



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

**Department of  
Environmental Conservation**

DIVISION OF SPILL PREVENTION AND RESPONSE  
Contaminated Sites Program

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File: 2258.38.017

December 22, 2016

Mr. Jon Schleder  
FAA Alaska Region  
222 W. 7th Avenue, Box 14  
Anchorage, AK 99513

Re: Decision Document: FAA Talkeetna Flight Service Station Comm Tower  
Cleanup Complete Determination

Dear Mr. Schleder:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the FAA Talkeetna Flight Service Station Comm Tower located at Talkeetna, AK. 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 Talkeetna Flight Service Station Comm Tower, 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:**

FAA Talkeetna Flight Service Station Comm Tower  
14333 E 2nd Street  
Talkeetna, Alaska 99676

**Name and Mailing Address of Contact Party:**

Jon Schleder  
FAA Alaska Region  
222 W. 7th Avenue, Box 14

**DEC Site Identifiers:**

File No.: 2258.38.017  
Hazard ID.: 26395

**Regulatory Authority for Determination:**

18 AAC 75

**Site Description and Background**

The Talkeetna Flight Service Station (FSS) dates from May 1940 to present. The communications tower was located adjacent to the FSS and was painted with lead-based paint. Flaking and drips from maintenance activities contaminated the soils with lead around the base of the tower. Prior to de-commissioning the tower in 2015, FAA personnel collected three surface soil samples around the tower foundation and

immediately adjacent to the base of the tower on the south side. Lead concentrations in the samples ranged from non-detect to 2,800 mg/kg.

### **Contaminants of Concern**

Lead in soil is the contaminant of concern.

### **Cleanup Levels**

The cleanup level established in 18 AAC 75.341 (d), Table B2 for lead in soil is 400 mg/kg.

### **Characterization and Cleanup Activities**

No groundwater was encountered during characterization or cleanup activities. Due to the lack of mobility of lead in lead-based paint, it is unlikely that groundwater was impacted from lead contamination in surface soil.

The communications tower was removed from the Talkeetna airport in September, 2015. Upon removal of the tower, the soil was screened using a hand-held X-ray fluorescence instrument (XRF) calibrated for lead to assist in guiding the excavation activities and to determine when or if clean boundaries were reached. Surface soil screening progressed outward from the tower base to a distance of 5 ft. One location at the southeast corner of the foundation exceeded the action level of 200 parts per million (ppm) by XRF. The area east of the foundation was excavated to a depth of approximately 12 inches and a width of approximately 3ft, and the excavated material was placed in a bulk bag for proper disposal. After screening the excavation with the XRF, seven confirmation soil samples were collected. All samples were below the DEC cleanup level for lead, ranging from non-detect to 9.0 mg/kg. Maximum depth of field screening and sample collection for lead in soil was 12 inches below ground surface.

### **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, ADEC 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 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.

**Table 2 – Exposure Pathway Evaluation**

<b>Pathway</b>	<b>Result</b>	<b>Explanation</b>
Surface Soil Contact	De Minimis Exposure	Remaining lead concentrations in soil are below DEC cleanup levels.
Sub-Surface Soil Contact	Pathway Incomplete	No lead was detected in sub-surface soils.
Inhalation – Outdoor Air	Pathway Incomplete	Lead is not a volatile substance.
Inhalation – Indoor Air (vapor intrusion)	De Minimis Exposure	Lead is not a volatile substance.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not encountered during characterization or cleanup activities.
Surface Water Ingestion	Pathway Incomplete	No surface water was near the contaminated area.
Wild and Farmed Foods Ingestion	Pathway Incomplete	The tower is at the airport and not accessible for subsistence use.
Exposure to Ecological Receptors	Pathway Incomplete	Remaining lead concentrations in soil are less than 1/10 <sup>th</sup> of the most stringent DEC 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. “Exposure Controlled” means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

### **ADEC 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 ADEC 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.

This determination is in accordance with 18 AAC 75.380 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 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) 451-2156, or email at [joy.whitsel@alaska.gov](mailto:joy.whitsel@alaska.gov).

Sincerely,

Joy Whitsel  
Project Manager

cc: Eric Breitenberger, DEC