THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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File: 255.26.002

January 06, 2020

Michael McCrum
Bureau of Land Management
222 West 7th Avenue
Anchorage, Alaska 99513

Re: Decision Document: BLM Tanacross Administrative Buildings USTs Cleanup Complete Determination

Dear Mr. McCrum:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the BLM Tanacross Administrative Buildings located at Tanacross, Alaska. 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 BLM Tanacross Administrative Buildings, 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:
BLM Tanacross Administrative Buildings
MP 1322 Alaska Hwy
Tanacross, Alaska, 99776

Name and Mailing Address of Contact Party:
Mr. Michael McCrum
Bureau of Land Management
222 West 7th Avenue
Anchorage, Alaska 99513

DEC Site Identifiers:
File No.: 255.26.002
Hazard ID.: 24775

Regulatory Authority for Determination:
18 AAC 78 and 18 AAC 75

Site Description and Background
This source area consisted of two USTs at the Tanacross Airfield Site Administrative Facility (TASAF) located on the south side of the Alaska Highway (Figure 1). The USTs were located west of the road leading from the Alaska Highway to the TASAF, and were used to store gasoline (Tank #1) and aviation gasoline (Tank #2). The USTs were registered by BLM and removed in August 1997.

Upon excavation and removal, Tank #1 was found to be empty, and photoionization detector (PID) readings of the interior of the tank were below screening levels. However, at the bottom of the excavation, petroleum odors were noticed and PID readings gave a positive response. A soil samples was taken from the bottom of the excavation, approximately 8 ft below ground surface (bgs), and from the side of the excavation (3 ft bgs). The soil samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO), and lead. Sample results showed no exceedances of ADEC cleanup levels for any analytes (maximum concentrations 0.4 mg/kg total BTEX, 9.0 mg/kg GRO, 89.0 mg/kg DRO, and 23.9 mg/kg lead). The tank excavation was backfilled with native soil.

Tank #2 was found to contain liquid upon removal. A sample of the contents was taken for characterization, and the remaining liquid in the UST was pumped into drums for disposal. Similarly to Tank #1, odors and PID readings at the bottom of the excavation indicated potential soil contamination. Two soil samples were collected at either end of the excavation at 8 ft bgs, and one sample was collected from each of two test pits on both the north and south sides of the excavation. The UST contents and soil samples were analyzed for benzene, toluene, ethylbenzene, xylenes (BTEX), gasoline range organics (GRO), diesel range organics (DRO), and lead. All soil samples showed concentrations below ADEC cleanup levels (maximum concentrations 0.3 mg/kg total BTEX, 6.4 mg/kg GRO, 110.0 mg/kg DRO, and 6.9 mg/kg lead). The tank excavation was backfilled with native soil.

Contaminants of Concern
No contamination above 18 AAC 75.341 (d), Table B2 migration to groundwater DEC cleanup levels was observed in the soil samples taken from the tank excavations, although the contents of Tank #2 exhibited high levels of GRO, DRO, and BTEX.

Cleanup Levels
Contaminants were not found above 18 AAC 75.341 Table B1 and B2 under 40-inch precipitation zone human health or migration to groundwater soil cleanup levels. Additionally, groundwater contaminants were not found above 18 AAC 75.345 Table C cleanup levels. However, the aforementioned cleanup levels are used to evaluate soil and groundwater contamination for assessing cumulative risk and closure for this site (Table 1).

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (mg/L)
DRO	250	1.5
GRO	300	2.2
Lead	400	15

mg/kg = milligrams per kilogram
mg/L = milligrams per liter

Characterization and Cleanup Activities
Further remedial action was not undertaken for the TASAF USTs, because soil samples taken during the tank removal efforts did not exhibit exceedances of migration to groundwater cleanup levels for any analytes. However, immediately after removal of the USTs, groundwater monitoring wells were installed within the source areas of both USTs. A September 1997 groundwater sampling effort was undertaken to verify that groundwater was not contaminated. Groundwater at the Tank #1 source area showed detections of DRO (maximum 0.17 mg/L) and lead (maximum 0.015 mg/L). Xylenes (maximum 0.001 mg/L) and DRO (maximum 0.33 mg/L) were detected in groundwater at the Tank #2 source area, but all detections were below cleanup levels. In 2016, groundwater wells were re-sampled. Similar to 1997 groundwater results, no exceedances of cleanup levels were observed. Thus, no further remedial action was planned for these source areas.

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 soil and groundwater 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, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2. Because this is a LUST site where contamination was detected, but was always below the most stringent ADEC cleanup levels, "De Minimis Exposure" and "Contamination is below the most stringent cleanup levels" is selected for all pathways.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	No contamination was found in surface soils.
Sub-Surface Soil Contact	De Minimis Exposure	Contamination is below the most stringent cleanup levels.
Inhalation – Outdoor Air	De Minimis Exposure	Contamination is below the most stringent cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	Contamination is below the most stringent cleanup levels.
Groundwater Ingestion	De Minimis Exposure	Contamination is below the most stringent cleanup levels.
Surface Water Ingestion	Pathway Incomplete	There were no impacts to surface water.
Wild and Farmed Foods Ingestion	Pathway Incomplete	No contamination was found in surface soils.
Exposure to Ecological Receptors	Pathway Incomplete	Contamination is below the most stringent cleanup levels.

