



DIVISION OF SPILL PREVENTION AND RESPONSE Contaminated Sites Program

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File: 170.38.003

January 6, 2021

Bob Green 8HC60 Box 3490 Delta Junction, AK 99737

Re: Decision Document: Earl Mitchell Farm Estate Cleanup Complete Determination

Dear Mr. Green:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Earl Mitchell Farm Estate located at MP 1395 Alaska Highway. 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 unless information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Earl Mitchell Farm Estate, which is located in the ADEC office in Fairbanks, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

**Site Name and Location:** Earl Mitchell Farm Estate MP 1395 Alaska Highway Delta Junction AK 99737

ADEC Site Identifiers: File No.: 170.38.003 Hazard ID.: 1696 Name and Mailing Address of Contact Party: Bob Green 8HC60 Box 3490 Delta Junction, AK 99737

**Regulatory Authority for Determination:** 18 AAC 75

### Site Description and Background

The property, located at MP 1395 of the Alaska Highway, is an uninhabited agricultural area. The site was contaminated prior to 1991 and two areas of contamination were identified, Dumpsite 1 and Dumpsite 2.

Dumpsite 1 had approximately thirty 55-gallon drums, some of which were leaking unknown liquids, batteries, various debris (e.g., the remains of a mobile home, a truck, a school bus, an old drill rig, and a

large freezer). In 1991, two pipes were observed at Dumpsite 1. One pipe was believed to be a well casing, and the other was thought to be associated with an Underground Storage Tank (UST). The barrels and other debris were removed prior to 1999 and only the well casing remained. Following these removal activities, there was no obvious staining on the ground at Dumpsite 1; however, there was an area lacking vegetation. Documentation of cleanup activities performed at Dumpsite 1 before 1999 was not provided to ADEC.

At Dumpsite 2, eight 55-gallon drums and several large oil filters were identified during the 1991 assessment. The waste oil in the drums were disposed of prior to 2015 (with ADEC approval) and the empty drums were taken to the Delta Junction Landfill. A large surface stain remained at Dumpsite 2.

### **Contaminants of Concern**

The following contaminants of concern (COCs) in soil have been identified for this site:

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

## **Cleanup Levels**

The following 18 AAC 75 soil and groundwater cleanup levels apply at the Earl Mitchell Farm Estate:

- Table B2 Method Two Migration to Groundwater soil cleanup level
- Table C Groundwater Cleanup Levels

The approved cleanup levels and residual concentrations for the Earl Mitchell Farm Estate are presented in Table 1, below.

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Contaminant	Method Two	Dumpsite 1	Dumpsite 2
	Migration to	Maximum Remaining	Maximum
	Groundwater Soil	Soil Concentration	Remaining Soil
	Cleanup Level	(mg/Kg)	Concentration
	(mg/Kg)		(mg/Kg)
DRO	250	12.7J	177
RRO	11000		656

### Table 1 – Approved Soil and Groundwater Cleanup Levels, and Maximum Remaining Concentrations

mg/kg = milligrams per kilogram

J= The result is considered estimated with an unknown direction of bias due to a detection below the Limit of Quantitation

### **Characterization and Cleanup Activities**

During the 2020 site characterization and cleanup activities, the area lacking vegetation at Dumpsite 1 and the stained soil at Dumpsite 2 were excavated. Dumpsite 1 had an approximate area of 3 feet x 3 feet x 2 inches. Dumpsite 2 had an area of approximate area of  $4 \times 10 \times 2.5$  feet. One confirmation sample was collected from the bottom of each excavation and analyzed for DRO and RRO. There were no exceedances of the applicable cleanup levels. Maximum remaining contaminant concentrations for the Dumpsite 1 and 2 are presented in **Table 1**.

