THE STATE of ALASKA
GOVERNOR BILL WALKER

Department of Environmental Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

610 University Avenue
Fairbanks, AK 99709-3643
Phone: 907-451-2143
Fax: 907-451-2155
www.dec.alaska.gov

File: 140.38.002

November 27, 2017

Aemon Wetmore
Federal Aviation Administration, Alaska Section
222 West 7th Avenue, Box 14
Anchorage, AK 99513-7587

Re: Decision Document: FAA Gulkana Flight Service Station
Cleanup Complete Determination

Dear Mr. Wetmore:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (DEC) has completed a review of the environmental records associated with the Federal Aviation Administration (FAA) Gulkana Flight Service Station (FSS) located at Gulkana Airport, Gleanallen. 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 FAA Gulkana Flight Service Station, which is located in the DEC 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:
FAA Gulkana Flight Service Station
Gulkana Airport
Glenallen, AK, 99588

Name and Mailing Address of Contact Party:
Aemon Wetmore
Federal Aviation Administration
222 West 7th Avenue, Box 14
Anchorage, AK 99513-7587

DEC Site Identifiers:
File No.: 140.38.002
Hazard ID.: 26784

Regulatory Authority for Determination:
18 AAC 75

Site Description and Background
The FAA FSS Facility was a 1,400 square foot, single story building located west of runway 14 near the Gulkana Air Strip in Glenallen, Alaska. All infrastructure within the FSS facility has been removed. The

former FSS building was built in the early 1940s and consisted of a wooden frame built on top timber pilings with wood siding painted with white lead-based paint (LBP).

Contaminants of Concern
Concentrations of lead in soil from the exterior of the building were detected in excess of DEC's cleanup level. In addition, as part of the decommissioning activities, two soil samples were collected near the septic outfall and the conduit leading to the outfall. Contaminants of potential concern (COCP) related to the septic outfall were gasoline range organics (GRO), diesel range organics (DRO), residual range organics (RRO), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs) and Resource Conservation Recovery Act (RCRA) metals. Based on results from analyses, lead was the only contaminant in excess of applicable cleanup levels and was the only contaminant of concern at the site.

- Lead

Cleanup Levels
Cleanup levels for lead established in 18 AAC 75.341, Table B1 are applicable for this site. The soil cleanup level for lead at the FAA Gulkana Flight Service Station site is 400 mg/kg.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)
Lead	400

mg/kg = milligrams per kilogram

Characterization and Cleanup Activities
Sampling was initially conducted in August 2016 which indicated lead contamination in soil was present above cleanup levels. An initial excavation removed approximately six inches of soil around the exterior of the building, over an area of approximately 2,050 square feet. A Niton© x-ray fluorescence (XRF) instrument was used to guide excavation activities. After excavation, field screening was conducted over a sampling grid with five foot spacing, or one field screening sample per every 25 square feet (n = 87). Three consecutive XRF readings were collected from each grid. When the average of the field screening results indicated lead exceeded the action level pf 200 parts per million (ppm), additional soil was excavated from the sample grid.

Analytical confirmation samples were collected to confirm the results of field screening data. Twenty-two confirmation soil samples were collected from the excavation floor. Of the 22 confirmation samples and three duplicates collected, two exceeded the cleanup level of 400 mg/kg. The two grids with confirmation sample exceedances were over-excavated and a confirmation sample was collected from each grid after the over-excavation. The results from both samples were below the cleanup level. Lead remaining on site ranges from 4.89–389 mg/kg.

In addition to evaluation of lead in soil, two additional samples were collected for additional analysis. One at the end of the septic outfall, adjacent to the concrete crib, from approximately 12 inches beneath the soil surface, and the other 18 inches below the wooden stave. Analytical samples were collected and tested for gasoline range organics, diesel range organics, residual range organics, volatile organic compounds, semi-

volatile organic compounds, polychlorinated biphenyls, and RCRA metals. Results from the samples collected adjacent to the septic outfall and the wooden stave area did not exceed cleanup levels, with the exception of metals arsenic and chromium, which are expected to be naturally occurring.

Cumulative Risk Evaluation
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 of one 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
Exposure pathways are the conduits by which contamination may reach human or ecological receptors. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Lead in surface soil is no longer present (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	Pathway Incomplete	Lead in the sub-surface is below cleanup level.
Inhalation – Outdoor Air	Pathway Incomplete	Lead in the sub-surface is below cleanup level.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Both buildings have been demolished and lead remaining in soil is below cleanup level.
Groundwater Ingestion	Pathway Incomplete	Lead remaining in soil is below cleanup level.
Surface Water Ingestion	Pathway Incomplete	Lead remaining in soil is below cleanup level.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Lead remaining in soil is below cleanup level and not expected to bioaccumulate.
Exposure to Ecological Receptors	Pathway Incomplete	Lead remaining in soil is below cleanup level and not expected to bioaccumulate.

Note to Table 2: "Pathway Incomplete" means that in DEC's judgment contamination has no potential to contact receptors.

DEC Decision
Soil contamination at the site has 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 DEC approval in accordance with 18 AAC 75.325(i). A "site" as defined by 18 AAC 75.990 (115) 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 75.380 and does not preclude DEC 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) 451-2370, or email at gretchen.caudill@alaska.gov.

Sincerely,

G. Caudill

Digitally signed by Gretchen Caudill
DN: cn=Gretchen Caudill, o=DEC, ou, email=gretchen.caudill@alaska.gov, c=US
Date: 2017.11.27 14:04:23 -09'00'

Gretchen Caudill
Project Manager

Cc (via email): Spill Prevention and Response, Cost Recovery Unit, DEC
Eric Breitenberger, DEC
Kara Kusche, DEC
Lisa Ebbs, FAA Contract Support