



October 8, 2024

Electronic Delivery Only

Lance Raymore
Federal Aviation Administration
222 W 7th Avenue Box 14
Anchorage, Alaska 99513

Subject: **Decision Document: FAA Farewell Station
No Further Action for the Building 300 Dry Well (QS AOC 13)**

Dear Mr. Raymore,

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the Building 300 Dry Well located at the FAA Farewell Station approximately 63 Miles east southeast of McGrath and 195 miles northwest of Anchorage. Based on the information provided to date, it has been determined that the contaminant concentrations remaining at the Building 300 Dry Well 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 No Further Action determination is based on the administrative record for the Building 300 Dry Well Area of Concern (AOC) maintained by DEC. This decision letter summarizes the site history, cleanup actions and levels, and site closure conditions that apply. The FAA Farewell site will remain open in the DEC database until all areas of concern meet the regulatory requirements for a cleanup complete determination.

Site Name and Location:

FAA Farewell Station
Bldg. 300 Dry Well
~63 Miles ESE of McGrath
62°30'21.8" N, 153°53'45.2" W

Name and Mailing Address of Responsible

Party:
Lance Raymore
222 7th Avenue, #14
Anchorage, Alaska 99513

DEC Site Identifiers

File No.: 2548.38.001
Hazard ID.: 1873

Regulatory Authority for Determination

18 Alaska Administrative Code (AAC) 75

Site Description and Background

The FAA Farewell Station is located north of the Alaska Range, at approximately 63 miles east southeast of McGrath and 195 miles northwest of Anchorage. It is on the southern bank of Sheep Creek, which is midway between the Windy Fork and the South Fork of the Kuskokwim River. FAA Farewell Station is accessible by aircraft during the summer months and by land, via winter trails, when snow is present. The U.S. Army constructed the Farewell airfield and most of the buildings in 1942 to provide defense support during World War II defense. In 1986, the FAA abandoned most of the Farewell facilities, but the airfield continues to be used by hunters and hunting guides and as an emergency landing site.

Building 300 was a utility building located approximately 50 feet west of Building 104 (former Yak Hut). A wooden crib-style dry well was located approximately 45 feet north of Building 300. The dry well measured 8 feet by 4 feet by 4 feet deep. The top of the crib was approximately 4.5 feet below ground surface (bgs).

Contaminants of Concern

Soil samples were collected during site investigation and cleanup activities at this site; the samples were analyzed for total petroleum hydrocarbon (TPH) as diesel, total recoverable petroleum hydrocarbon (TRPH), gasoline range organics (GRO), volatile organic compounds (VOCs), pesticides, herbicides, polychlorinated biphenyls (PCBs), and metals. Based on these analyses, the following contaminant was detected above the applicable cleanup levels and is considered a Contaminant of Concern (COC) at this site:

- Mercury

Cleanup Levels

Soil cleanup levels applicable to the site are the 18 AAC 75 Table B1/B2 Human Health/Maximum Allowable cleanup levels for the under 40-inch precipitation zone. DEC has made a determination that the migration to groundwater pathway is incomplete at FAA Farewell due to the depth of groundwater at the site and the fact that groundwater has never been encountered during mobilizations to FAA Farewell. The applicable soil cleanup levels are listed below in Table 1

Table 1 – Method Two, Table B1 Approved Soil Cleanup Levels

Contaminant	Migration to Groundwater (mg/kg)¹	Under 40 Inch Zone Human Health (mg/kg)¹
Mercury (elemental)	0.36	3.1 (19) ²

Notes:

1. mg/kg = milligrams per kilograms
2. This level is based on a soil saturation concentration (C_{sat}) using the equations set out in Procedures for Calculating Cleanup Levels, adopted by reference in 18 AAC 75.340. The C_{sat} value is listed first, followed by the human health risk-based cleanup level in parentheses.

Characterization and Cleanup Activities

In 1992, a background soil sample was collected to evaluate the levels of naturally occurring metals. The analytical results included the following levels: arsenic (8.9mg/kg), cadmium (6.6 mg/kg), chromium (22 mg/kg), copper (44 mg/kg), lead (24 mg/kg), nickel (34 mg/kg), and zinc (75 mg/kg).

The dry well at Building 300 was removed on July 24, 2004. No sludge or debris was observed inside the crib. The wood from the top of the crib was removed and taken to the Farewell Landfill while the bottom layer of cribbing logs was left in place.

The excavated area was backfilled with clean soil and Building 300 was demolished. A soil sample was collected from the limits of the dry well excavation (approximately 9.5 feet bgs) at the south end of the dry well, near the former pipe inlet. The sample was analyzed for GRO, diesel range organics (DRO), and Resource Conservation and Recovery Act (RCRA) metal concentrations. All analytes were below the most stringent Table B2 migration to groundwater cleanup level except arsenic (5.83 mg/kg), mercury (1.36 mg/kg), and chromium (21.7 mg/kg). Arsenic and chromium concentrations were consistent with levels seen throughout Alaska and there are no known anthropogenic sources of these metals at the site.