The excavated soil was stockpiled and one analytical sample was collected from the stockpile and analyzed for DRO, RRO, Gasoline Range Organics (GRO), Volatile Organic Compounds (VOCs), Polycyclic Aromatic Hydrocarbons (PAHs), Resource Conservation and Recovery Act (RCRA) metals, and polychlorinated biphenyl (PCBs). The stockpile sample had a DRO concentration of 857 mg/kg. RRO, barium, cadmium, chromium, and lead were detected below the applicable Table B1/B2 cleanup

levels. Arsenic minimally exceeded the Table B1 cleanup level; however, this concentration is attributed to background and there are no known anthropogenic sources of arsenic at the site. The stockpiled soil was transported to US Ecology in Moose Creek, AK for treatment.

The larger diameter pipe was verified to be a well casing. During the October 2020 site characterization activities, the well was observed to be dry at a depth of 200 feet. The smaller diameter pipe, originally thought to be associated with a UST, could not be located. No other evidence to confirm the presence of a UST, (e.g., vent pipe, fuel cap, fuel lines, or photographs) has ever been submitted to ADEC.

The well casing at Dumpsite 1 is currently open, and not secured. ADEC recommends that the well be properly decommissioned in accordance with 18 AAC 80.015(e). Please see *Alaska Best Management Practices, Maintaining or Decommissioning Water Wells and Boreholes* for more information about well decommissioning (http://dec.alaska.gov/media/8482/dwp-alaska-bmps-for-decommissioning-water-wells-and-boreholes.pdf). At a minimum, ADEC recommends that the well be properly equipped with a locking cap.

# Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g), 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.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations at the Earl Mitchell Farm Estate meet the human health cumulative risk criteria for residential land use.

# **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**.

Pathway	Result	Explanation
Surface Soil Contact	De Minimis Exposure	Residual surface soil contamination does not exceed the most stringent soil cleanup levels.
Sub-Surface Soil Contact	De Minimis Exposure	Residual subsurface contamination does not exceed the most stringent cleanup levels.
Inhalation – Outdoor Air	Pathway Incomplete	No volatile compounds were detected in the soil. Residual soil contamination is de minimis.
Inhalation –	Pathway	There are no structures present at the site.
Indoor Air (vapor intrusion)	Incomplete	Residual soil contamination is de minimis.

# Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Groundwater Ingestion	Pathway Incomplete	An existing well at the site was observed to be dry to 200'. Residual soil contamination is de minimis. Groundwater is not expected to be impacted at this site.
Surface Water Ingestion	Pathway Incomplete	The nearest surface water body is the Gerstle River which is over <sup>1</sup> / <sub>4</sub> mile from the site. Residual soil contamination is not expected to migrate to surface water.
Wild and Farmed Foods Ingestion	Pathway Incomplete	No bioaccummulative compounds are present at the site.
Exposure to Ecological Receptors	Pathway Incomplete	There are no concerns about other ecological pathways.

<u>Notes to Table 2</u>: "De Minimis Exposure" means that in ADEC's judgment receptors are unlikely to be adversely 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.

### **ADEC Decision**

Soil contamination at the site has been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. This site will receive a "Cleanup Complete" designation on the Contaminated Sites Database, subject to the following standard conditions.

#### **Standard Conditions**

- Any proposal to transport soil or groundwater from a site that is subject to the site cleanup rules or for which a written determination from the department has been made under 18 AAC 75.380(d)(1) that allows contamination to remain at the site above method two soil cleanup levels or groundwater cleanup levels listed in Table C 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 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.
- 3. Groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

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 contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to 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, 555 Cordova Street, Anchorage, Alaska 99501-2617, within 20 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, P.O. Box 111800, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department 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) 451-2881, or email at <u>shonda.oderkirk@alaska.gov</u>

Sincerely,

Shonda Oderkirk

Shonda Oderkirk Project Manager

cc, via email: Spill Prevention and Response, Cost Recovery Unit Rodney Guritz, Arctic Data Services, LLC Eric Breitenberger, ADEC Jamie McKellar, ADEC