



THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Environmental
Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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September 2, 2015

File: 630.38.003

Andrea Elconin
USACE
P.O. Box 6898
Elmendorf AFB, 99506-6898

Re: Decision Document; Unalakleet Air. Warning – Drum Dump
Cleanup Complete Determination

Dear Ms. Elconin:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with Unalakleet Air. Warning – Drum Dump Site located at Unalakleet, Alaska. Based on the information provided to date, the DEC 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 Unalakleet Air. Warning – Drum Dump, which is located in the offices of the Alaska Department of Environmental Conservation (DEC) in Fairbanks, 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 Cleanup Complete Determination.

Introduction

Site Name and Location:

Unalakleet Air. Warning – Drum Dump
Unalakleet D-4, T18S, R11W, Sec 21
Unalakleet, Alaska 99684

Name and Mailing Address of Contact Party:

Andrea Elconin
USACE
P.O. Box 6869
JBER, AK 99506-6869

Database Record Key and File Number:

ADEC Reckey: 199932X121301
File: 630.38.003
Hazard ID: 4297

Regulatory authority under which the site is being cleaned up:

18 AAC 75

Background

The Drum Dump site (Site 14) is located on a private native allotment between Beach Road and Kouwegok Slough, north of Unalakleet and the Communications Building site (Site 12). This site served as an unpermitted landfill used by the Air Force for drum disposal and consisted of one major drum accumulation.

Contaminants of Concern

During site investigations (SIs) in 1999 and 2000, surface soil samples were collected at the site. Diesel range organics (up to an estimated 6,800 mg/kg), residual range organics (up to an estimated 13,200 mg/kg), the volatile organic compounds (VOCs) benzene (up to an estimated 0.90 mg/kg) and methylene chloride (up to an estimated 0.150 mg/kg), and the RCRA metals arsenic (up to 11 mg/kg) and lead (up to an estimated 880 mg/kg) were detected in the soil in the immediate vicinity of the dump site at concentrations above their respective soil cleanup levels. However, methylene chloride and lead are not considered contaminants of concern as detected concentrations were attributed to laboratory cross-contamination. In addition, the site-specific arsenic concentrations exceeding soil cleanup levels were determined to be below or equal to the established background concentrations. Therefore, the arsenic concentrations detected in the soil at the Unalakleet Air Force Station FUDS are not related to past military use but are instead naturally occurring concentrations. Based on these analyses and knowledge of the source area, the following Contaminants of Concern were identified:

- Diesel range organics (DRO)
- Residual range organics (RRO)
- Benzene

Cleanup Levels

The default soil cleanup levels for this site are established in 18 AAC 75.341, Method Two, Table B2, Under 40 Inch Zone. The more restrictive of either the inhalation or ingestion cleanup levels apply to this site.

<u>Contaminant</u>	<u>Site Cleanup Level (mg/kg)</u>
DRO	10,250
RRO	10,000
Benzene	11

Cleanup Activities

The 55-gallon military fuel drums at this dump site were removed as part of the 2002 remedial action (RA), and approximately 840 cubic yards of contaminated soil was excavated from the site during the 2005 RA. The soil at this site largely consisted of beach gravel due to its location on the spit. Confirmation samples were analyzed for DRO, RRO, polyaromatic hydrocarbons (PAHs), and/or VOCs. RRO was not detected above cleanup levels. DRO and the VOCs benzene and methylene chloride were detected in the confirmation samples at concentrations above soil cleanup levels. However, methylene chloride is not considered a contaminant of concern as detected concentrations were attributed to laboratory cross-contamination. In one sample collected from the western sidewall, DRO was detected at a concentration of 360 mg/kg and benzene was detected at a concentration of 0.053 mg/kg. Benzene was also detected at a concentration of 0.239 mg/kg in soil collected from the eastern sidewall. Further excavation at this location was confined by Beach Road to the west and Kouwegok Slough to the east.

All of the requirements listed in the ADEC Memorandum on Site Closure (dated 24 July 2009) have been met:

- Free product has not been detected at the site.
- Surface staining is not present at the site.
- Cumulative risk standards have been achieved.
- Residual contaminant concentrations will not require institutional controls.
- Groundwater contaminant plumes are not present.
- Residual contamination will not cause a violation of 18 AAC 70.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using DEC’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 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	De-Minimis exposure	Site DRO, RRO and benzene contamination have been excavated and removed from the site to levels below the direct contact/ingestion and outdoor inhalation cleanup levels.
Sub-Surface Soil Contact	De-Minimis exposure	Site DRO, RRO and benzene contamination have been excavated and removed from the site to levels below the direct contact/ingestion and outdoor inhalation cleanup levels.
Inhalation – Outdoor Air	De-Minimis exposure	Maximum concentration of benzene in soil samples was measured at 0.239 mg/kg, well below the Method 2 outdoor inhalation cleanup level of 11 mg/kg.

Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	There are no buildings at the site, De-Minimis DRO, RRO and benzene contamination remains in the subsurface below outdoor inhalation cleanup levels.
Groundwater Ingestion	Pathway Incomplete	Groundwater is not a current or reasonably expected future source of drinking water
Surface Water Ingestion	Pathway Incomplete	No contaminants of concern were detected in surface water samples above ADEC benchmark screening levels.
Wild Foods Ingestion	Pathway Incomplete	Remaining subsurface DRO, RRO and benzene contamination is isolated, De Minimis and is unlikely to migrate or be taken up by plants.
Exposure to Ecological Receptors	Pathway Incomplete	Remaining subsurface DRO, RRO and benzene contamination is isolated, De Minimis and is unlikely to impact ecological receptors.

Notes to Table 1: “De-Minimis exposure” means that in DEC’s judgment receptors are unlikely to be affected by the minimal volume of remaining contamination. “Pathway incomplete” means that in DEC’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

The cleanup actions to date have served to excavate and adequately remove contaminated soil from the site. Based on the information available, DEC has determined no further assessment or cleanup action is required. There is no longer a risk to human health or the environment, and this site will be designated as closed on the Department's database.

Although a Cleanup Complete determination has been granted, DEC approval is required for off-site soil disposal in accordance with 18 AAC 75.325(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 75.380 (d) and does not preclude DEC 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 questions about this closure decision, please contact the DEC project manager, Joy Whitsel at (907) 451-2156 or by email at joy.whitsel@alaska.gov

Sincerely,



Fred Vreeman
Environmental Program Manager

cc: Joy Whitsel, DEC, via email