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.

ADEC Decision

Soil and groundwater contamination at the site are at concentrations below the approved cleanup levels suitable for residential land use, and have never exceeded these levels since tank removal in 1997. 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 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 DEC approval in accordance with 18 AAC 78.600(h). A "site" [as defined by 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. (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 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 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 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) 451-2104, or email at kevin.fraley@alaska.gov.

Sincerely,

Kevin Fraley

Digitally signed by Kevin Fraley
Date: 2020.01.06 13:23:21 -09'00'

Kevin Fraley
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit
Eric Breitenberger, DEC
Melody Debenham, BLM

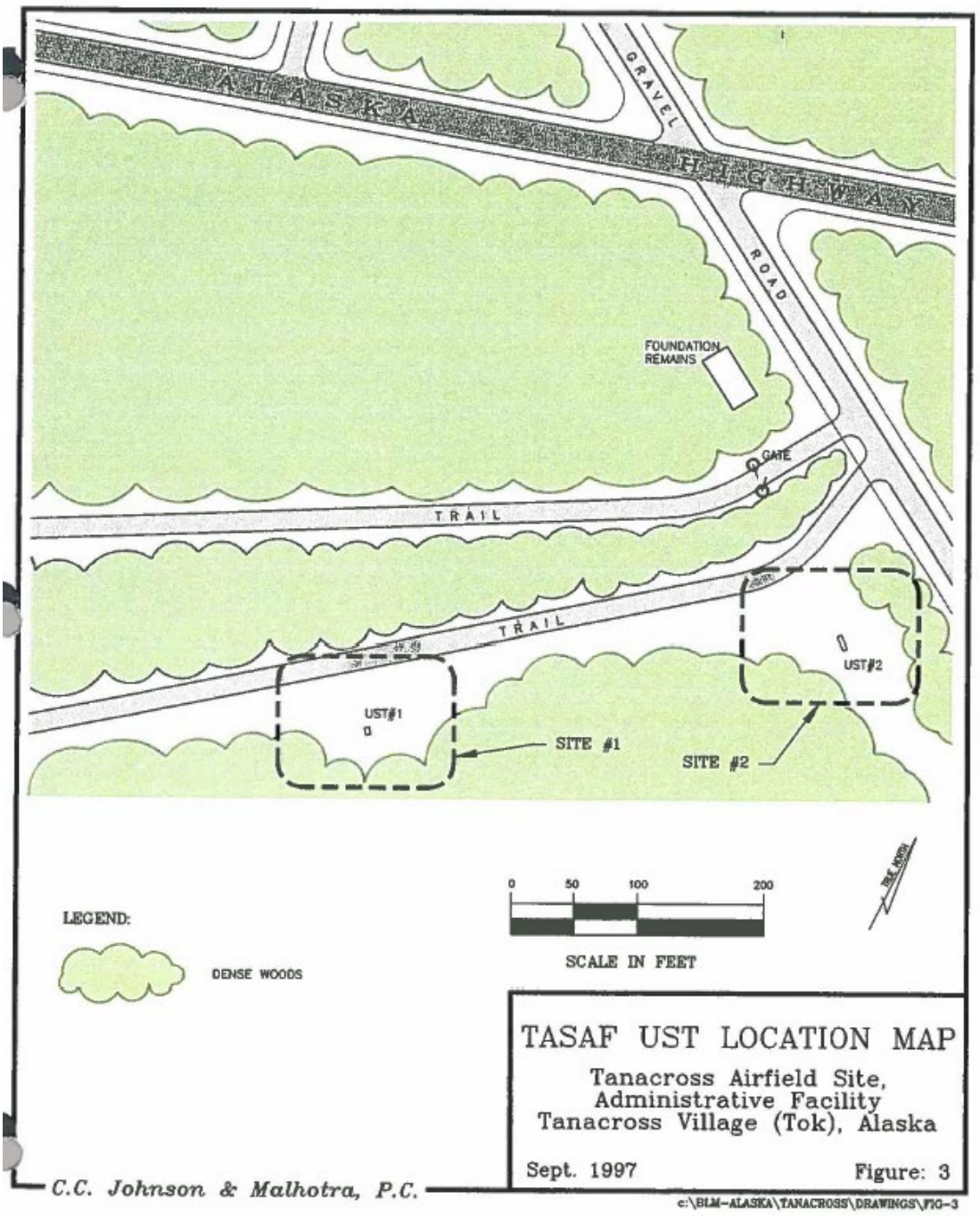

Figure 1: Locations of the TASAF USTs.