



Alaska District
U.S. Army Corps of Engineers

Date 30 July 2015 Identification No. ER-15-13
Please refer to the identification number when replying.

Environmental Resources Section

Public Notice

The U.S. Army Corps of Engineers (Corps) has prepared an environmental assessment (EA) and draft Finding of No Significant Impact (FONSI) for the following project:

Removal Action
Containerized Waste & Contaminated Soil
Nike Site Love Former Military Facilities
Fairbanks, Alaska

The Corps' proposed actions are authorized under the Department of Defense (DOD) Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS), which provides the means to clean up waste materials, contaminated soil, and unsafe structures and debris from areas formerly used by the DOD.

The proposed project and potential environmental impacts are described in the enclosed EA and draft FONSI, which is available for public review and comment for 30 days from the date of this notice. It may also be viewed on the Alaska District's website at: www.poa.usace.army.mil. Click on the Reports and Studies button, look under Documents Available for Public Review, and then click on the Environmental Cleanup link.

To obtain a printed copy, please send a request via email to: Christopher.B.Floyd@usace.army.mil or send a request to the address below. The FONSI will be signed upon review of comments received and resolution of significant concerns. Please submit comments regarding the proposed action to the above email or to the following address:

U.S. Army Corps of Engineers, Alaska District
ATTN: CEPOA-PM-C-ER
P.O. Box 6898
Joint Base Elmendorf-Richardson, Alaska 99506-0898

For information on the proposed project, please contact Chris Floyd of the Environmental Resources Section at the above email or Corps postal address.

A handwritten signature in black ink, appearing to read 'Michael D. Noah'. The signature is fluid and cursive, with a long horizontal stroke at the end.

Michael D. Noah
Chief, Environmental Resources Section



**US Army Corps
of Engineers**

Alaska District

Environmental Assessment and Finding of No Significant Impact

Containerized Waste & Contaminated Soil Removal Action

Nike Site Love Former Military Facilities

Fairbanks, Alaska

F10AK0854-02

Formerly Used Defense Sites Program



Nike Site Love Battery Control Area, circa 1984

July 2015

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 (Corps) has assessed the environmental effects of the following action:

**Removal Action
Containerized Waste & Contaminated Soil
Nike Site Love Former Military Facilities
Fairbanks, Alaska**

This action has been evaluated for its effects on several significant resources, including fish and wildlife, wetlands, threatened or endangered species, marine resources, and cultural resources. No significant short-term or long-term adverse effects were identified.

This Corps action complies with the National Historic Preservation Act, the Endangered Species Act, the Clean Water Act, the Magnuson-Stevens Fishery Conservation and Management Act, and the National Environmental Policy Act. The completed environmental assessment supports the conclusion that the action does not constitute a major Federal action significantly affecting the quality of the human and natural environment. An environmental impact statement is therefore not necessary for the removal action at the former Nike Site Love military facilities.

Michael S. Brooks
Colonel, U.S. Army Corps of Engineers
District Commander

Date

Environmental Assessment

1.0 PURPOSE AND NEED OF REMEDIAL ACTION

1.1 Introduction

The U.S. Army Corps of Engineers (Corps) prepared this environmental assessment (EA) under the National Environmental Policy Act (NEPA) to address the removal of containerized waste, contaminated soil, and buried structures at the former Nike Site Love facilities near Fairbanks, Alaska. The Corps' proposed actions are authorized under the Department of Defense (DOD) Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS), which provides the means to clean up waste materials, contaminated soil, and unsafe structures and debris from areas formerly used by the DOD. Most FUDS projects follow Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) processes, which would not include preparation of an EA under NEPA. However, the proposed project involves the excavation and removal of containerized waste and petroleum products, both of which fall outside the purview of CERCLA.

1.2 Site Description and History

Nike Site Love, also known as Nike Battery “E”, is a former U.S. Army Nike anti-aircraft missile facility located approximately 10 miles north of Fairbanks, Alaska (figure 1). Nike Site Love occupied 1,060 acres in Sections 25 and 26, Township 2N, Range 2W of the Fairbanks Meridian. Cook Inlet Regional Native Corporation (CIRI) is the current landowner for most of the site (USACE 2015).

