



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of
Environmental Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

555 Cordova Street
Anchorage, AK 99501
Phone: 907-269-7503
Fax: 907-269-7687
www.dec.alaska.gov

File: 2100.26.598

October 6, 2016

Mr. David Wilder
Wild Country, LLC
dba Lake and Pen Air
3323 Dry Creek
Port Alsworth, AK 99623

Re: Decision Document: Lake and Pen Air UST #2
Cleanup Complete Determination

Dear Mr. Wilder

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Lake and Pen Air UST #2 at 1740 East 5th Avenue, Anchorage, AK 99501. 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 new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Lake and Pen Air UST #2, which is located in the ADEC office in Anchorage, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:

Lake and Pen Air UST #2
1740 East 5th Avenue
Anchorage, AK 99501

Name and Mailing Address of Contact Party:

David Wilder
Wild Country LLC, dba Lake and Pen Air
3323 Dry Creek
Port Alsworth, AK 99623

DEC Site Identifiers:

File No.: 2100.26.598
Hazard ID.: 26547

Regulatory Authority for Determination:

18 AAC 78 and 18 AAC 75

Site Description and Background

A 10,000 gallon diesel underground storage tank (UST) was installed on April 18, 1985. According to the UST removal report, the most recent product in the tank was Jet A. In 2015, an associated tank, UST #1 failed a tank tightness tank and all three USTs were defueled, and removed in November 2015.

Contaminants of Concern

Example language: During the site investigation at this site, samples were collected from soil and analyzed for Gasoline Range Organics (GRO), Diesel Range Organics (DRO), Residual Range Organics (RRO), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), Polycyclic Aromatic Hydrocarbons (PAHs), Ethylene Dibromide (EDB) and 1,2-dichloroethane (1,2-DCA). Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Ethylene Dibromide

Cleanup Levels

Example language: The most restrictive cleanup levels, migration to groundwater was thought to apply to this site. Ethylene Dibromide was detected above the migration to groundwater cleanup level dictated in 18 AAC 75.340 (c), Table B1.

Table 1 – Approved Cleanup Levels

Contaminant	Direct Contact Soil (mg/kg)	Outdoor Inhalation Soil (mg/kg)	Migration to Groundwater Soil (mg/kg)	Groundwater (mg/L)
Ethylene Dibromide	4.2	0.600	0.00016	0.00005

mg/kg = milligrams per kilogram

mg/L = milligrams per liter

Characterization and Cleanup Activities

UST Removal and required site characterization under 18 AAC 78.090 conducted in 2015 included 42 field screening samples, and 20 lab samples pursuant to regulations under 18 AAC 78. The tank did not show evidence of a release, all piping was connected, and spill buckets were intact and sealed. The only exceedance of ADEC cleanup levels noted was Ethylene Dibromide at 0.00027 mg/kg in sample UST2-52, above the migration to groundwater cleanup level of 0.00016 mg/kg. After further evaluation, it was concluded that the site could be closed for the following reasons:

- Only one sample exceeded ADEC cleanup levels at 12 feet bgs, while the other samples for EDB at the same depth returned non-detect
- The depth to groundwater under Merrill field is between 31-80 feet bgs
- Merrill Field is currently monitoring the groundwater, and as of 2016, EDB is not detectable

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 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.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is below ingestion cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Remaining contamination is not in groundwater. The area is also covered with asphalt.
Groundwater Ingestion	Pathway Incomplete	Contamination is not detected in groundwater
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	Contamination is 12 feet bgs, and below asphalt cover
Exposure to Ecological Receptors	Pathway Incomplete	Contamination is 12 feet bgs, and below asphalt cover.

Notes to Table 2: “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. “Exposure Controlled” means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

ADEC Decision

Soil and groundwater contamination at the site have 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

1. Any proposal to transport soil or groundwater off-site requires ADEC approval in accordance with 18 AAC 78.600(h). A “site” 18 AAC 78.995(134) 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.
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.

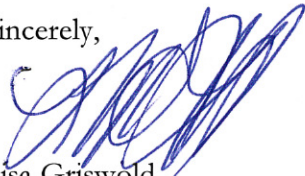
This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

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 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, 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 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) 269-2021, or email at lisa.griswold@alaska.gov.

Sincerely,



Lisa Griswold
Project Manager

Electronic cc: Spill Prevention and Response, Cost Recovery Unit
Arran Forbes, RSE
Dave Nyman, RSE