



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: 740.38.021

February 26, 2015

Elizabeth Andringa
BLM Alaska Fire Service
P.O. Box 35005
Ft. Wainwright, AK 99703-0005

Re: Decision Document: BLM Alaska Fire Service Fort Yukon Station
Cleanup Complete Determination

Dear Ms. Andringa:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the environmental records for the Bureau of Land Management (BLM) Alaska Fire Service Fort Yukon Station site located at the Fort Yukon Municipal Airport. The BLM leases the lot at the Fort Yukon airport from the State of Alaska, Department of Transportation & Public Facilities. This decision letter memorializes the site history, cleanup actions, and standard conditions for long-term site management. No further remedial action is required.

Site Name and Location:

BLM Alaska Fire Service - Fort Yukon Station
Track 1, Parcel A
Fort Yukon Municipal Airport
Fort Yukon, Alaska

DEC Site Identifiers:

File No: 740.38.021
Hazard ID: 25596

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

The BLM Alaska Fire Service operates a Wildland Fire Operations Facility at the Fort Yukon Municipal Airport. During the course of operations in the late 1980's and early 1990's, fire retardant was spilled during aircraft loading operations and from several retardant storage tanks. Fire retardant operations ceased in 2000, and the site was decommissioned. The BLM currently uses the site for parking and loading and unloading aircraft supporting Wildland Fire Suppression.

Contaminants of Concern

Based on the type of retardant used and soil sampling results, the contaminant of concern for this site is cyanide.

Cleanup Level

Soil cleanup levels for cyanide are established in 18 AAC 75.341 (d), Table B2. Migration to groundwater soil cleanup levels are applicable at this site. This cleanup level is for free, or physiologically available, cyanide.

Table 1 – Approved Cleanup Level

Contaminant	Soil (mg/kg)
cyanide	27 mg/kg

mg/kg = milligrams per kilogram

Characterization and Cleanup Activities

BLM conducted soil sampling in 2005 at the site to determine the nature and extent of contamination. Nine areas of stained soil were observed. Soil samples from the stained areas were analyzed for total cyanide, with a maximum result of 770 mg/kg. In 2009, additional characterization samples were collected and analyzed for total cyanide and free cyanide. The maximum total cyanide result was 1,510 mg/kg, and the highest free cyanide result was 150 mg/kg.

In 2010, BLM removed approximately 90 cubic yards of cyanide contaminated soil from the site. Results of the confirmation samples collected from the limits of the excavations are below the cleanup level. The soil transported to Columbia Ridge Landfill in Arlington, Oregon for proper disposal.

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

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Confirmation sample results from the 2012 removal action are below the direct contact cleanup level.
Sub-Surface Soil Contact	Pathway Incomplete	Confirmation sample results from the 2012 removal action are below the direct contact cleanup level.
Inhalation – Outdoor Air	Pathway Incomplete	Cyanide is the only contaminant of concern at this site, and it is not an inhalation risk.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	Cyanide is the only contaminant of concern at this site and it is not an inhalation risk.
Groundwater Ingestion	Pathway Incomplete	Confirmation sample results from the 2012 removal action are below the migration to groundwater cleanup level. Contamination

		was limited to the top 1.5 of soil. Depth to groundwater is approximately 9 feet.
Surface Water Ingestion	Pathway Incomplete	Confirmation sample results from the 2012 removal action are below the migration to groundwater cleanup level.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Cyanide is the only contaminant of concern at this site and does not bioaccumulate.
Exposure to Ecological Receptors	Pathway Incomplete	Cyanide is the only contaminant of concern at this site and does not bioaccumulate.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be 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 administrative mechanism in place limiting land or groundwater use, or a physical barrier in place that deters contact with residual contamination.

ADEC Decision

Remaining contamination in soil is below approved cleanup levels. This site will receive a “Closed” 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 78.600(h). 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 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 feel free to contact me at melody.debenham@alaska.gov or (907) 451-5175.