Nike Site Love consisted of two distinct sites separated by roughly one mile but interconnected by trails and roads. It had a battery control area and a launch complex area (figure 2). The battery control area at a Nike facility typically included several types of radars and personnel housing within a battery control building. The launch complex area consisted of a launch control building, a vehicle maintenance building, one or more concrete missile launch and storage structures, and several warhead magazines.

The Nike facility was built in 1960 and deactivated in 1970. Environmental cleanup began in 1986, when all improvements were reportedly removed, including buildings, towers, utilidors, fencing, transformers, and fuel tanks (three underground fuel tanks: two 20,000-gallon tanks and one 30,000-gallon tank; one 20,000-gallon tank from the launch boiler room was also removed). Debris was placed in a permitted on-site monofill. Asbestos-containing material was disposed of at the Fairbanks North Star Borough landfill, and tanks were taken offsite for metal recycling. It is not clear what contaminated soil removal or confirmation sampling occurred at that time (USACE 2015).

The U.S. Environmental Protection Agency (USEPA) conducted its own preliminary assessment of the site in 1998 and found PCBs and petroleum hydrocarbons in several samples of surface soil. In 2006, the Alaska Department of Environmental Conservation (ADEC) conducted an

environmental records review of the former Nike Site Love facility at the request of the Corps. The letter from this review stated that the information available at the time was not sufficient for site closure and requested further investigation as a result of some of the findings in the data review. After receiving a public complaint from a landowner near the site, the ADEC conducted a site visit in 2011. This resulted in the ADEC issuing a letter stating that additional information will be required to achieve site closure (ADEC 2011) and requesting again that the Corps reevaluate the site (USACE 2015).

