



Civil Works Branch

Public Notice

Alaska District
U.S. Army Corps of Engineers

Date July 17, 2007 Identification No. ER-07-023
Please refer to the identification number when replying.

Environmental Assessment and Finding of No Significant Impact
for
Tok Alaska Communications System (ACS) Radio Relay Site (RRS)
Tok, Alaska

The U.S. Army Corps of Engineers, Alaska District is proposing to investigate and potentially remove an unknown number of drums that allegedly contain the herbicide Agent Orange that were allegedly buried under a former military equipment yard in Tok, Alaska during 1968 or 1970. A 2006 geophysical survey of the site, now used by a commercial construction company, discovered magnetic anomalies that may indicate buried metal drums. A removal action is planned for the summer of 2007. If Agent Orange or other contaminant of military origin is found during the investigation, all removal and transportation of the contaminant or contaminated soil will be immediately coordinated with the Alaska Department of Environmental Conservation and U.S. Environmental Protection Agency as appropriate.

The Corps has prepared a draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) for this action. These documents state that the proposed action will not affect endangered species, wetlands, or cultural resources in the area.

Please submit comments regarding the proposed action to the address below no later than 30 days from the date of this public notice. No public meeting for this action is scheduled. If you believe a public meeting is needed, please explain in writing why a meeting is necessary and mail it to the address below during the 30-day review period. The FONSI will be signed upon review of comments received and resolution of significant objections.

U.S. Army Engineer District, Alaska
ATTN: CEPOA-EN-CW-ER (Floyd)
P.O. Box 6898
Elmendorf AFB, Alaska 99506-0898

For more information about the project please contact Christopher Floyd of the Environmental Resources Section at (907) 753-2700 or electronically to the e-mail address: Christopher.B.Floyd@poa02.usace.army.mil.

Guy R. McConnell
Chief, Environmental Resources Section

Enclosure



**US Army Corps
of Engineers**

Alaska District

Environmental Assessment and Finding of No Significant Impact

Alaska Communications System Radio Relay Station Removal Action Tok, Alaska

Defense Environmental Restoration Program
Formerly Used Defense Sites



July 2007

FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969, as amended, the U.S. Army Corps of Engineers, Alaska District, has assessed the environmental impacts of the following action:

Removal Action Alaska Communications System (ACS) Radio Relay Site (RRS), Tok, Alaska

The U.S. Army Corps of Engineers (Corps) has identified a site that may contain drums of Agent Orange, a Vietnam War era herbicide, buried in a former-military equipment maintenance and storage yard in Tok, Alaska. The site is currently being used by a commercial construction company to store construction equipment. An unnamed former Department of Defense (DOD) employee has alleged that drums containing the herbicide were buried at the site in 1968 or 1970. Geophysical surveys, performed in response to the allegation, located subsurface anomalies that could be buried drums.

The Corps has been authorized to clean up military-related hazardous materials and wastes and remove unsafe structures and debris with military origins from areas formerly used by the DOD. The purpose of this removal action is to reduce known and potential risks to human health and the environment.

The ACS RRS removal action at Tok, Alaska will include the excavation of areas that appear to contain buried materials and debris that potentially include drums containing Agent Orange; investigations and testing to determine the nature, magnitude, and extent of the hazards present; and the removal, treatment and/or disposal of hazardous materials, wastes, and contaminated soil and debris with military origins. The work will be performed during the summers of 2007 and/or 2008. An environmental assessment (EA) and work plan describe the action and the anticipated environmental effects in more detail.

The site is within a developed area and is not within a Coastal Zone Program management area. It will not affect wetlands, waterbodies, threatened or endangered species or their critical habitat, or any known cultural or archeological resources or historical property in or eligible for inclusion in the National Register of Historic Places.

The environmental assessment prepared for this action supports the conclusion that this action will not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not necessary for the removal activities proposed at the former military equipment yard in Tok, Alaska.