Removal of the dry well at former Building 300 was also addressed in a letter from EPA to FAA, dated August 12, 2009, in which the EPA advised FAA to continue working with DEC to determine the appropriate next steps at this area of concern.

In 2018, one historical location of the former Building 300 Dry Well was targeted for investigation and delineation. Five soil borings were advanced within and adjacent to the Building 300 Dry Well and the collected soil samples were analyzed for mercury. Three soil borings were advanced 80 to 100 feet northeast of the dry well to collect background samples, which were analyzed for RCRA metals. Mercury contamination (15 mg/kg) was detected in one soil sample collected within the former dry well at a depth of 6 to 8 feet bgs. Contamination was not detected in four step-out soil borings, which were sampled at the same intervals. The site recommendation was that remediation efforts should be implemented to remove the mercury-contaminated soil to manage the human health risks.

Approximately 22.5 tons of mercury-contaminated soil was removed from the former Building 300 Dry Well AOC during initial excavation efforts. A total of 11 confirmation soil samples were collected (three base and eight sidewall) from the excavation limits. In 2021, an additional 20 tons of soil was removed from the areas where previous samples had exceeded cleanup levels. The excavation was extended to approximately 11 feet bgs. Confirmation samples (three base and one sidewall) were collected from the new excavation boundaries and analyzed for mercury. Concentrations of mercury in all final confirmation soil samples were below the cleanup level (0.36 mg/kg), ranging from non-detect to 0.272 mg/kg. The final excavation was roughly circular, with an approximate diameter of 27 feet, and final depth of 11 feet bgs. Analytical results for all overburden stockpile samples were also below the applicable cleanup level. After analytical confirmation, overburden soil was used to backfill the excavation.

Remaining Contamination

The maximum concentrations of contaminants remaining at the site are shown in Table 2. These concentrations are all below their respective approved cleanup levels. Sample locations referred to in Table 2 are shown in Figure 2.

Table 2 - Maximum Remaining Concentration in Soil at 300 Dry Well

Contaminant	Sample Location	Sample ID	Date Sampled	Soil (mg/kg)
Mercury (Elemental)	(Sidewall)	FWL21SS-005-300DW	06/05/2021	0.272

mg/kg = milligram(s) per kilogram

Cumulative Risk Assessment

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 noncarcinogenic risk standard at a hazard index (HI) of 1 across all exposure pathways.

Based on a review of the environmental record, DEC 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 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 or Pathway Incomplete. A summary of this pathway evaluation is included in Table 3.

Table 3 – 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).
Subsurface Soil Contact	De Minimis	Residual contamination in subsurface soil is well below the most stringent 18 AAC 75 Table B1 cleanup levels.
Inhalation – Outdoor Air	De Minimis	Residual contamination is well below the most stringent 18 AAC 75 Table B1 cleanup levels and is not expected to impact outdoor air.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	There are currently no structures at this site, and none are expected to be placed in this location in the future. Residual concentrations are well below the most stringent 18 AAC 75 Table B1 cleanup level and not expected to impact indoor air.
Groundwater Ingestion	Pathway Incomplete	DEC has made a determination that the migration to groundwater pathway is incomplete at FAA Farewell.
Surface Water Ingestion	Pathway Incomplete	Surface water is not located at this site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Contaminants of concern do not have the potential to bioaccumulate in plants or animals.
Exposure to Ecological Receptors	Pathway Incomplete	There are no concerns about ecological receptors.

Notes:

1. “De Minimis Exposure” means that, in DEC’s judgment, the receptors are unlikely to be adversely affected by the minimal volume or concentration of remaining contamination.
2. “Pathway Incomplete” means that, in DEC’s judgment, the contamination has no potential to contact receptors.

DEC Decision

Soil contamination at the 300 Dry Well has been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. DEC approval is required for movement and disposal of soil and/or groundwater subject to the Site Cleanup Rules, in accordance with 18 AAC 75.325(i). Since the cleanup at this AOC met the most stringent cleanup levels of 18 AAC 75.341, Tables B1 and B2, this letter will serve as your approval for future movement and disposal of soil associated with this release.

Movement or use of contaminated material in an ecologically sensitive area or in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited. Furthermore, 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. If, in the future, groundwater from this site is to be used for other purposes, 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 DEC from requiring additional assessment and/or cleanup action if information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Informal Reviews and Adjudicatory Hearings

A person authorized under a provision of 18 AAC 15 may request an informal review of a contested decision by the Division Director in accordance with 18 AAC 15.185 and/or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. See DEC’s “Appeal a DEC Decision” web page <https://dec.alaska.gov/commish/review-guidance/> for access to the required forms and guidance on the appeal process. Please provide a courtesy copy of the adjudicatory hearing request in an electronic format to the parties required to be served under 18 AAC 15.200. Requests must be submitted no later than the deadline specified in 18 AAC 15.

If you have questions about this no further action decision, please feel free to contact Sophia Bracio at (907) 451-1682, or email at sophia.bracio@alaska.gov.