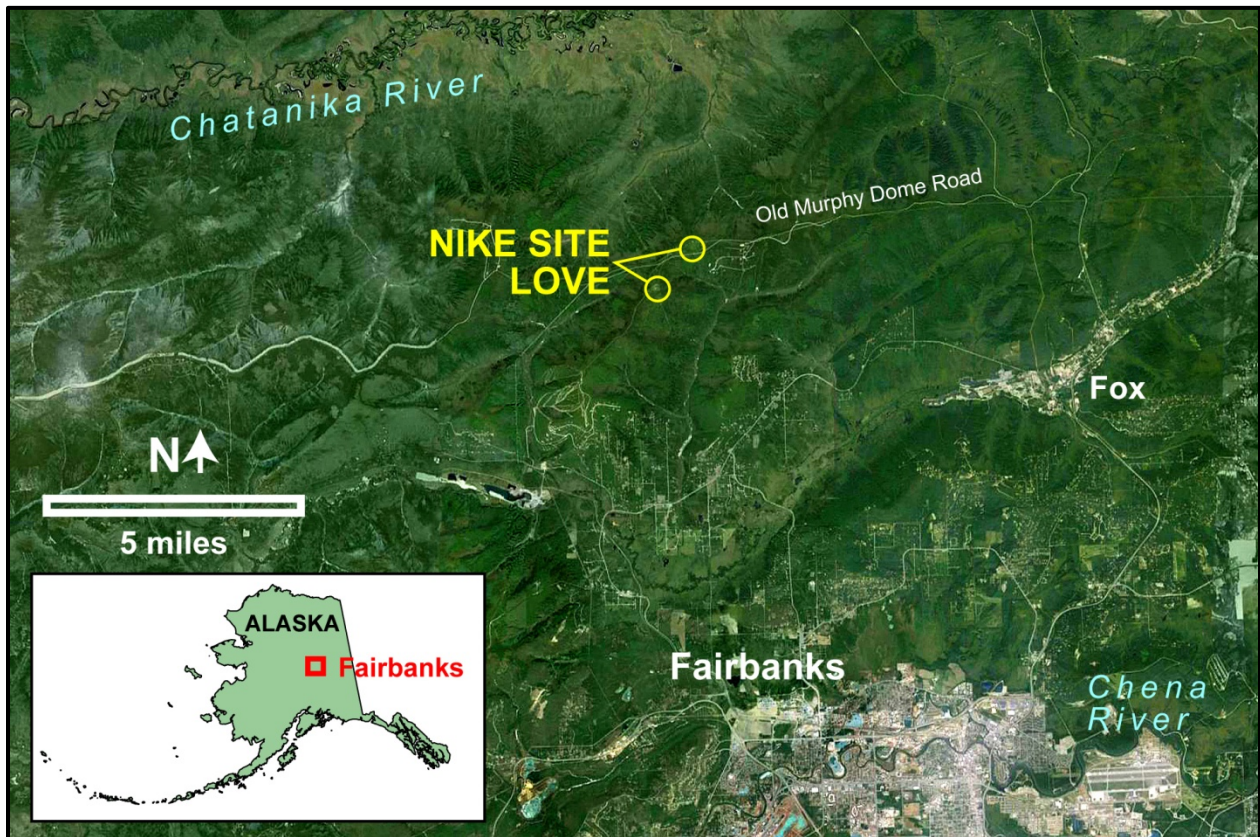


Figure 1. Location and vicinity of Nike Site Love.

