

# Department of Environmental Conservation

Division of Spill Prevention and Response Contaminated Sites Program

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File: 860.38.037 860.38.005

July 3, 2012

Al Weilbacher Building 171 2261 Hughes Ave., Suite 155 Lackland AFB, TX 78236-9853

Re:

ADEC determination "Cleanup Complete" for Site Galena Airport UST 1854, Former Galena Forward Operating Location (FOL), Galena, Alaska.

Dear Mr. Weilbacher:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the Site investigations documented in the Final Preliminary Assessment Report for the Site Galena Airport UST 1854, Former Galena Forward Operating Location (FOL), Galena, Alaska. Based on the information provided to date, ADEC has 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 Galena Airport UST 1854, 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 the site and provides a summary of the regulatory issues considered in the Cleanup Complete Determination.

## Introduction

Site Name and Location: Galena Airport UST 1854 Galena Alaska, 99741

Database File Number and Hazard ID:

File: 860.38.037 Hazard ID: 25880

Regulatory Authority: 18 AAC 75 and 18 AAC 78

## **Background and Characterization Activities**

Site UST1854 is located about 15 feet north of Building 1854, Headquarters Building. Site UST1854 consists of a graveled area with patches of grass located north of the northeastern corner of Building 1854. The feature of concern at Site UST1854 is the site of a removed UST. An AST is also located north of Building 1854 and is being investigated separately as Site AST1854.

UST 1854 was a 2,000-gallon steel tank (USAF, May 17, 1988; USAF, February 2010) 5.5 feet in diameter and 12 feet long (USAF, December 2002, Table 2-1, pg. 2-1). The UST was installed in 1962, used to store diesel fuel from 1986 until it was removed in 1998 (USAF, February 2010). A September 21, 1993 spill of unknown volume because of a rupture line is included in the "History of Reported Oil Spills Greater than 50 Gallons" table in the ODPCP (USAF, October 2004, pg. G-1). It is unclear if this reported spill was associated with the AST located within Building 1854 or with the UST. No confirmation samples were collected from the excavation when the UST was removed. Samples were collected during follow-on investigations in 1999 and 2001.

Since UST 1854 contained fuel for an emergency generator, it is regulated by ADEC according to 18 AAC 78 Underground Storage Tanks, as amended October 2006, and by 18 AAC 75 Oil and Other Hazardous Substances Pollution Control, revised October 9, 2008. Site UST1854 is not in the LUST program and a release investigation for the site has been conducted by the USAF to complete site closure requirements.

In 1999, three soil samples were collected from 9.5 feet to 13 feet bgs outside the western (SP-1), eastern (SP-2), and northern (SP-3) boundaries of a buried concrete tie-down slab at Site UST1854 (RSE, August 1999). The samples were analyzed for DRO by Method AK102. DRO was detected in soil samples at the western and eastern ends of the slab at concentrations of 15 mg/kg and 6.4 mg/kg, respectively (RSE, 1999, Table 1, p. 6). Results were below ADEC Method 1 screening levels (RSE, August 1999). Figures showing sample locations (RSE, August 1999) and a table providing a summary of the analytical results (USAF, December 2002) are included in the supporting documentation. In January 2000 ADEC recommended additional investigation of Site UST1854 to test for GRO and BTEX, and further characterize the extent of contamination at UST 1584 and its associated piping.

In 2001, two soil borings (SB01 and SB02) were installed in the location of the former UST at the west and east ends (USAF, December 2002). One soil sample was collected from each boring from depths of 12 to 13 feet bgs at Soil Boring SB01 and 10 to 11 feet bgs at Soil Boring SB02. In addition, samples from various depth intervals were field-screened for evidence of contamination using a PID and Hanby test kit. The soil boring samples were analyzed for DRO (Method AK102), GRO (Method AK101), RRO (Method AK103), BTEX constituents (Method 8021B), and SVOCs (Method 8270C).

The piping for UST 1854 was not found, however, one hand-auger boring was installed at the inferred location of the former pipe that connected the western side of the UST with Building 1854. One soil sample was collected from the hand-auger boring at a depth of 3 to 3.5 feet bgs. The hand-auger soil sample was analyzed for DRO, GRO, RRO, VOCs, and metals (Methods 6010B/6020).

GRO, VOCs and PAHs were not detected. BTEX was not detected, with the exception of toluene, which was detected at a concentration of 0.11 mg/kg at soil boring SB02. DRO concentrations ranged from 6 mg/kg to 23 mg/kg. RRO concentrations ranged from 31 mg/kg to 89 mg/kg. No contaminants (GRO, DRO, RRO, BTEX, VOCs, PAH, and metals) were detected above the ADEC Method 2 cleanup levels. Site UST 1854 was recommended for No Further Action in December 2002.