Sincerely,

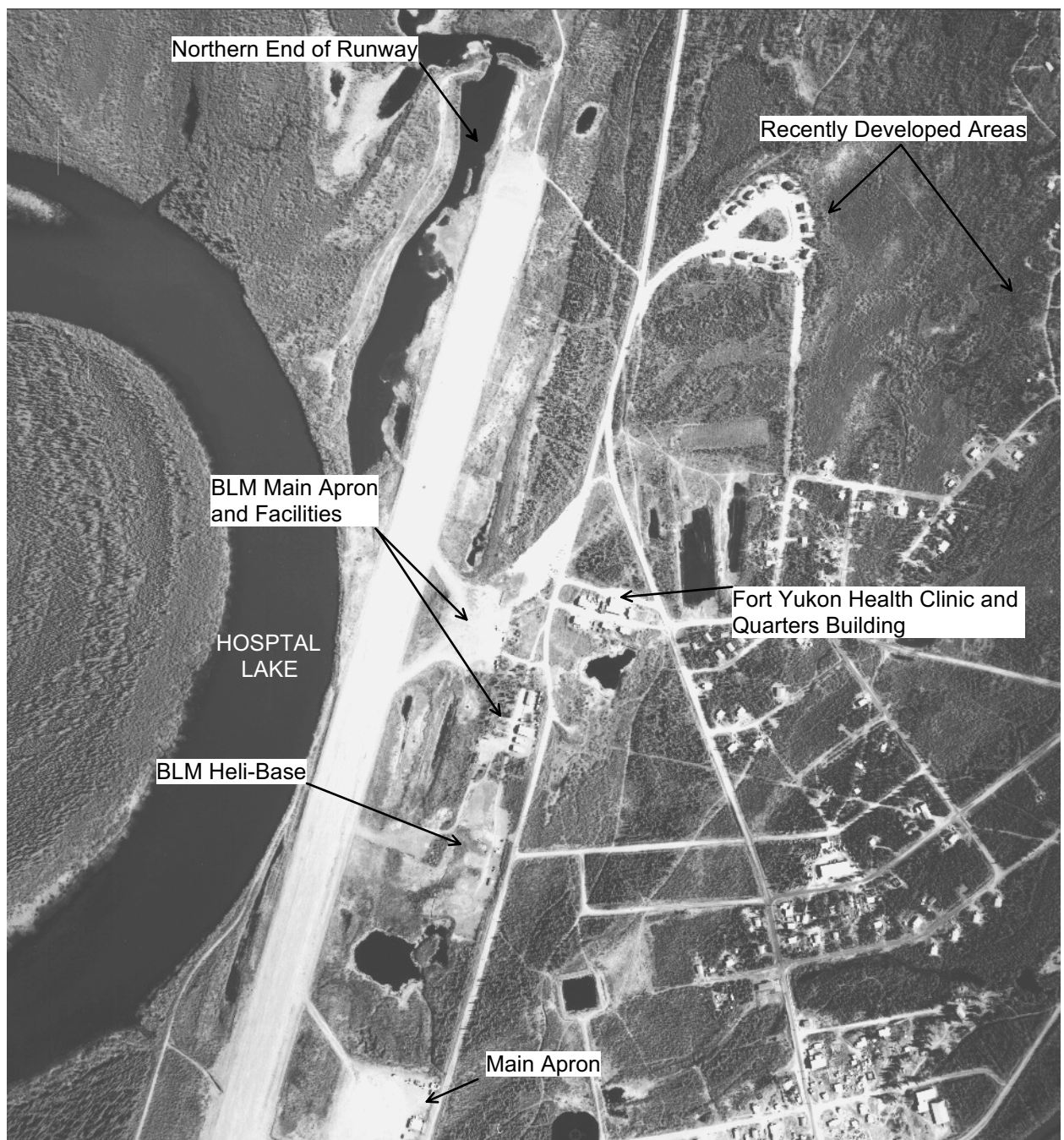


Melody Debenham
Environmental Program Specialist

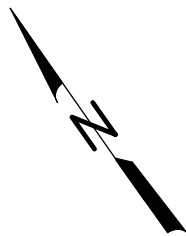
Enclosures: Figure 1 – Fort Yukon Airport Sites (S&W, 2005)
Figure 1 – 2010 Excavation and Sample Locations (ECC, Inc., 2012)

cc: Becky Legg-Merrell, ADOT&PF

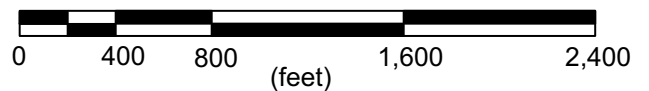
Becky Legg-Merrell
ADOT&PF - Aviation Leasing
2301 Peger Road
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Base Map: Aeromap photo June 2, 2001



APPROXIMATE SCALE: 1 inch = 800 feet



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Alaska Fire Service Fort Yukon Soil Sampling
Fort Yukon, Alaska

FORT YUKON AIRPORT SITES

November 2005

31-1-11285-001

SHANNON & WILSON, INC.
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS

Figure 1