Sincerely,

DocuSigned by:

Jennifer McGrath

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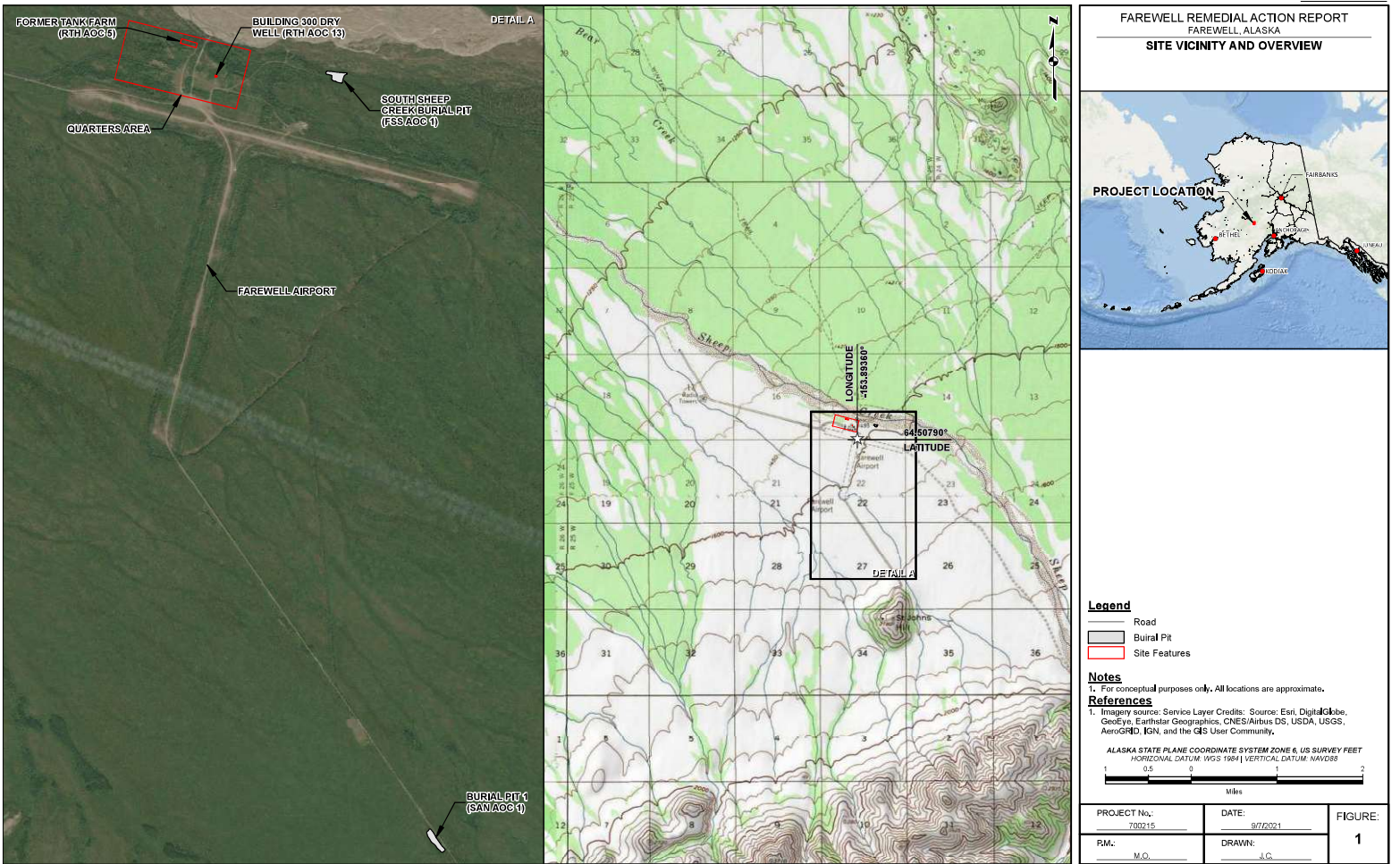
Jennifer McGrath

Environmental Program Specialist

Enclosure(s): Figure 1 – Site Vicinity
 Figure 2 – 2021 Sample Locations and Mercury Results

cc, via email: Sophia Bracio, DEC
 Jamie McKellar, DEC
 Tim Sharp, DEC

Figure 1



1 INCH

FAREWELL REMEDIAL ACTION REPORT
FAREWELL, ALASKA
SITE VICINITY AND OVERVIEW

PROJECT LOCATION

Legend

- Road
- Burial Pit
- Site Features

Notes

1. For conceptual purposes only. All locations are approximate.

References

1. Imagery source: Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community.

ALASKA STATE PLANE COORDINATE SYSTEM ZONE 8, US SURVEY FEET
HORIZONTAL DATUM: WGS 1984 VERTICAL DATUM: NAVD83

1 0.5 0 1 2
Miles

PROJECT No.: 700215	DATE: 8/27/2021	FIGURE: 1
PM: M.G.	DRAWN: J.C.	

Figure 2

