



THE STATE
of ALASKA
GOVERNOR BILL WALKER

Department of Environmental
Conservation

DIVISION OF SPILL PREVENTION AND RESPONSE
Contaminated Sites Program

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

File No: 900.38.001

September 10, 2018

Via Electronic Mail Only

Beth Astley

Beth.N.Astley@usace.army.mil

CEPOA-PM-C-FUDS

P.O. Box 6898

JBER, AK 99506-6898

Re: Haines-Fairbanks Pipeline MP 343.9
Cleanup Complete

Dear Ms. Astley:

The Alaska Department of Environmental Conservation (ADEC) has reviewed the United States Army Corps of Engineers' (USACE) Project Closure Report for the Haines-Fairbanks Pipeline MP 343.9: Hazard ID: 4467. 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 as long as no new information becomes available that indicates residual contamination poses an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Haines-Fairbanks Pipeline MP 343.9 which is located in the offices of the ADEC in Juneau, Alaska. The site history and cleanup actions were described in the Project Closeout Report Containerized Hazardous, Toxic, or Radioactive Waste Project # F10AK1016-13 Haines-Fairbanks Pipeline Milepost 343.9 Scottie Creek Scraper Trap Near Northway, Alaska, dated July 2018, and is included in this document as an attachment. Cleanup levels for the site are based upon the most conservative ADEC Method Two Soil Cleanup Criteria listed for the Under 40-inch Precipitation Zone Human Health or Migration to Groundwater exposure pathways as listed in Tables B1 and B2 of 18 AAC 75.341.

The Haines-Fairbanks Pipeline MP 343.9 (Scottie Creek Scraper Trap) site is located near Alaska Highway Milepost 1226 on the north side of the highway west of the Scottie Creek Lodge. The site is located less than five miles from the Canadian border. The nearest community to the site is Northway Junction, located approximately 35 miles northwest. The current site use is presumed recreational although it is not a known recreational site. There are no intact, remaining site features. According to

former personnel who worked on the pipeline, significant volumes of fuel were released to the ground during pigging operations.

Petroleum contamination in the soil was discovered by CH2M Hill on behalf of the USACE at the site in 2007 and approximately 20 cubic yards was excavated and disposed of at that time. The base of the excavations did not meet ADEC cleanup levels, therefore, in 2008, the USACE performed a Rapid Optical Screening Tool (ROST) investigation to determine the extent of remaining contamination. The results found limited petroleum contamination. However, due to a lack of correlation between the soil analytical results and the ROST data, additional site investigation was recommended. During the 2016/2017 field effort, Bristol Environmental Remediation Services, LLC excavated the two concrete slabs and approximately 1,700 tons of petroleum contaminated soil which was sent to Organic Incineration Technology in North Pole, AK. The 24 confirmation soil samples collected indicated that all of the contaminated soil above the cleanup levels had been excavated.

Contaminants of Concern

During the site characterization and cleanup activities at this site, samples were collected from soil and analyzed for lead, diesel range organics (DRO), residual range organics (RRO), gasoline range organics (GRO), benzene, toluene, ethylbenzene, and total xylenes (BTEX), and polycyclic aromatic hydrocarbons (PAHs). Groundwater was not encountered during investigation and excavation activities and surface water was not affected by the contamination. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- GRO
- DRO

The migration to groundwater cleanup levels for soil for the under-40 inch precipitation zone apply to the site.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)
DRO	250
GRO	300

mg/kg = milligrams per kilogram

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. Although DRO and GRO are not used in this calculation, 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 contamination was evaluated using ADEC’s Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. The remaining petroleum contamination (DRO and GRO) on site meets the most stringent of 18 AAC 75.340 cleanup levels, therefore, ADEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	There is no surface soil contamination.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination on site meets the most stringent ADEC cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	There is no contamination in the surface nor subsurface soil above inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	There are no buildings on site.
Groundwater Ingestion	Pathway Incomplete	Groundwater was not affected by the contamination.
Surface Water Ingestion	Pathway Incomplete	Surface water was not affected by the contamination.
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	Contamination is not expected to affect ecological receptors.

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.

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.
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 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) 465-5207, or email at Danielle.Duncan@alaska.gov.

Sincerely,



Danielle Duncan
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit

Enclosure: Project Closeout Report Containerized Hazardous, Toxic, or Radioactive Waste Project # F10AK1016-13 Haines-Fairbanks Pipeline Milepost 343.9 Scottie Creek Scrapper Trap Near Northway, Alaska.