A visual inspection of Site UST1854 was conducted in October 2009. The site consists of gravel and patches of grass with no viable habitat. There are no potential ecological exposure pathways at the site. Additional

samples were not collected. The site was recommended for No Further Action in the September 2011, Preliminary Assessment.

The 2001 Sample results were reviewed during this cleanup complete determination and found that several compounds had laboratory detection limits above their respective Migration to groundwater cleanup levels.

- 1,2,3 Trichloropropane (CUL=0.00053 mg/kg) had a reported detection limit of 0.023 mg/kg.
- 1,2 Dibromoethane (EDB) (CUL=0.00016 mg/kg) had a reported detection limit of 0.008 mg/kg.
- Methylene Chloride (CUL=0.016 mg/kg) had a reported detection limit of 0.021 mg/kg.
- Vinyl Chloride (CUL=0.0085 mg/kg) had a reported detection limit of 0.023 mg/kg.

Based on the fact that the UST contained only diesel and that chlorinated compounds are not contaminants of concern at the site, it is unlikely that 1,2,3 – Trichloropropane, Methylene Chloride, or Vinyl Chloride are present at lower levels than the reported detection limits. Likewise the presence of 1,2 – Dibromoethane (EDB), a gasoline additive, is unlikely to be present at levels below the reported detection limits.

#### **Contaminants of Concern**

During the investigations for this site, diesel range organics (DRO), residual range organics (RRO), and the BTEX compound Toluene were detected at levels below screening and the most stringent method 2 clean up levels.

# Clean Up Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Tables B1 and B2.

	Site Cleanup Levels (mg/kg)
Contaminant	Migration to GW
DRO	250
RRO	11,000
Toluene	6.5

The default groundwater cleanup levels for this site are established in 18 AAC 75.345 Table C Groundwater Cleanup Levels.

Contaminant	Site Cleanup Level (mg/L)
DRO	1.5
RRO	1.1
Toluene	1.0

#### Pathway Evaluation

Following investigation 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 1.

Table 1

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	No contamination of surface soils was indicated during investigations. There is no surface soil contact.
Sub-Surface Soil Contact	De-minimis exposure	Contamination remains in the subsurface, but is below migration to groundwater levels.
Inhalation – Outdoor Air	De-minimis exposure	Contamination remains in the subsurface, but is below migration to groundwater and outdoor inhalation levels .
Inhalation – Indoor Air (vapor intrusion)	De-minimis exposure	Low level contamination remains in the subsurface. Remaining contamination is below the most stringent ADEC cleanup levels.
Groundwater Ingestion	Pathway Incomplete	Groundwater contamination above ADEC cleanup levels was not encountered during the investigations.
Surface Water Ingestion	Pathway Incomplete	There is no surface water located within ½ mile of the site.
Wild Foods Ingestion	Pathway Incomplete	There is no surface or subsurface contamination remaining above migration to groundwater levels.
Exposure to Ecological Receptors	Pathway Incomplete	Contaminated soil is not present at surface.

### **ADEC Decision**

The investigations to date have adequately characterized contaminated soil at the site. Based on the information available, ADEC has determined no further assessment or cleanup action is required. The Release Investigation is complete for this site, any potential risk to human health or the environment is acceptable as it is determined to be below action levels, and any contamination remaining has been evaluated as de-minimus. Based on these findings the site status will be designated "cleanup complete" and the site will be listed as closed on the Department's database.

Although a cleanup complete determination has been granted, ADEC approval is required for off-site soil disposal in accordance with 18 AAC 75.375 (i). It should be noted that movement or use of potentially contaminated soil in a manner that results in a violation of 18 AAC 70 water quality standards is unlawful.

This determination is in accordance with 18 AAC 78.276(f), the site cleanup rules in 18 AAC 75.325 Article 3 and site closure rules in 18 AAC 75.380 (d). The determination 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 any questions concerning this closure decision, please do not hesitate to contact the ADEC project manager at (907) 451-2180, or by email at dennis.shepard@alaska.gov.

Approved By,

Fred Vreeman

Environmental Program Manager

Recommended By,

Dennis Shepard

Environmental Program Specialist

cc: Donna Kozak, Booz Allen Hamilton, via email

Win Westervelt, CH2MHill, via email Andi Lord, CH2MHill, via email Colette Foster, ADOT&PF, via email Sam Myers, ADOT&PF, via email