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: 2601.38.094

October 6, 2015

Ken Hatfield
1425 Ismailov Street
Kodiak, AK 99615

Re: Decision Document: Residence - 1425 Ismailov Drive
Cleanup Complete Determination

Dear Mr. Hatfield:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the Residence - 1425 Ismailov Drive site. 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 this site will be closed. This decision is based on the administrative record for the Residence - 1425 Ismailov Drive site, which is located in the offices of the ADEC in Anchorage, Alaska. No further remedial action is required.

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 determination.

Site Name and Location:
Residence - 1425 Ismailov Drive
1425 Ismailov Street
Kodiak, AK 99615

Name and Mailing Address of Contact Party:
Ken Hatfield
1425 Ismailov Street
Kodiak, AK 99615

DEC Site Identifiers:
File No: 2601.38.094
Hazard ID: 2126

Regulatory Authority for Determination:
18 AAC 75

Site Description

The Residence - 1425 Ismailov Drive site is located northwest of the intersection at Ole Johnson Avenue and Ismailov Street in Kodiak, Alaska. The area surrounding this site is generally flat and residential in nature; however, topography tends to gradually slope towards Woody Island Channel, to the southeast. The nearest surface water body is Potato Patch Lake, which is located roughly 550 feet east-northeast of the site. The city of Kodiak operates a public water system, in which the water is withdrawn from a surface water source located about 1 mile northwest of the site. There are no drinking water wells on site or in the surrounding area.

Background

In 1994, ADEC received notification from the Kodiak Fire Department that a petroleum sheen was observed flowing along a drainage path towards Potato Patch Lake. Absorbent booms were placed by the Kodiak Fire Department to soak up as much fuel as possible. According to the file, the source of contamination originated from the underground storage tank (UST) located at 1425 Ismailov Street (the site). The UST was subsequently removed from the ground and replaced by an above ground storage tank (AST). Although contaminated soil was noted during UST removal, no confirmation soil samples were collected.

Contaminants of Concern

The 1994 heating oil release was investigated for the first time in July 2015 (described below in the Characterization and Cleanup Activities section). Soil and groundwater samples were analyzed for gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), and benzene, toluene, ethylbenzene, and xylenes (BTEX). Ten percent (10%) of the soil samples were also analyzed for volatile organic compounds (VOCs) and polynuclear aromatic hydrocarbons (PAHs). Because the UST was used for heating oil, the primary contaminant of concern is DRO.

Cleanup Levels

Default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2, Migration-to-Groundwater (MTG) for the over 40-inch zone. Default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C.

Table 1 – ADEC Cleanup Levels

Contaminant	Soil Cleanup Level – MTG (mg/kg)	Soil – Maximum Remaining Concentrations (mg/kg)	Groundwater Cleanup Level (mg/L)	Groundwater – Maximum Remaining Concentrations (mg/L)
GRO	260	2.12	2.2	ND
DRO	230	198	1.5	0.527
RRO	9,700	561	1.1	ND
Benzene	0.025	ND	0.005	ND
Toluene	6.5	0.029	1.0	ND
Ethylbenzene	6.9	ND	0.7	ND
Xylenes	63	0.0402	10.0	0.00159

mg/kg = milligrams per kilogram
mg/L = milligrams per liter
MTG = migration to groundwater
ND = not detected above laboratory limits of quantitation
GRO = gasoline range organics
DRO = diesel range organics
RRO = residual range organics

Characterization and Cleanup Activities

The 1994 heating oil release was investigated for the first time in July 2015. The objective of this investigation was to characterize the surface and subsurface soils and groundwater to determine if contamination remained above ADEC cleanup levels. Several test pits were advanced to groundwater in the location of the former UST and surrounding area. Based on soil field screening data and visual evidence of contamination, a total of five soil samples (including one duplicate) were collected from the

soil-groundwater interface and were submitted for laboratory analysis. In addition to the soil samples, one groundwater sample was collected from a temporary monitoring well that was installed in the test pit over the former UST, in the area most likely impacted. Groundwater was generally encountered at four feet below ground surface (bgs).

All soil and groundwater samples were submitted for laboratory analysis of GRO, DRO, RRO, and BTEX. In addition, the most contaminated sample was submitted for analysis of VOCs and PAHs. Analytical results revealed that all soil and groundwater sample results were below the most stringent cleanup levels.

Cumulative Risk Evaluation

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 noncarcinogenic risk standard at a hazard index of one across all exposure pathways. 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, Exposure Controlled, 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 is present in surface soil (0 to 2 feet below ground surface), but is below the most stringent MTG cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination is present in the subsurface soils, but is below the most stringent MTG cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination is present in the subsurface soils, but is below the most stringent MTG cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Contamination is present in the surface and subsurface soils, but is below the most stringent MTG cleanup levels.
Groundwater Ingestion	De-Minimis Exposure	Groundwater contamination is present, but below the Table C groundwater cleanup levels. Groundwater is not used as a drinking water source for the site or the area surrounding the site.
Surface Water Ingestion	Pathway Incomplete	Contamination is not present in surface water.

Wild and Farmed Foods Ingestion	Pathway Incomplete	Site is not located in an area that is used or reasonably could be used for hunting, fishing, or harvesting of wild or farmed foods
Exposure to Ecological Receptors	Pathway Incomplete	No terrestrial or aquatic exposure routes present.

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 "Closed" designation on the Contaminated Sites Database, subject to the following 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.

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

This determination is in accordance with 18 AAC 75.380 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.

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) 269-7691 or by email at joshua.barsis@alaska.gov.

Sincerely,

Joshua Barsis
Environmental Program Specialist