Project Closeout Report

Containerized Hazardous, Toxic, and Radioactive Waste
Project # F10AK1016-13
Haines-Fairbanks Pipeline Milepost 343.9
Scottie Creek Scraper Trap
Near Northway, Alaska

July 2018

Prepared By:
U.S. Army Corps of Engineers - Alaska District
Environmental Engineering Branch
P.O. Box 6898
JBER, Alaska 99506-0898

Table of Contents

1.0 INTRODUCTION.....1

2.0 SUMMARY OF SITE CONDITIONS.....1

 2.1 HAINES-FAIRBANKS PIPELINE HISTORY.....1

 2.2 SITE LOCATION AND BACKGROUND.....2

3.0 REMOVAL ACTIVITIES2

4.0 SUMMARY OF REMEDY3

5.0 REFERENCES.....3

LIST OF FIGURES

FIGURE 1 - SITE LOCATION MAP

LIST OF ATTACHMENTS

ATTACHMENT 1 - DECLARATION OF PROJECT CLOSEOUT DECISION

1.0 INTRODUCTION

The Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS) authorizes the cleanup of contamination resulting from past military activities at sites no longer owned by the Department of Defense (DOD) per 10 United States Code (USC) 2701-2707. A hazardous, toxic, and radioactive waste (HTRW) project (F10AK1016-01) was authorized for the Haines-Fairbanks Pipeline (HFP) in 2002 after completing a Findings and Determination of Eligibility (FDE). The results of the FDE indicated that the Haines-Fairbanks Pipeline property met the eligibility requirements for including in the DERP-FUDS program. In 2012, a revised Inventory Project Report (INPR) was completed to modify the existing -01 HTRW project and add 13 containerized hazardous, toxic, and radioactive waste (CON/HTRW) projects (F10AK1016-02 through -14). As part of the 2012 HFP INPR revision, a separate CON/HTRW project (F10AK1016-13) was established for Haines-Fairbanks Pipeline Milepost (PMP) 343.9 (Scottie Creek Scraper Trap), 458.75 (Gate Valve #58), and 555 (Tenderfoot Creek). In 2015, a follow-on INPR revision was completed in part to separate the Gate Valve #58 and Tenderfoot Creek sites into newly-created CON/HTRW projects, leaving the Scottie Creek Scraper Trap as a stand-alone site for the F10AK1016-13 project.

The Scottie Creek Scraper Trap site is included in the Alaska Department of Environmental Conservation's (ADEC) Contaminated Sites Program Database under the name "Haines-Fairbanks Pipeline MP 343.9", with Hazard Identification (ID) #4467 and File ID #900.38.001.

Based on the results of environmental investigations and contaminated soil removal actions at the Scottie Creek Scraper Trap site, the F10AK1016-13 CON/HTRW project of the Haines-Fairbanks Pipeline is being recommended for site closeout by the U.S. Army Corps of Engineers, Alaska District (USACE). This Project Closeout Report is issued by USACE pursuant to ER 200-3-1, paragraph 4-7.4.1.1.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Haines-Fairbanks Pipeline History

The USACE was responsible for pipeline design and construction. The HFP, its five pumping stations, and two associated bulk storage terminals were constructed by private contractors with oversight from USACE over a period of 22 months from 1953 to 1955. The HFP was built to transport fuels from the port at Haines, Alaska, to the military bases in interior Alaska. The pipeline was run by federal civilians supervised by the Petroleum Division on Fort Richardson. Four types of fuel were transported through the pipeline including diesel, automotive gas, jet fuel, and aviation gas; however the majority of the fuel transported was jet fuel (JP4). Much of the 8-inch diameter pipeline was laid on the ground surface, although approximately 96 miles of the HFP near Delta Junction, Alaska, and most of the 42 miles of HFP between the Haines Fuel Terminal and the Canadian border were buried. Other portions of the HFP were also buried, although these intervals were short and intermittent.

Originally, the HFP was constructed with five pump stations located at Haines and Tok, Alaska, and Border, Haines-Junction, and Donjek in Yukon Territory, Canada. Bulk fuel storage facilities

were also constructed at Haines and Tok, Alaska. Six new pump stations were added to the HFP in 1962 in response to increased military fuel demands. The new pump stations were located at Blanchard River, Destruction Bay, and Beaver Creek in Yukon Territory, Canada, and at Lakeview, Sears Creek, and Timber, Alaska.