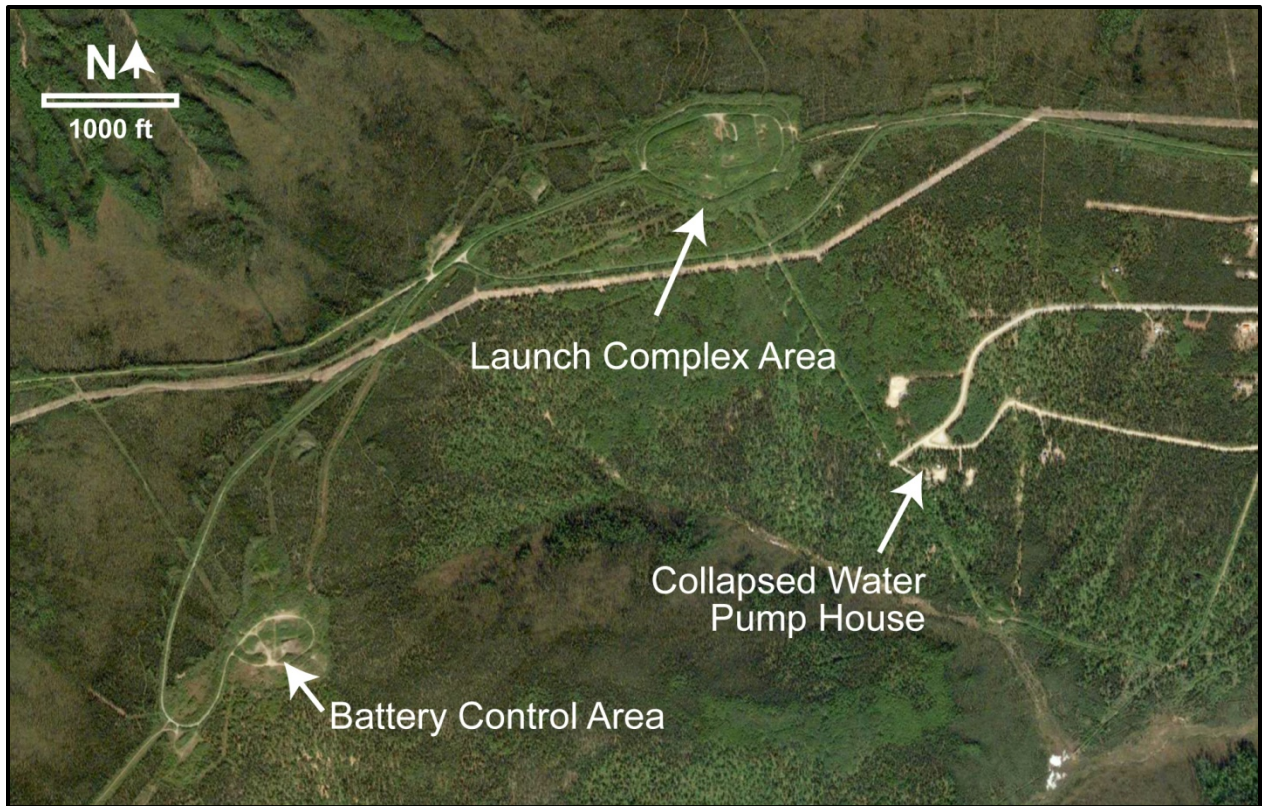


Figure 2. Layout of Nike Site Love (aerial imagery dated May 2002).

1.3 Need for Action

Additional investigation is needed to determine whether significant chemical contamination remains present at the site in order to comply with regulator requirements and to address complaints from local landowners. The 2011 ADEC site investigation also identified a transformer, several drums, miscellaneous debris such as utility poles, wire cable, and piping, and potential entrapment hazards described by the ADEC as “abandoned bunkers” (ADEC 2011; USACE 2015).



Figure 3. Photograph from the 2011 ADEC site visit (ADEC 2011) showing a transformer and other scattered debris, as well as the overgrown nature of of the site.

2.0 ALTERNATIVES

2.1 No-Action Alternative

Under the no-action alternative, the containerized waste and potential contaminated soil would remain in place. This would limit the use of the area by the landowner and potentially allow the migration of chemical contaminants to nearby habitat and water sources, and may result in regulatory enforcement actions by the State of Alaska. The no-action alternative would avoid the short-term disruptions to the local environment that would be caused by the operation of heavy equipment and excavation of soil.

2.2 Remedial Action Alternative

The preferred alternative includes the removal and disposal of containerized waste and contaminated soil from the project site.

The proposed actions at Nike Site Love include:

- Removal, transportation, and disposal at an approved off-site facility of several previously-identified items of containerized waste, including one transformer, two 55-gallon drums, and a 5-gallon metal can, as well as miscellaneous debris such utility poles, wire cable, sewer piping, and a sign post;

- Excavation, containerization, transport, and proper disposal of petroleum-contaminated soil (up to 40 tons), PCB-contaminated soil (up to 10 tons), and/or soil contaminated with other wastes (e.g., glycols, metals, solvents, etc; up to 30 tons) discovered on site during the Corps' site investigation (see below);
- Removal of a collapsed pump house located approximately 1 mile south of the Launch Complex Area (figure 2) to include excavation of metal holding tanks and a concrete sub-basin, and the transportation and appropriate disposal of all debris;
- Backfilling of several small, partially-shored subterranean voids found during the ADEC 2011 site visit and described as "bunkers," located along Old Murphy Dome Road roughly 2 miles east of the former Launch Complex Area.

The removal action will be preceded by a minimally-invasive site investigation by Corps personnel using a Geoprobe® direct-push rig complete with Ultraviolet Optical Screening Tool (UVOST) real-time data collection equipment to initially investigate and delineate areas that may contain petroleum contamination (USACE 2015).

2.3 General Work Practices and Environmental Protection

Environmental best management practices (BMPs) would be developed more fully in the contractor's work plan. Erosion control BMPs may include covering exposed soil with brush, netting, erosion blankets or mulches (e.g., chipped brush), limiting off-road travel, and placing silt fences where applicable to control sediment runoff from the project site perimeter and to protect any nearby creeks or drainage channels.

All fuels and fluids used in machinery and excavation equipment would be stored at least 50 feet from water bodies. Equipment and trucks containing fuel would park at least 50 feet from creeks and beaches when not in use. Emergency spill response procedures and materials would be provided on all equipment; materials would include sorbent mats, socks, and pads for absorbing fuels and fluids used on site.

Excavations would be backfilled with clean material from an approved, established borrow source and contoured to match the existing surface. Given the small size of the excavations, the backfilled excavations will be allowed to re-vegetate naturally.

