THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

555 Cordova St
Anchorage, AK 99501
Main: 907-269-7522
Fax: 907-269-7687
www.dec.alaska.gov

File No: 2100.26.594

Return Receipt Requested
Article No. 7014 0510 0001 5871 2385

February 19, 2016

Mr. Darin Hargraves
Anchorage School District
1301 Labar Street
Anchorage, AK, 99515

Re: Decision Document: ASD Hanshew Middle School UST #2.
Corrective Action Complete Determination

Dear Mr. Hargraves:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the Anchorage School District (ASD) Hanshew Middle School underground storage tank (UST) #2 site located in Anchorage, Alaska. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

This decision is based on the administrative record for the ASD Hanshew Middle School UST #2 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 determination.

Site Name and Location:
ASD Hanshew Middle School UST #2
10121 Lake Otis Parkway
Anchorage, AK, 99518

Name and Mailing Address of Contact Party:
Mr. Darin Hargraves
Anchorage School District
1301 Labar Street
Anchorage, AK, 99515

DEC Site Identifiers:
File No: 2100.26.594
Hazard ID: 26481

Regulatory Authority for Determination:
18 AAC 75 and 18 AAC 78

Site Description and Background

The subject UST was a double walled cylindrical steel tank installed in 1997. The tank was equipped with a spill bucket, an overfill protection valve, and a piping sump basin with an interstitial sensor located on top of the tank. The tank was buried approximately 4 feet below grounds surface (bgs), and subsurface materials generally consisted of gravel and silt, with silt and sand and a pea gravel bedding material around the immediate area of the tank. Groundwater was not encountered during removal of the UST and is not expected to be within 5 feet below the UST. Petroleum contamination in soil was encountered during the September 2015 piping assessment.

Contaminants of Concern

During the course of the investigations at this site, soil and groundwater samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), and volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX). Based on these analyses, the following contaminants of concern were identified in surface soil.

- Diesel Range Organics (DRO)

Cleanup Levels

Soil cleanup levels for this site are established in 18 AAC 75.341, Tables B1 and B2 for the migration to groundwater pathway

Contaminant	*Site Cleanup Level (mg/kg)*
• DRO	250

Characterization and Cleanup Activities

In July 2015 a 1,100-gallon diesel underground storage tank (UST #2) and its associated piping were removed from the Anchorage School District ASD Hanshew Middle School. Approximately 45 cubic yards of soil were generated during the removal of the UST. No holes were observed in the tank during excavation. Soil was segregated into "clean" and "potentially impacted" stockpiles, based on photoionization detector (PID) measurements. Seventeen PID readings and four analytical soil samples were taken from the stockpiles and did not contain target analytes above ADEC cleanup levels. Similarly, fifteen PID readings and five analytical soil samples were collected from the UST excavation bottom and sidewalls, and did not contain target analytes exceeding ADEC cleanup levels. The UST was transported offsite for disposal and the excavated soil was placed back into the excavation.

Investigation of the vent piping included the collection of eight samples for field screening with a PID and three analytical samples from beneath the former locations of the vent lines. DRO was detected in one sample at 379 mg/kg at 1.9 feet bgs, above the cleanup level of 250 mg/kg. The vent piping was less than 3 feet from the tank excavation, and no other samples from this site exceeded cleanup levels.

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 recently detected concentrations of contaminants in all of the soil samples collected in 2015.

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

Exposure 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, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis Exposure	Contamination in surface soil is de Minimis and below direct contact cleanup levels
Sub-Surface Soil Contact	Pathway Incomplete	Contamination is not present in sub-surface soil (2 to 15 feet below ground surface)
Inhalation – Outdoor Air	Pathway Incomplete	Contaminant concentrations in soil are below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Volatile contaminants capable of causing risk via this pathway are not present at the site.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered in the excavation and the deepest soil samples did not contain detectable concentrations of contaminants
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	Ecological receptors are not likely to come into contact with groundwater contamination remaining at the site.

Notes to Table 2: "De-Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be affected by the minimal volume or concentration 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

This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, 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 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.)

2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.

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 99811-1800, 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 99811-1800, 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 feel free to contact me at (907) 269-7522.

Sincerely,

Chelsy Passmore
Environmental Program Specialist