The Haines-to-Tok section of the pipeline was shut down in July 1971. In 1973, the Tok-to-Eielson section of the HFP was deactivated. The bulk fuel storage facilities in Haines and Tok, Alaska, continued to operate until 1979, when the U.S. Army closed the Tok fuel storage facility. The Tok-to-Fairbanks section of the HFP was briefly reactivated to pump the remaining fuel from the station. All of the fuel was removed from the Tok terminal in July 1979 and the pipeline was shut down. Most of the unused pipeline has been removed or salvaged by non-military entities.

The HFP was plagued with leaks from corrosion, ice damage, and vandalism (e.g., bullet holes) throughout its operational history. Underground portions of the pipeline experienced damage from broken welds and at least one accidental breach from borehole drilling. Ice plugs formed in the pipeline during system startup and resulted in spills at a number of sites; however, most of these ice plugs were located in Canadian sections of the pipeline (CRREL 1972).

2.2 Site Location and Background

The Haines-Fairbanks Pipeline extends a total of 626 miles from Haines, Alaska, through the Canadian provinces of British Columbia and the Yukon Territory, through Tok, Alaska, and up to Fairbanks, Alaska. The pipeline route generally parallels the Haines Highway from Haines, Alaska, to Haines Junction, Yukon Territory. It then follows the Alaska Highway to Delta Junction, Alaska, continuing along the Richardson Highway to Fort Wainwright, Alaska. Approximately 52 percent of the pipeline route lies within United States territory.

Pipeline Milepost 343.9 (Scottie Creek Scraper Trap)

The Scottie Creek Scraper Trap site is located at Haines-Fairbanks Pipeline Milepost 343.9, Alaska Highway Milepost (AHMP) 1226. Global positioning system (GPS) coordinates of the site are 62.671240° North Latitude and 141.064770° West Longitude (in decimal degrees). The site is on the north side of the Alaska Highway, west of the Scottie Creek Lodge entrance and under ownership of the Alaska Department of Natural Resources (DNR).

3.0 REMOVAL ACTIVITIES

Several environmental investigations and cleanup activities have occurred at various locations along the HFP since its closure in 1973. The most recent activities concerning the Scottie Creek Scraper Trap (SCST) site occurred in 2007, 2008, and 2017.

In 2007, USACE performed investigation activities at the site, including excavating test pits, performing field screening, and collecting soil samples for laboratory analysis. Approximately 20 cubic yards (cy) of impacted soil were excavated and removed from the site during excavation of two test pits (approximately 10 cy per test pit). The test pits were excavated adjacent to the remaining concrete slabs associated with the scraper trap. Results of the investigation indicated that soil contamination that exceeded ADEC cleanup levels for diesel range organics (DRO) and

gasoline range organics (GRO) was present at the site from depths of approximately 1 foot below ground surface (bgs) to over 9 feet bgs near the base of both test pits. The horizontal and vertical extents of contamination were not delineated during this investigation (USACE 2008).

In 2008, USACE performed a rapid optical screening tool (ROST) investigation of the SCST, including the advancement of eight ROST probes to depths up to 20 feet bgs. Results of the investigation did not indicate the presence of significant petroleum contamination, even though ROST probes were advanced in the same locations as the 2007 test pits. The ROST Site Investigation Report concluded that the extent of remaining contamination at the SCST site appeared to be limited, though due to the lack of correlation between the soil analytical results and ROST investigation results, the site was recommended for further investigation (USACE 2010).

USACE completed a soil removal effort at the site in 2017, removing approximately 1,720.5 tons of contaminated soil, along with the two concrete slabs associated with the SCST. Confirmation sampling of the final excavation boundaries demonstrated that all soil in excess of applicable ADEC soil cleanup levels had been removed. The excavation was backfilled and the site contoured to pre-existing grade upon receipt of the final confirmation soil samples. Based on the results of this effort, the site was recommended for closure (USACE 2018).

4.0 SUMMARY OF REMEDY

Based on the results of the aforementioned investigation efforts and cleanup activities, USACE recommends that no further action is required at the Scottie Creek Scraper Trap site (F10AK1016-13). All soil in excess of applicable ADEC soil cleanup levels has been removed and there is no remaining risk to human health and the environment at the site. This project closeout determination may be reviewed and modified in the future if any new information becomes available which indicates the presence of eligible CON/HTRW that may cause a risk to human health or the environment.