3.0 AFFECTED ENVIRONMENT

3.1 Community

The project area is in a sparsely populated corner of Fairbanks North Star Borough. A handful of residences are near the Nike site along Old Murphy Dome Road (figure 2). Fairbanks, a city of about 32,000, is 10 miles to the south, and the community of Fox (population 417 in 2010) is about 7 miles to the east (ADCRA 2015).

3.2 Current Land Use

The former Nike facility is on private land owned by CIRI. The abandoned military site is overgrown with dense scrub and is not currently used for any known purpose.

3.3 Climate

The climate in the Fairbanks area is subarctic continental, with long, very cold winters and brief warm summers. Temperatures have been recorded as low as -62 °F in mid-winter and as high as 96 °F in summer. Winter temperature inversions can trap ice fog and smoke in local valleys for prolonged periods of time (ADCRA 2015).

3.4 Topography, Soils, and Hydrology

Both the Battery Control Area and the Launch Complex Area are located atop ridges in the rolling hill country north of Fairbanks. Native geology consists of overlying silt intermixed with minor gravel/cobbles (thickness ranges from 1 to 18 feet), which overlies schist bedrock. A sandy gravel type base fill was placed in areas where improvements were made. Groundwater has not been encountered in investigations at either area. The facility's water supply wells were located at a site about 1,000 feet lower in elevation southeast of the Launch Complex Area (USACE 2015).

3.5 Air Quality and Noise

The project site presumably enjoys good air quality due to the low number of emission sources and its elevation. A portion of the Fairbanks North Star Borough, including the City of Fairbanks and the City of North Pole, was designated as a non-attainment area under the Clean Air Act (CAA) for particulate material emissions (PM_{2.5}) in December 2009. However, the project site is outside this non-attainment area. Particulate air pollution is a particular issue in the Tanana River Valley, especially in the winter months. Wood-burning stoves are a common means of heating homes, and strong, persistent temperature inversions trap pollutants in low-lying areas,

Analysis shows that local emissions from wood stoves, burning distillate oil, industrial sources, and mobile emissions contribute to particulate pollution. For planning purposes, PM_{2.5} is primarily a concern during the winter months (October through March) when extremely strong temperature inversions are frequent and human-caused air pollution impacts increase. Summertime smoke from wild-land fires is also a health concern, but is addressed as a natural, uncontrollable, exceptional event.

There is no air monitoring station near the project site and no existing data to compare with other National Ambient Air Quality Standards (NAAQS) established under the Clean Air Act (CAA). These air quality standards include concentration limits on the "criteria pollutants" of carbon monoxide, ozone, sulfur dioxide, nitrogen oxides, and lead. Potential sources of air pollution would be limited to emissions from planes using the nearby airport and vehicles on the Copper River Highway that include both non-point/mobile sources and fixed point sources. Dust lofted from the gravel highway would be a source of particulate pollution.

3.6 Biological Resources

Wildlife resources at the heavily modified former Nike site are expected to be sparse compared to the surrounding countryside and limited to species such as browsing moose, small mammals, and shrub-nesting birds that are able to make use of the emergent vegetation at the site. Recent photographs of the site show dense new growth of spruce, birch, and alder, along with forb communities, where recent fires have not burned off the vegetation. The surrounding area hosts typical Interior Alaska boreal forest communities of spruce, birch, and aspen parkland, especially in the undeveloped lands to the north of the site. Moose, brown bears, and black bears are found in the lowlands and along rivers, while smaller mammals include lynx, marten, beaver, porcupine, and voles. Swans, geese, and other waterfowl nest on ponds and lakes during the summer. Common boreal forest birds include spruce grouse, ravens, great horned owls, black billed magpies, and migratory passerines such as warblers and thrushes.

3.7 Wetlands

The project area has not been delineated for jurisdictional wetlands. However, the Nike facilities' location on ridge crests with no accessible groundwater suggests that wetlands are unlikely to be present within the project sites.

The U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) mapper (USFWS 2015a) indicates forested wetlands occupying valleys and draws in between hills and ridges in the general area. Figure 4 is a screen-shot from the NWI website showing areas of forested wetlands in a lowland area adjacent to the ridges occupied by the Nike facilities but not encroaching on the facilities except where the road connecting the two sites passes through lower ground.