Kevin J. Wilson
Colonel, Corps of Engineers
District Commander

Date

Environmental Assessment
for
Alaska Communications System (ACS) Radio Relay Site (RRS),
Tok, Alaska
F10AK0234

1.0 Purpose and Need of Proposed Action

This environmental assessment has been prepared for proposed efforts to locate, investigate, and remove an unknown number of buried drums that are alleged to contain the herbicide, “Agent Orange” at the ACS RRS in Tok, Alaska. Agent Orange is a 1:1 mixture of the herbicides 2,4,D and 2,4,5-T. The proposed action is based on the memory of an unnamed former DOD employee who alleges that several drums containing Agent Orange were buried on the site during 1968 or 1970. The location of the burial is described as being “about 50 yards distant in about a 1:00 to 2:00 o’clock position from the back door of a repair shop in the center of the yard”. The drums were said to have been rolled to the center of a 50 to 75-foot-long trench excavated with a D-6 dozer and buried. It is not known if the dozer crushed or otherwise damaged the drums during the alleged burial. Figure 1-1 shows the general location of the site. The alleged burial site is under a gravel pad owned by a commercial construction company and used to store heavy equipment.

A geophysical investigation conducted in June 2006 used ground-penetrating radar and electromagnetic techniques to survey the site (R&M Consultants 2006). A mass consistent with a group of metal drums was detected approximately 6 to 7 feet underground and designated “A6” (figure 1-2). No samples have been collected to determine if contamination exists.

If drums containing Agent Orange or another herbicide are present, and they are damaged or have leaked, the soil near the drums could be contaminated and could pose a potential risk to human health and the environment. This project proposes to investigate the anomalies detected by a geophysical survey and remove any drums, debris, and contaminated soil.

At least 15 herbicides other than Agent Orange were used by the military in the area, starting about 1962. Agent Orange was primarily used from about 1968 through 1971. Most military herbicides were coded with colored bands that marked the drums, and most of them contained 2,4,D and or 2,4,5-T. Agent Orange and Super Agent Orange were identified (and named after) the orange band used to mark the drums. Early health concerns about Agent Orange focused on contamination with TCDD, or 2,3,7,8 Tetrachlorodibenzo-p-dioxin. TCDD is one of a family of dioxins, and was a by-product of the Agent Orange manufacturing process. The Agent Orange used in Vietnam was allegedly contaminated with TCDD. TCDD cannot be broken down by sunlight and is not biodegradable. It does not dissolve in water and can attach to particles of soil. It can accumulate in the tissue of animals including humans.

If the investigation discovers hazardous materials or debris, the removal action would reduce a risk to human health and to the environment from former military activities in the community of Tok, Alaska.

2.0 Alternatives

2.1 No Action Alternative

No work would be conducted under the No-Action alternative. If present, drums, possibly containing Agent Orange or other hazardous substances, materials or wastes, and possibly contaminated soil and debris would remain on the project site possibly continuing to pose a safety and health risk to humans and the environment in the Tok area.

2.2 Description of the Proposed Action

The proposed action would excavate down to the subsurface anomalies detected during the geophysical survey, and remove any drums, hazardous materials, and associated contaminated soil.

If drums containing Agent Orange or another contaminant were found, the contractor conducting the work would perform testing to identify the contaminants and determine treatment, transportation and disposal options, and obtain the necessary permits to remove and transport the materials to an appropriate approved disposal facility. Drums containing liquid would be placed in over packs and handled and transported according to industry, State, and Federal standards. Contaminated empty drums would be cleaned and crushed for disposal. Rinsate from cleaning and decontamination would be collected and tested before disposal in accordance with ADEC requirements.

All drums found would be inspected for leaks or damage. Soil under the drums would be inspected for staining and odor, and tested for contamination. If contaminated soil was found, it would be packed into poly super sacks and transported to an approved treatment or disposal facility.

After the drums and contaminated soil were removed from the site, the holes would be filled with clean soil from a local source and contoured to pre existing conditions. The site is not currently vegetated and thus it would not be re vegetated.

3.0 Existing Conditions

Indigenous people have occupied the general Tok area for a few thousand years, but the modern community of Tok was founded at the junction of the Alaska Highway and the Tok Cutoff to the Glenn Highway as a Road Commission camp in 1942. Tok is approximately 205 miles southeast of Fairbanks and 328 highway miles northeast of Anchorage. Tok is an unincorporated community with a population of 1,435. Although the Tok area was traditionally Athabascan, the current population of Tok is primarily non-Native.

