

# Atka Air Force Auxiliary Field Site Atka, Alaska\_

## Site Summary With Appendices



**March 2004**

**Prepared by:**

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## GLOSSARY OF TERMS

The following list of terms includes several used throughout these documents as well as some useful related terms. For additional related terms, please visit the following website links:

ATSDR: <http://www.atsdr.cdc.gov/glossary.html>  
EPA: <http://www.epa.gov/OCEPAterms/>  
CDC: <http://www.cdc.gov/nceh/dls/report/glossary.htm>

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**Acute:** Occurring over a short time (compare with chronic).

**Biomagnification:** POPs and heavy metals are particularly troublesome in the Arctic because they travel long distances in air and water currents, are transported by some migratory animal species, and tend to get trapped in colder environments. In addition, they tend to persist long after they are released and move from air and water into soil, plants, animals and humans. As POPs accumulate in fat and heavy metals generally accumulate in organs and muscle, these contaminants tend to magnify in living organisms as organisms containing these contaminants are consumed. This process of magnification in living organisms is called “biomagnification.”

**Cancer:** Any one of a group of diseases that occur when cells in the body become abnormal and grow or multiply out of control.

**Cancer risk:** A theoretical risk for getting cancer if exposed to a substance every day for 70 years (a lifetime exposure). The true risk might be lower.

**Carcinogen:** A substance that causes cancer.

**Chronic:** Occurring over a long time (compare with acute).

**Cleanup:** The process of removing debris, contamination, and pollution from the land, water, and air. Federal, state, and local agencies have laws and requirements that include standards for acceptable levels of various pollutants or contaminants, site monitoring requirements, and other related tasks.

**Completed Exposure Pathway:** The route a substance takes from its source (where it began) to its end point (where it ends), and how people can come into contact with (or get exposed to) it. An exposure pathway has five parts: a source of contamination (such as an old leaking underground storage tank); an environmental media and transport mechanism (such as movement through groundwater); a [point of exposure](#) (such as a private well); a route of exposure (eating, drinking, breathing, or touching), and a receptor population (people potentially or actually exposed). When all five parts are present, the exposure pathway is termed a “completed exposure pathway.”

**Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA):** CERCLA, also known as Superfund, is the federal law that concerns the removal or cleanup of hazardous substances in the environment and at hazardous waste sites. ATSDR, which was created by CERCLA, is responsible for assessing health issues and supporting public health activities related to hazardous waste sites or other environmental releases of hazardous substances. This law was later amended by the Superfund Amendments and Reauthorization Act (SARA).

**Contaminant:** A substance that is either present in an environment where it does not belong or is present at levels that might cause harmful (adverse) health effects.

**Environmental media:** Soil, water, air, biota (plants and animals), or any other parts of the environment that can contain contaminants.

**Exposure:** Contact with a substance by swallowing, breathing, or touching the skin or eyes. Exposure may be short-term (acute exposure), of intermediate duration, or long-term (chronic exposure).

**Feasibility Study:** A study by EPA to determine the best way to clean up environmental contamination. A number of factors are considered, including health risk, costs, and what methods will work well.

**Groundwater:** Water beneath the earth's surface in the spaces between soil particles and between rock surfaces (compare with surface water).

**Hazardous waste:** Potentially harmful substances that have been released or discarded into the environment.

**Polychlorinated Biphenyls (PCBs):** A group of manufactured organic chemicals that contain 209 individual chlorinated chemicals (known as congeners). PCBs are oily liquids or solids and range from being colorless to light yellow. Products containing PCBs are old fluorescent lighting fixtures; electrical appliances containing PCB capacitors; old microscope oil; and hydraulic fluids, paints, inks, adhesives, electrical condensers, batteries, and lubricants. PCBs are known to cause skin diseases and are suspected to cause birth defects and cancer.

**Persistent Organic Pollutants (POPs):** POPs are toxic chemicals that adversely affect human health and the environment around the world. Because they can be transported by wind and water, most POPs generated in one country can affect people and wildlife far from where they are used and released. They persist for long periods of time in the environment and can accumulate and pass from one species to the next through the food chain. To address this global concern, the United States joined forces with 90 other countries and the European Community to sign a groundbreaking United Nations treaty in Stockholm, Sweden, in May 2001. Under the treaty, known as the Stockholm Convention, countries agree to reduce or eliminate the production, use, and/or release of 12 key POPs. The Convention specifies a scientific review process that could lead to the addition of other POPs chemicals of global concern.

**Responsible Party:** The person, agency, group, or organization that caused the condition impacting resources, either intentionally or unintentionally. This “condition” can be

contamination of the environment, hazardous building, collapsed buildings, or other disturbance from previous activities. This entity (or entities) is legally and fully or partially responsible for completing cleanup and restoration of the site or area that was impacted, depending upon who was responsible.

**Remedial investigation:** The CERCLA process of determining the type and extent of hazardous material contamination at a site.

**Resource Conservation and Recovery Act (1976, 1984) (RCRA):** This Act regulates management and disposal of hazardous wastes currently generated, treated, stored, disposed of, or distributed.