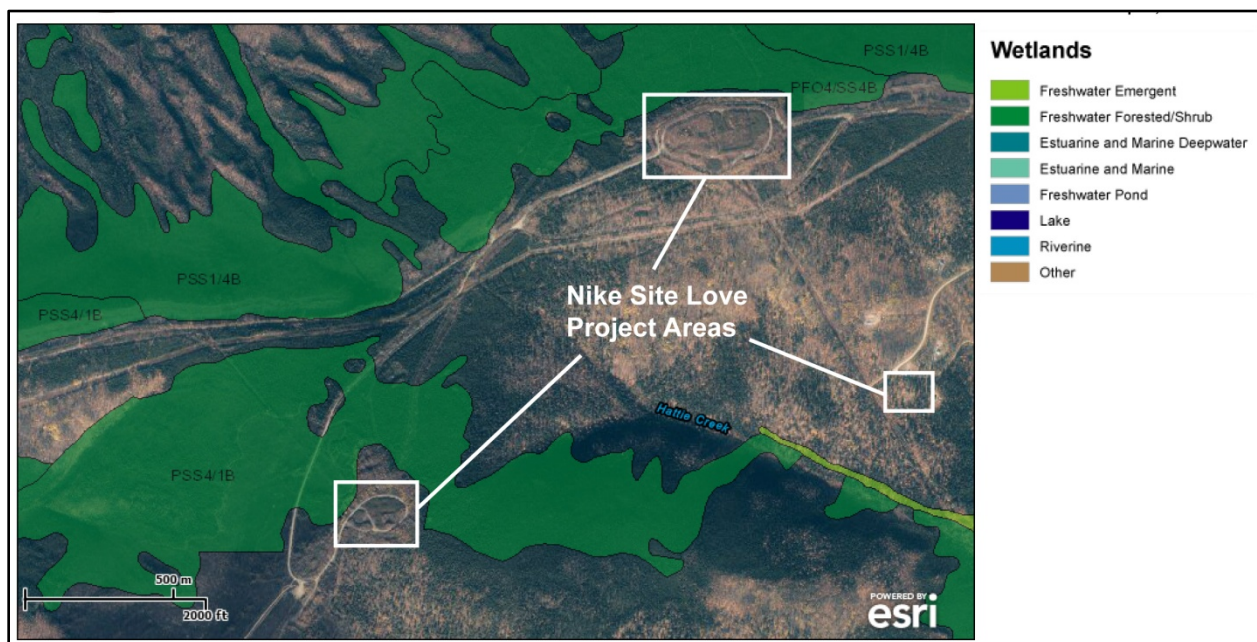


Figure 4. Screenshot from the NWI mapper (USFWS 2015a) showing locations of wetlands relative to the project sites.

3.8 Protected Species

Endangered Species Act. No species listed under the Endangered Species Act (ESA) are in or near the project area according to information made available online by the USFWS (USFWS 2015b).

Bald and Golden Eagle Protection Act. The general project area is within the range of both bald and golden eagles, although the hilly, partially forested terrain with few lakes or streams is not particularly attractive to bald eagles. Both species are protected under the Bald and Golden Eagle Protection Act, as well as the Migratory Bird Treaty Act (see below). In addition to prohibiting direct takes, such as killing eagles or destroying nests, this act also regulates human activity or construction that may interfere with eagles' normal breeding, feeding, or sheltering habits (USFWS 2011).

Migratory Bird Treaty Act. With the exception of State-managed ptarmigan and grouse species, all native birds in Alaska (including active nests, eggs, and nestlings) are protected under the Federal Migratory Bird Treaty Act (MBTA; USFWS 2009).

3.9 Essential Fish Habitat and Anadromous Streams

The project site is not near an anadromous stream. The closest streams listed in the Alaska Department of Fish & Games Anadromous Waters Catalog (AWC; ADFG 2015b) are the Chatanika River about 5 miles to the north and the Chena River roughly 10 miles to the south. There is no marine essential fish habitat near this inland site.