The alleged burial site is about one or two city blocks east of the junction of the Alaska Highway and the Tok Cutoff. It is unclear how long or often the site had been used by the military. Military construction in the Tok area began with construction of the Alaska Highway and radio relay station in the 1940s, and continued through the 1950s and 1960s with construction of a fuel pipeline and pump station and a White Alice communication station. The site was used by the military as an equipment yard up to the late 1960s or early 1970s.

3.1 Physical Environment

Tok is in the eastern interior of Alaska and is part of the Yukon Region, Tanana Subregion, and Tanana lowlands. The lowland areas are known to contain discontinuous permafrost and possible continuous permafrost at greater depths. The Tanana River, its flood plain, and rolling hills dominate the topography of the region.

3.1.1 Climate

The climate at Tok is characterized by light precipitation, cold winters, and warm summers, with average low temperatures in January of -32 °F and average high temperatures in July of 72 °F. Extreme temperatures have been measured from as low as -80 °F to as high as 99 °F. Ice fog in the winter and smoke from wildfires in the summer are the only regional air quality and visual obscuration problems. Tok is not in or near a non-attainment area, and there are no unusual local air quality restrictions.

3.1.2 Geology and Soils

The Tanana lowlands are underlain with gravel, sand, and silt. Scattered low hills of granite, ultramafic rocks, and probable Precambrian schist rise above the alluvial landscape. Tertiary conglomerate in the foothills of the Alaska range plunges below the lowlands. Till deposited by glaciers as low moraine ridges and featureless sheets forms a complex mixture of unsorted gravel, sand, silt, and clay over the Tok area.

Permafrost in the Tok area is discontinuous. The frozen ground generally consists of coarse to fine-grained deposits. Maximum determined depth to the base of the permafrost is 265 to 390 feet below ground surface. South-facing slopes tend to be largely free of permafrost.

3.1.3 Hydrology

Groundwater in the region is contained in the alluvial deposits of coarse-grained materials. It is found at depths ranging from 50 to 90 feet below the ground surface.

Unconfined groundwater generally is found in unconsolidated alluvium in the valleys and in fractured bedrock beneath high slopes and ridges. Artesian conditions may occur in the lower slopes where permeable beds are confined by permafrost or by impermeable sedimentary beds. Flowing artesian wells are common along the lower hill slopes. Groundwater flow paths are influenced by the discontinuous permafrost, which acts as a downward and vertical barrier. In general, groundwater flows north toward the Tanana River.

There are no central water or sewer systems in Tok. Most homes use individual wells at 50- to 125-foot depths and individual septic tanks.

3.2 Biological Environment

3.2.1 Vegetation

Vegetation in the Tok area generally is characterized by extensive stands of black spruce in lower areas and by mixed stands of black spruce, tamarack, birch, and aspen in higher areas. The understory includes willows and lowbush cranberry rooted in a thick mat of sphagnum mosses and sedges. Underlying the lowland spruce forests are loams, silt loams, or stratified silt loam and fine sand. Fibrous peat also extends into the permafrost in some areas.

The proposed project site was developed as an equipment yard on a gravel pad by the military during the White Alice construction in 1962. An equipment garage and repair shop is on the property. Small numbers of black spruce are in the area, but there is no significant vegetation on the property (figure 1-3).

3.2.2 Fish and Wildlife

There are no streams, ponds, lakes, or other water bodies at or immediately adjacent to the proposed project site.

Tok is within the summer range of caribou and the year-round range of moose, bears (brown and black), wolves, and wolverine. The lowlands between Tok and Tanacross are a moose winter concentration area, and although moose may wander on the proposed project site during winter, there is no indication that the site is especially valuable or uniquely important to moose or any other large wildlife species.

Tok is in a major waterfowl migratory corridor, but the site is an equipment yard and there is no waterfowl habitat on the site. Raptors also migrate through the flyway above Tok and may use the Tok area for feeding and resting. Raptors are not known to use the proposed project site.