5.0 REFERENCES

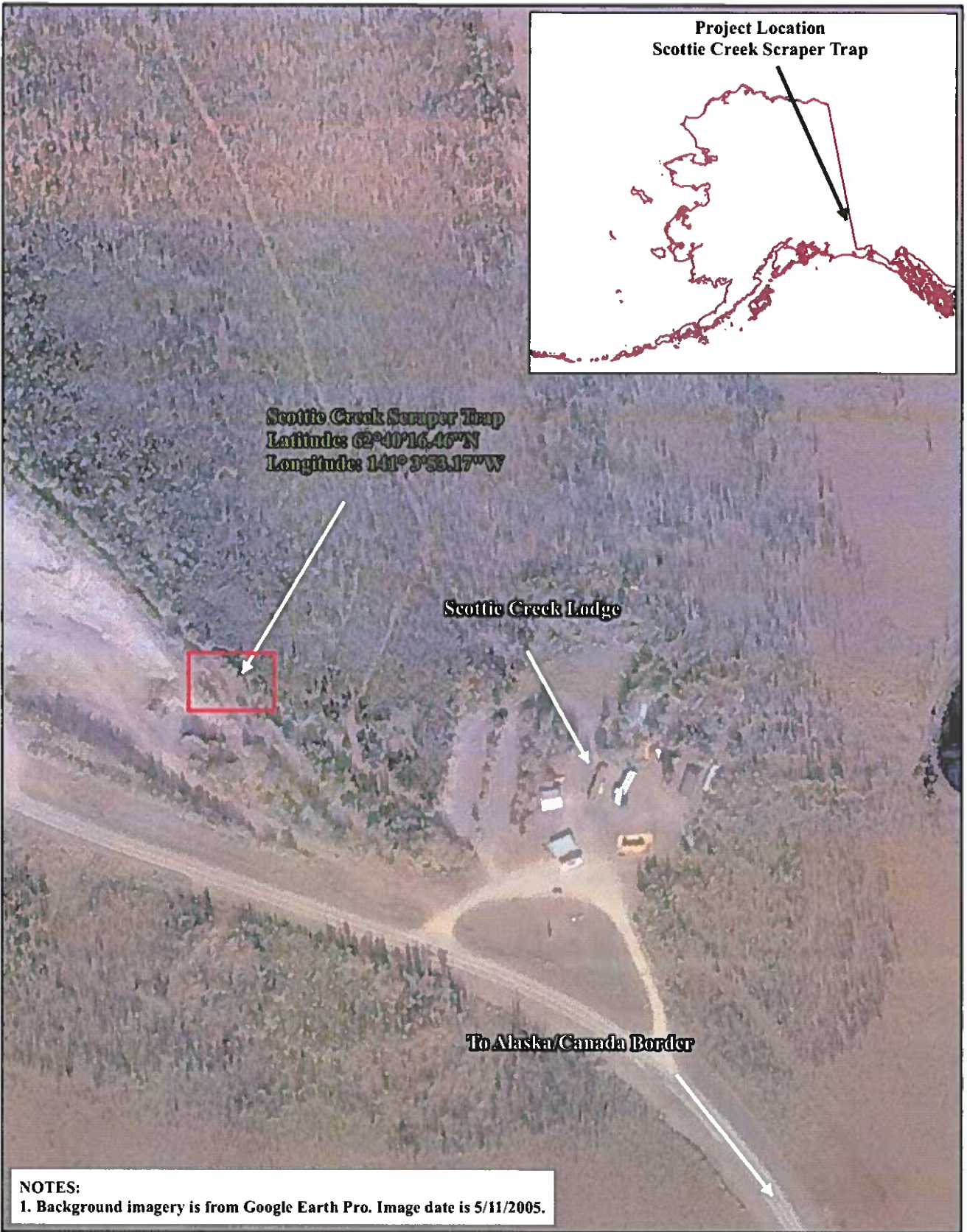
CRREL, 1972. Preliminary Investigations of Petroleum Spillage, Haines-Fairbanks Military Pipeline, Alaska, April. (F10AK101601_01.09_0501_a)

USACE, 2008. 2007 Haines-Fairbanks Pipeline Site Investigation. July. Prepared by CH2M HILL. (F10AK101601_01.09_0505_a)

USACE, 2010. 2008 ROST Site Investigation Report Final, March. (F10AK101601_01.09_0503_a)

USACE, 2018. 2017 Source and Contaminated Soil Removal Report. March. Prepared by Bristol Environmental Services. (F10AK101613_07.08_0500_a)