3.10 Cultural and Historic Resources

A review of the Alaska Historic Resources Survey (AHRS) database by the Corps' District archaeologist indicates that one historic site is located within the project's area of potential effect (APE): the Nike Site Love military installation itself designated FAI-403 in the AHRS. No known prehistoric sites have been identified within the project area. The ARHS site summary describes FAI-403 as being demolished and represented only by remnant debris scattered through the former site (Pierce 2015).

4.0 ENVIRONMENTAL CONSEQUENCES OF ALTERNATIVES

4.1 No-Action Alternative

The no-action alternative would avoid the short-term disruptions to the local environment that would be caused by the operation of heavy equipment and excavation of soil. However, the contaminated soil and waste materials would remain in place, which would limit the use of the area by the community and potentially allow the migration of chemical contaminants to the nearby environment.

4.2 Preferred Alternative

Under the preferred alternative, contaminated soils and waste materials would be removed from the site to the extent practicable. The potential environmental consequences are described below.

4.2.1 Effects on Community and Land Use

The project sites are privately owned and not currently used for any known purpose. The removal of containerized waste and contaminated soils may make the sites more attractive for use and development. The project will cause an increase in truck and equipment traffic on local roads, which may briefly affect the use of those roads by local residents; however, blocking of roads or rerouting of traffic should not be necessary.

4.2.2 Effects on Air Quality and Noise

Air quality may be affected during the project period from the use of heavy equipment, construction vehicles, and generators. The Corps believes any increase in pollutant emissions caused by the project would be transient, highly localized, and would dissipate entirely at the completion of the project. The area is not in a CAA “non-attainment” area, and the conformity determination requirements of the CAA would not apply to the proposed project at this time.

4.2.3 Effects on Topography, Soils, and Hydrology

The areas of excavation would be small and would not significantly alter the topography or patterns of overland water flow in the area.

4.2.4 Effects on Biological Resources

The planned activities would be highly localized in their impacts and affect an area already altered by the former military construction and past cleanup efforts. A significant amount of brush may need to be cleared to access specific features. The activities may displace some wildlife from the sites while work is ongoing. The project sites are surrounded by areas of similar, higher-quality habitat, and any wildlife displaced from the project area by noise and activity should be able to quickly resume their natural behavior. In the longer term, the project will improve wildlife habitat by removing physical hazards such as metal cables, containerized waste, and contaminated soil.

4.2.5 Effects on Wetlands

The intrusive excavation of contaminated soil or debris would occur mostly in areas already filled with debris and borrow material, and no wetlands are expected to be present in the project area. However, any inadvertent discharge to wetlands at the site as a result of the proposed activities would be authorized under Nationwide Permit No. 38, “Cleanup of Hazardous and Toxic Waste.”

4.2.6 Effects on Protected Species

The proposed action will have no effect on ESA-listed species, as none are present in the area.

The heavy scrub at the project site does not appear to be suitable habitat for bald or golden eagles and none are expected to be present at the project site.

Nesting birds are likely to be the most vulnerable animal species at the site. The destruction of active nests, eggs, or nestlings is a violation of the Migratory Bird Treaty Act (MBTA). The U.S. Fish and Wildlife Service advises that the period 1 May through 15 July should be considered the nesting window for birds nesting in forest or scrub in the Alaskan interior (USFWS 2009) and that any brush-clearing activities should be scheduled for prior to or after this window. The project

activities may overlap this nesting window; if the proposed work takes place in late summer or early autumn, the potential impact on nesting birds would be negligible.

4.2.7 Effects on Essential Fish Habitat and Anadromous Streams

The project would not require entry into or alteration of water bodies. Best management practices such as silt fencing or other appropriate sediment control would be employed to minimize the risk of runoff reaching streams during excavation. The intent of the project is to remove sources of contamination from the environment and should have a net positive effect on area fish habitat. There is no marine EFH in the project area, and the Corps determines that the project would have no adverse effects on fish habitat.