4.0 Threatened and Endangered Species

The U.S. Fish and Wildlife Service was consulted regarding this action. There are no threatened or endangered species in Tok and none are known to migrate through the area. Tok is well south of the migration route of the endangered Eskimo curlew (Gollop et al. 1986).

5.0 Archaeological and Historical Resources

Coordination with the State Historical Preservation Officer (SHPO) for this action has been completed. The SHPO has concurred that no historic properties will be adversely affected in a letter dated April 21, 2004 (File No: 3130-1R COE/Environmental). The maintenance shed on the site is eligible for the National Register of Historic Places under Criterion A (events) because of its association with Cold War activities (AHRS 1981), but would not be touched or otherwise harmed by this investigation and potential removal action.

6.0 Coastal Zone Management.

Tok is not within a coastal zone management area (ADNR 2004).

7.0 Wetlands and Special Aquatic Sites

The project site has at least a 35-year history of development and commercial-type use. It is on leveled and filled land. There are no wetlands or special aquatic sites associated with this removal action and no 404(b)(1) evaluation is necessary.

8.0 Environmental Consequences

8.1 No Action Alternative

The no-action alternative would result in no investigation or removal at the alleged drum burial site. Concerns related to potential drums of Agent Orange and any associated risks to humans and the environment would continue. If intact drums of contaminants are present, the risk of leakage would grow over time. Agent Orange and possibly contaminated soil could remain on site where it would continue to pose a risk to human health, safety, and to the environment.

8.2 Consequences of the Proposed Action

Investigation of the alleged burial site, removal of drums containing Agent Orange or other hazardous materials, and removal of any contaminated soil found, would remove a potential human health and safety risk from the environment.

8.2.1 Effects on the Physical Environment

The proposed action is not expected to have any significant effects on the physical environment. If present, the drums and contaminated soil would be located, tested, removed from the environment, and the surrounding gravel pad regraded to its pre-existing contours.

8.2.2 Effects on the Biological Environment

The proposed action is not expected to have any significant effects on the biological environment. It would not affect any wetlands or special aquatic sites.

8.2.3 Threatened and Endangered Species

The proposed action is not expected to have any significant effects on any listed or candidate species.

8.2.4 Historical and Archeological Resources

The proposed action is not expected to have any significant effects on any historical or archeological resources. No World War II buildings or distinguishable features would be affected by this action.

9.0 Conclusion

This FUDS investigation and potential removal action would remove a potential risk to human health from the environment with minimal or no effect on the environment. As a result of this assessment, the Corps concludes that this removal action would have no significant, lasting, or adverse impacts to the environment.

The removal action is not expected to impact cultural or historic resources in the Tok area.

