



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Environmental
Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File No: 2100.26.171

September 25, 2015

Ms. Susan Kirkpatrick
First Group America
600 Vine Street, Suite 1400
Cincinnati, OH 45202

Re: Decision Document; Shaw / TMS Anchorage Terminal
Corrective Action Complete Determination

Dear Ms. Kirkpatrick:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Shaw /TMS Anchorage Terminal site located in Anchorage, Alaska. 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.

This decision is based on the administrative record for the Shaw / TMS Anchorage Terminal site, which is located in the offices of the 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.

Introduction

Site Name and Location:

Shaw/TMS Anchorage Terminal
5801 East 4th Ave
Anchorage, Alaska, 99508

Name and Mailing Address of Contact Parties:

Mr. Joshua Bolling P.G.
Strata Environmental Services
110 Perimeter Park, Suite E
Knoxville, TN, 37922

First Group America
c/o Susan Kirkpatrick
600 Vine Street Suite 1400
Cincinnati, OH, 45202

ADEC Site Identifiers

File: 2100.26.171
Hazard ID: 24537

Regulatory authority under which the site is being cleaned up:

18 AAC 78 and 18 AAC 75

Background

This site is a former Laidlaw (First Student/First Group America) facility, where in 1994 a regulated gasoline underground storage tank (UST) was removed, and a leak was detected. Soil and groundwater contamination was identified necessitating additional activities to evaluate the nature and extent of contamination.

Contaminants of Concern

During the investigations at this site, soil and groundwater samples were analyzed for diesel range organics (DRO), gasoline range organics, (GRO), and volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses and knowledge of the source area, the following Contaminants of Concern were detected above cleanup levels in soil and/or groundwater:

- DRO
- GRO
- Benzene
- Toluene
- Ethylbenzene

Cleanup Levels

Soil cleanup levels for this site are established in 18 AAC 75.341, Tables B1 and B2:

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
• DRO	250
• GRO	300
• Benzene	0.025
• Toluene	6.5
• Ethylbenzene	6.9

Groundwater cleanup levels for this site are established in 18 AAC 75.345, Table C.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/l)</u>
• DRO	1.5
• GRO	2.2
• Benzene	0.005
• Toluene	1.0
• Ethylbenzene	0.7

Site Characterization and Cleanup Activities

A compartmentalized gasoline and diesel underground storage tank (UST) was removed from the site by Laidlaw Transit in 1994 at which time a release from the UST was detected. Following the detection of the leak three monitoring wells (B1MW, B2MW, B3MW) were installed at the site in 1997, to evaluate the nature and extent of the contamination. Sampling confirmed GRO as well as benzene, toluene, and ethylbenzene in groundwater at concentrations above ADEC cleanup levels.

In 2002, 310 cubic yards of impacted soil was removed from the site over a series of three excavations and disposed of at Alaska Soil Recycling. Soil samples collected during all three excavations contained DRO, GRO benzene, ethylbenzene, and toluene at concentrations above ADEC cleanup levels. Confirmation soil samples collected after the final excavation however contained only benzene above the cleanup level at a concentration of 0.175 mg/kg at an approximate depth of 18 feet below ground surface (bgs) During the backfilling of the third excavation, 400 lbs of oxygen releasing compound (ORC) was mixed with the backfill from a depth of 15 feet to 8 feet bgs to enhance the natural attenuation of benzene at the site. Five months after the addition of the ORC, one soil boring was advanced into the former UST to collect a soil sample approximately 15 feet bgs. Analysis of this sample indicated benzene was still present above the cleanup level at a concentration of 0.159 mg/kg.

In November 2013 three soil borings were advanced at the source area treated in 2002 to collect soil samples. Samples from each of these borings did not contain contaminants above laboratory method detection limits.

Groundwater monitoring was conducted at the site between 1997 and 2004. Subsequent to Laidlaw vacating the property in 2004 all groundwater monitoring ceased. Laidlaw was acquired by First Group America (FGA) in 2009 and in 2010 FGA re-instated semi-annual groundwater monitoring. The results of the 2010 monitoring efforts indicated contaminants were no longer present in groundwater at concentrations above ADEC cleanup levels in two of the three monitoring wells. These wells (B1MW, B2MW) were decommissioned in 2011. Monitoring well B3MW contained benzene at 0.00907 mg/l. This well was sampled on a semi-annual basis until 2012 until two consecutive monitoring events indicated contaminant concentrations remained below ADEC cleanup levels. Monitoring well B3MW was decommissioned in 2015 in accordance with ADEC standards.

Cumulative Risk Calculation

Pursuant to 18 AAC 78.600(d), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Cumulative risk at this site was calculated assuming a residential land use and using the most recent detected concentrations of contaminants in all of the groundwater samples collected in 2012 and in soil samples collected during soil excavation in 2002. It should be noted that the soil data used to calculate cumulative risk was collected in 2002 from an area that was then targeted by the mixing of 400 lbs of Oxygen Releasing Compounds (ORC), so it is unlikely that these contaminants remain in the same concentrations as in 2002.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations do not pose a cumulative human health risk.

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: 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	Contaminated soil was removed from the surface during the 2002 excavation and treated.
Sub-Surface Soil Contact	De minimis exposure	Contaminant concentrations remaining in subsurface soil are below direct contact cleanup levels
Inhalation – Outdoor Air	De minimis exposure	Contaminant concentrations remaining in subsurface soil are below inhalation cleanup levels

Inhalation – Indoor Air (vapor intrusion)	De minimis exposure	Contaminant concentrations in groundwater are below vapor intrusion action levels and the remaining contamination is covered by clean fill
Groundwater Ingestion	De minimis exposure	Monitoring wells show that contamination is below ADEC cleanup levels
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in this area.
Wild Foods Ingestion	Pathway Incomplete	Wild foods are not collected in this area.
Exposure to Ecological Receptors	Pathway Incomplete	Ecological receptors are not likely to come into contact with subsurface contamination remaining 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

ADEC has determined there is no unacceptable risk to human health or the environment. Therefore this site will be issued a Corrective Action Complete determination subject to the following standard conditions:

Standard Conditions

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 75.325. 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.)
2. 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.

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.

If you have questions about this closure decision, please contact the ADEC project manager, Chelsy Passmore at (907) 269-7522.

Approved by,

A handwritten signature in blue ink that reads "Chelsy M. Passmore". The signature is written in a cursive style with a large initial "C" and "P".

Chelsy Passmore
Environmental Program Specialist

CC: Joshua Bolling

Attachment A: Site Figures

