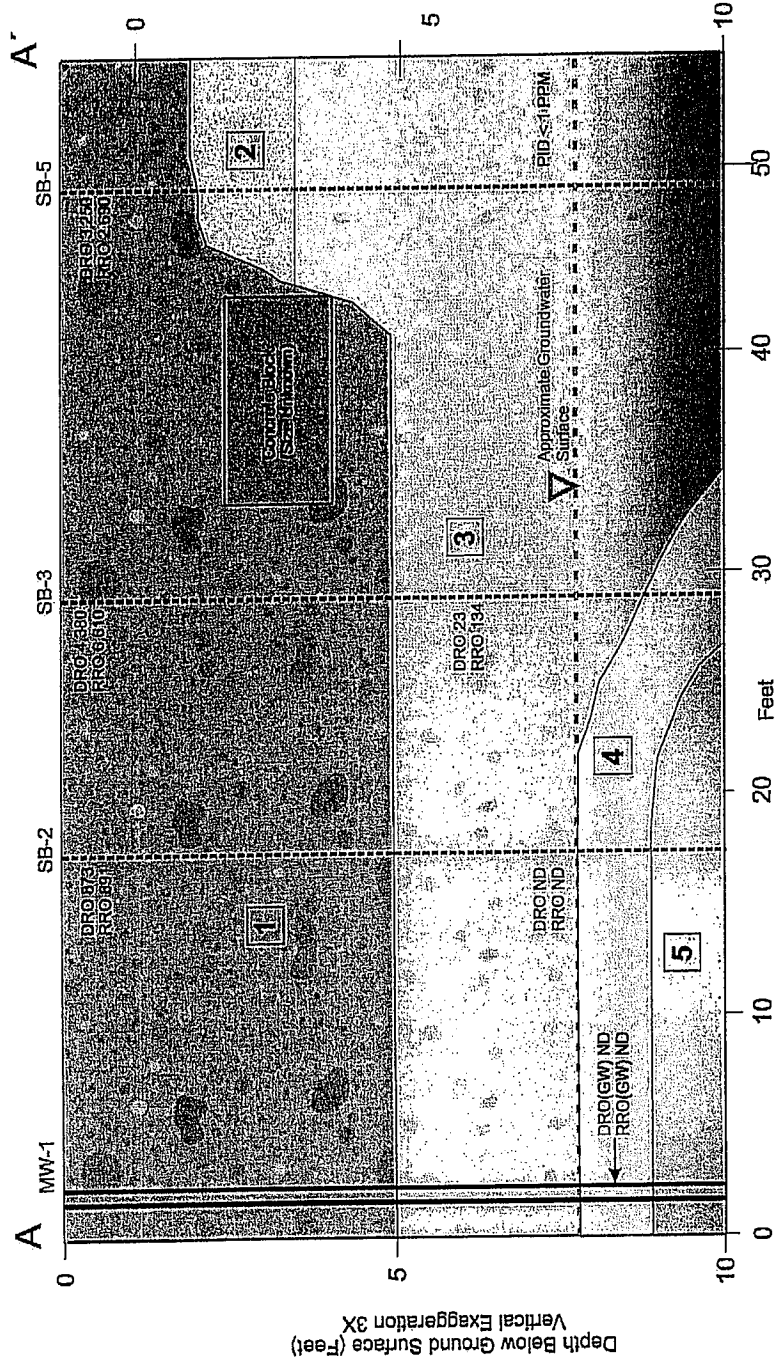


3980-013

12/08

Figure 1

Cross Section A - A'
 Vicinity of Former Waste Oil UST
 1749 Ship Avenue
 Anchorage, Alaska



LEGEND

1 Gravely Sand with Cobbles and Silt (FS)

2 Organic Silt with Peat

3 Gravely Sand with Silt Lenses

4 Fine Sand

5 Silt

DRO < 1 PPM Photoionization Detector Measurement Less than 1 Part Per Million

RRO Diesel Range Organics In mg/kg

DRO(GW) Residual Range Organics In mg/kg

RRO(GW) Groundwater Sample 8/18/2007

ETEX Benzene, Toluene, Ethylbenzene, and Xylenes In mg/kg

ND Not Detected Above Reporting Limit

SB-2 Soil Boring 6/18/2008

3980-013 12/08

Figure 2