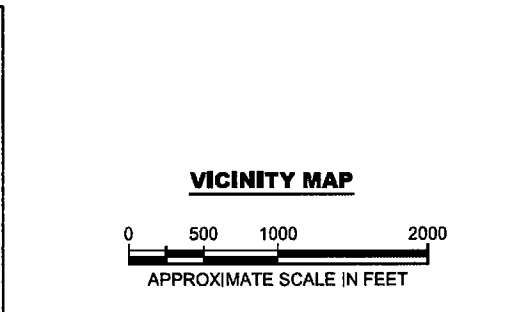
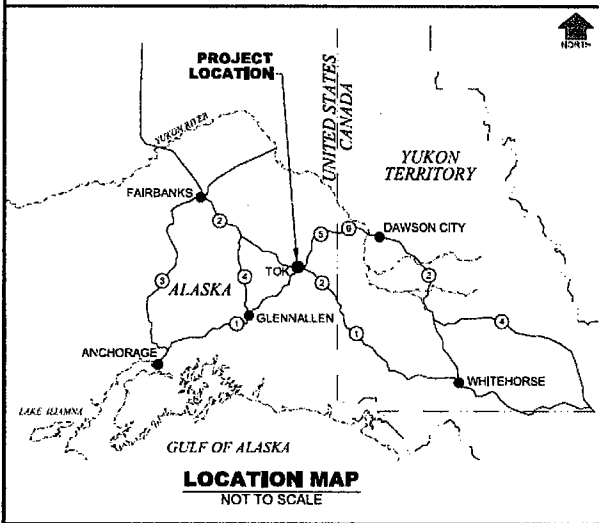
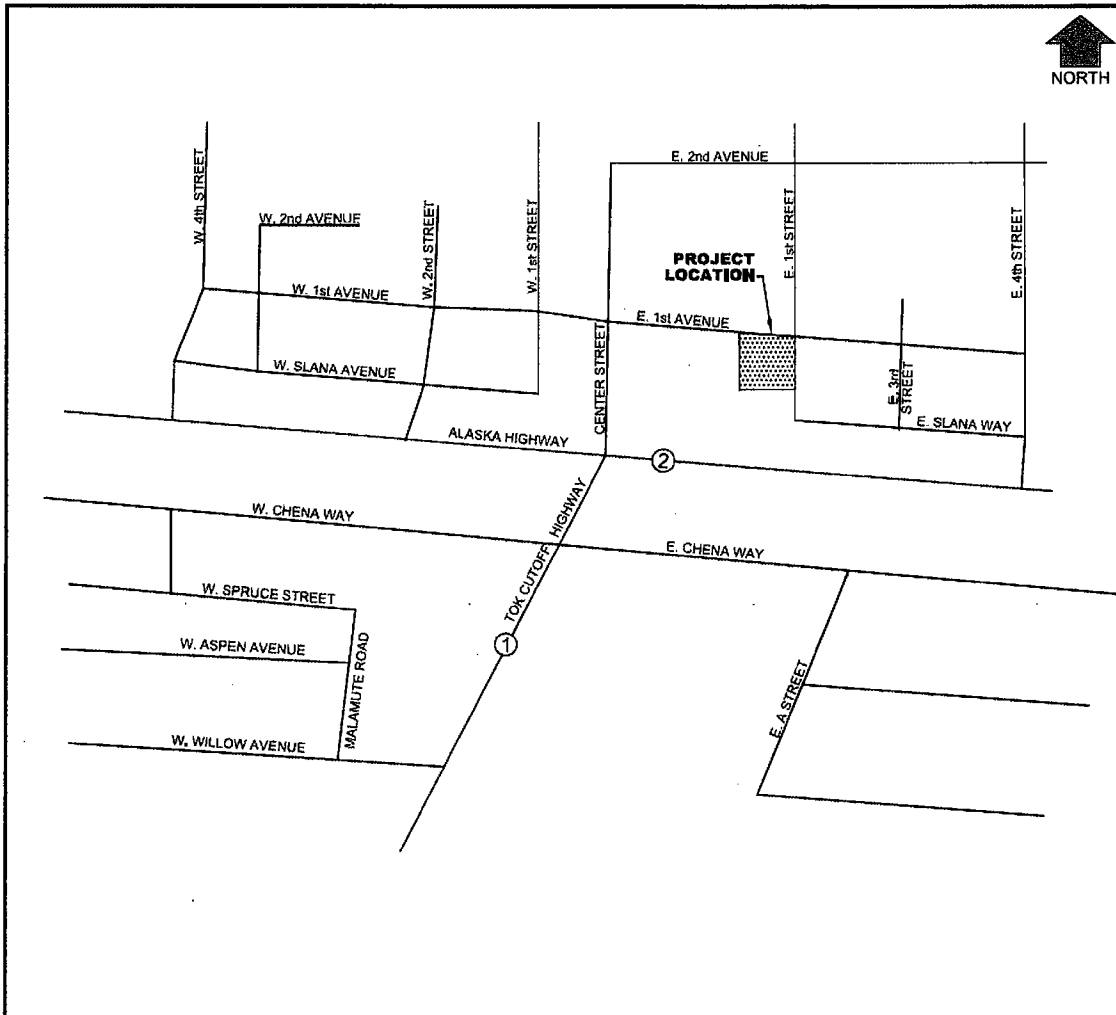
This assessment supports the conclusion that the proposed project does not constitute a major federal action significantly affecting the quality of the human environment, and therefore, a finding of no significant impact will be prepared.