Figures



<p>0 115 230 FEET</p>	LOCATION AND VICINITY MAPS	
<p>U.S. Army Corps of Engineers Alaska District</p>	SCOTTIE CREEK SCRAPER TRAP F10AK1016-13 NEAR ALASKA/CANADA BORDER	FIGURE 1

Attachment 1

Declaration of Project Closeout Decision

DECLARATION OF PROJECT CLOSEOUT DECISION
For
FORMERLY USED DEFENSE SITE CON/HTRW PROJECT
PIPELINE MILEPOST 343.9 (SCOTTIE CREEK SCRAPER TRAP - F10AK1016-13)
NORTHWAY, ALASKA

STATEMENT OF BASIS

Authority for the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS) for Containerized Hazardous Toxic Radiological Waste (CON/HTRW) projects is derived from the Defense Environmental Restoration Program, 10 United States Code (USC) 2701-2707. The decision to close out the CON/HTRW project (F10AK1016-13) is based on the 2018 Project Closeout Report and the results of site investigations and removal activities completed on behalf of the United States Army Corps of Engineers – Alaska District (USACE-AK) in 2007, 2008, and 2017.

SITE DESCRIPTION AND HISTORY

The Haines-Fairbanks Pipeline (HFP) extends a total of 626 miles from Haines, Alaska, through the Canadian provinces of British Columbia and the Yukon Territory, through Tok, Alaska, and up to Fairbanks, Alaska. The pipeline route generally parallels the Haines Highway from Haines, Alaska, to Haines Junction, Yukon Territory. It then follows the Alaska and Richardson Highways to Delta Junction, Alaska, continuing along the Richardson Highway to Fort Wainwright, Alaska. Approximately 52 percent of the pipeline route lies within United States territory.

An original HTRW project (F10AK1016-01) was authorized for the HFP in 2002 after completing a Findings and Determination of Eligibility (FDE). The results of the FDE indicated that the Haines-Fairbanks Pipeline was formerly used by the Department of Defense (DOD) and eligible for cleanup under the DERP-FUDS. In 2012, a revised Inventory Project Report (INPR) was completed to modify the existing -01 HTRW project and add 13 containerized hazardous, toxic, and radioactive waste (CON/HTRW) projects (F10AK1016-02 through -14). As part of the 2012 HFP INPR revision, a separate CON/HTRW project (F10AK1016-13) was established for Haines-Fairbanks Pipeline Milepost (PMP) 343.9 (Scottie Creek Scrapper Trap), 458.75 (Gate Valve #58), and 555 (Tenderfoot Creek). In 2015, a follow-on INPR revision was completed in part to separate the Gate Valve #58 and Tenderfoot Creek sites into newly-created CON/HTRW projects, leaving the Scottie Creek Scrapper Trap as a stand-alone site for the F10AK1016-13 project.

DESCRIPTION OF THE SELECTED REMEDY AND IMPLEMENTATION

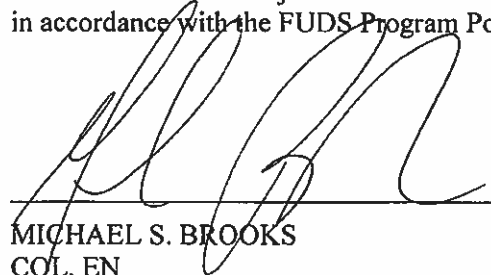
Based on the results of environmental investigation efforts in 2007 and 2008, as well as the completion of contaminated soil removal and confirmation soil sampling efforts in 2017, USACE-AK has determined that no further action is required at the Scottie Creek Scrapper Trap site.

DECLARATION

In accordance with the Defense Environmental Restoration Program for Formerly Used Defense Sites, the U.S. Army Engineer District, Alaska, has completed all CON/HTRW activities at the Haines-Fairbanks Pipeline Milepost 343.9 – Scottie Creek Scrapper Trap FUDS (F10AK1016-13), located near Northway, Alaska. This Declaration of Project Closeout Decision supports the

conclusion that all known sources of CON/HTRW have been remediated. This decision may be reviewed and modified in the future if any new information becomes available which indicates the presence of eligible CON/HTRW that may cause a risk to human health or the environment.

This Declaration of Project Closeout Decision has been prepared and approved by the undersigned in accordance with the FUDS Program Policy, Engineer Regulation (ER) 200-3-1, May 10, 2004.


_____ Date 10 AUG 18
MICHAEL S. BROOKS
COL, EN
Commanding