4.2.8 Effects on Cultural Resources

The Corps determined that the FAI-403 property is not eligible for the National Register of Historic Places due to the lack of integrity of the former military site (Pierce 2015). Previous removal actions have eliminated several key aspects of historic integrity including design, workmanship, and materials. Given the extensive ground disturbance created by the construction of this facility and the subsequent remedial activities that have taken place on the property since its demolition and re-grading in 1984, the area is of low archaeological potential. The proposed soil sampling at FAI-403 is minimally invasive and unlikely to disturb subsurface cultural resources, if existing. The removal of metal tanks at the pump house and subsurface wire debris will be in areas that have been previously disturbed by construction, clean-up, and placement of the tanks. For these reasons, the Corps determined that the proposed activities will result in no historic properties affected, and sought concurrence from the State Historic Preservation Officer (SHPO; Pierce 2015). The SHPO concurred in a letter dated 14 April 2015.

4.2.9 Effects on Environmental Justice

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires Federal agencies to identify and address any disproportionately high and adverse human health effects of its programs and activities on minority and low-income populations.

The express purpose of the proposed project is to reduce future risks to human health and welfare in the region by removing contaminants and physical risks from the environment. The Corps does not anticipate adverse impacts from this project to the human population.

4.2.10 Cumulative Effects

Federal law (40 CFR 651.16) requires that NEPA documents assess cumulative effects, which are the impact on the environment resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.

The immediate incremental impacts of air pollutants and noise from construction machinery would be of short duration and would not contribute to long-term cumulative effects. The removal of debris and chemical contamination from the project area may make development of the

privately-owned land more feasible, and it could conceivably be sold for residential development similar to what exists adjacent to the property.

5.0 PERMITS AND AUTHORIZATIONS

This project would require no resource permits and few authorizations. The Corps has obtained concurrence from the State Historical Preservation Officer that the proposed work will not cause adverse effects to historical properties or cultural resources.

6.0 CONCLUSION

The proposed environmental cleanup project at the former Nike Site Love, as discussed in this document, would have some minor, largely controllable short-term impacts, but in the long term would help improve the overall quality of the human environment. This assessment supports the conclusion that the proposed project does not constitute a major Federal action significantly affecting the quality of the human environment; therefore, a finding of no significant impact will be prepared.

7.0 PREPARERS OF THIS DOCUMENT

This Environmental Assessment was prepared by Chris Floyd and Diane Walters of the Environmental Resources Section, Alaska District, U.S. Army Corps of Engineers. The Corps of Engineers Project Manager is Valerie Palmer.

8.0 REFERENCES

Alaska Department of Environmental Conservation (ADEC). 2011. Letter to Ron Pflum (Corps) from Amanda Loomis dated 9 August 2011, subject: Nike Site Love.

Alaska Department of Fish and Game (ADFG). 2015. Anadromous Fish Distribution Database: <http://www.sf.adfg.state.ak.us/SARR/AWC/index.cfm/FA/maps.interactive>.

Alaska Office of History and Archaeology (AOHA). 2013. Department of Natural Resources, Alaska Heritage Resource Survey online database (restricted access).

Bittner, Judith. 2015. Letter dated 14 April 2015, subject: Formerly Used Defense Site (FUDS) Clean-up at Nike Site Love, Fairbanks.

Pierce, Shona (USACE). 2015. Letter to Jason Brune, Cook Inlet Region, Inc., dated 20 March 2015.

U.S. Fish and Wildlife Service (USFWS). 2015a. National Wetlands Inventory mapper website: <http://www.fws.gov/wetlands/Data/Mapper.html>

U.S. Fish and Wildlife Service (USFWS). 2015b. Information, Planning, and Conservation System (IPac) website: <http://ecos.fws.gov/ipac/>

USFWS. 2009. ADVISORY: Recommended Time Periods for Avoiding Vegetation Clearing in Alaska in order to Protect Migratory Birds.

U.S. Army Corps of Engineers (USACE). 2015. Statement of Work, Nike Site Love CON/HTRW, Formerly Used Defense Site F10AK0854-02, Fairbanks, Alaska. 4 February 2015.