10.0 Preparers

Larry Bartlett, biologist with the Environmental Resources Section, Alaska District Corps of Engineers, prepared this environmental assessment. Margan Grover, archaeologist provided the historical and archeological assessment. This environmental assessment was edited by Ms. Diane Walters, writer-editor.

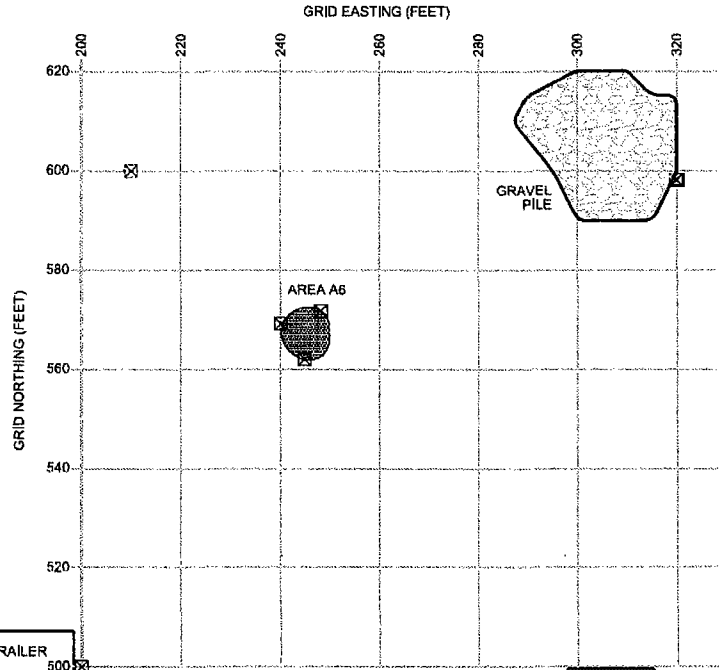
11.0 Literature Cited

- ADNR. 2006. Alaska's Coastal Zone Map. Alaska Coastal Zone Management Program. Alaska Dept. of Natural Resources (ADNR) (<http://www.dnr.state.ak.us/acmp/GIS/IndexMap.pdf>.)
- ADNR. 2004. Letter dated April 21, 2004, Alaska Dept. of Natural Resources (ADNR), Division of Parks and Outdoor Recreation, Office of History and Archaeology, Subject: Remove drums that may contain herbicides, Tok Junction ACS Station , Tok, Alaska.
- AHRS. 1981. Alaska Historic Resources Survey. On file at the Office of History and Archaeology, Anchorage, Alaska.
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- Gollop, J.B., T.W. Barry, and E.H. Iversen. 1986. Eskimo curlew a vanishing species? Saskatchewan Natural History Society Special Publication No. 17. Regina, Saskatchewan. Northern Prairie Wildlife Research Center Home Page.
- R&M Consultants. 2006. Geophysical Site Investigation ACS RRS Site. Tok, Alaska. Contract No. W911KB-05-D-0004. Prepared for: U.S. Army Corps of Engineers, Alaska District.



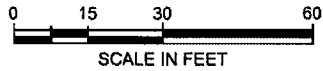
**ACS RRS SITE
PROJECT LOCATION AND VICINITY MAPS**
TOK, ALASKA

PROJECT MANAGER: J. McVay	FILE NAME: Fig 1-1 Location & Vicinity Maps.dwg	DATE: July 12, 07
JE AV	LAYOUT TAB: Fig 1-1 Location & Vicinity Maps	FIGURE NO.: 1-1
	FILE LOCATION: ERS-JR \05F50501	



LEGEND

- SURVEY STAKE
- MAJOR ANOMALY (STAKED)
- SITE INVESTIGATION GRID




ACS RRS SITE MAP		
TOK, ALASKA		
PROJECT MANAGER: J. McVay	FILE NAME: Fig 1-2 Site Map.dwg	DATE: July 12, 07
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Figure 1-3: Photograph of the Tok ACS site, taken 26 May 2006. Excavation of potential buried drums will take place in the general area shown in the foreground of this photograph. The view is toward the northeast; the gravel pile shown in the background is the one noted on Figure 1-2.