**Restoration:** Restoration is very similar to cleanup in that it is the process of removing debris, contamination, and pollution from the land, water, and air. Restoration might also involve additional follow-up efforts like re-grading and re-vegetating a site once cleanup is complete. To restore an area might be defined as bringing it back to original condition.

**Sample:** A portion or piece of a whole. A selected subset of a population or subset of whatever is being studied. For example, in a study of people the sample is a number of people chosen from a larger population. An environmental sample (for example, a small amount of soil or water) might be collected to measure contamination in the environment at a specific location.

**Site:** An area consisting of a collection of buildings, runways, roads, landfills, or other facilities which were constructed or established at some point in the past. The site could be abandoned or still in use. A site could be as small as one building and a leaking fuel tank. A site could also consist of an entire military base that supported 30,000 personnel at one time. A large WWII military base, like that on Unalaska and Amaknak Islands (Dutch Harbor) might be divided into several “sites” for organizational and cleanup management purposes. Different agencies define a site differently. Please refer to Section 1.0 of this document for further discussion.

**Stakeholder:** A person, group, or community who has an interest in activities at a hazardous waste site.

**Surface water:** Water on the surface of the earth, such as in lakes, rivers, streams, ponds, and springs (compare with groundwater).

**Survey:** A systematic collection of information or data. A survey can be conducted to collect information from a group of people or from the environment. Surveys of a group of people can be conducted by telephone, by mail, or in person. Some surveys are done by interviewing a group of people.

**Traditional Foods:** Wild foods which were historically and/or are currently used by Alaska Natives and others to provide a nutritional diet and other health, cultural, spiritual, and economic benefits. Traditional foods are sometimes called subsistence foods. However, the word subsistence doesn't necessarily imply more than food use of such resources.

**Tribal Consultation:** The process of seeking, discussing, considering, and, if appropriate, acting on the views and recommendations of federally recognized tribal governments at the earliest time in the planning and decision-making process. Consultation means more than simply providing information about what the agency is planning to do and allowing comment. Rather, consultation means two-way communication that works toward a consensus reflecting the concerns of the affected federally recognized tribe(s).

**Tumor:** An abnormal mass of tissue that results from excessive cell division that is uncontrolled and progressive. Tumors perform no useful body function. Tumors can be either benign (not cancer) or malignant (cancer).

## ACRONYMS & ABBREVIATIONS

Below is an alphabetical summary of some of the acronyms & abbreviations encountered in the attached documents:

ADEC	Alaska Department of Environmental Conservation
ASTs	Aboveground Storage Tanks
cu yd	cubic yards
CWM	Chemical Warfare Material or Chemical Weapons Material
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
EE/CA	Engineering Evaluation/Cost Analysis
EOD	Explosive Ordnance Disposal or Explosive Ordnance Demolition
EPA	U.S. Environmental Protection Agency
FUDS	Formerly Used Defense Sites
HTRW	Hazardous, Toxic, and Radiological Waste
IRA	interim removal action
Jacobs	Jacobs Engineering Group, Inc.
LORAN	Long Range Aid to Navigation
MOGAS	Motor Vehicle Gasoline (or general use gasoline)
OE	Ordnance, Exploded
OEW	Ordnance and Explosives Waste
POL	petroleum, oil, and lubricants
PCB	polychlorinated biphenyls
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
RI	remedial investigations
SHPO	State Historic Preservation Office
SI	site investigations
TERC	Total Environmental Restoration Contract
USACOE	U.S. Army Corps of Engineers (same as USAED)
USAED	U.S. Army Engineer District, Alaska (same as USACOE, Alaska)
USCG	U.S. Coast Guard

USF&WS  
USTs  
UXO  
WWII

U.S. Fish & Wildlife Service  
Underground Storage Tanks  
Unexploded Ordnance  
World War II

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**SITE: ATKA AIR FORCE AUXILIARY FIELD**

**LOCATION: Atka Island**

**DATE PREPARED: 3/12/04**

**LAT/LONG: N52°13', W174°14' (approximate)**

**LAND OWNERSHIP: Atxam Corporation, Alaska Dept. of Transportation and Public Facilities, Alaska Maritime National Wildlife Refuge**

**RESPONSIBLE PARTY: U.S. Department of Defense**

**LEAD FEDERAL CONTACT: U.S. Army Corps of Engineers**

**LEAD LOCAL TRIBAL CONTACT(S): Atka Tribe**

**ROC REPRESENTATIVE CONTACT: Ray Golodoff, Atka Tribe**

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### **NATIVE ALASKAN HISTORY**

The Aleutian Islands include sites of numerous Aleut communities, as evidenced by extensive archaeological sites throughout the region. Artifacts from several of these sites indicate the presence of Aleuts dating back over 10,000 years. The Andreanof Islands group includes Tanaga, Adak, Atka, and Amlia Islands. For this summary, we are also including the Delarof Islands in this group. Aleut villages were always situated on the seacoasts. No people were ever more dependent on the sea than the Aleuts. Three factors governed the choice of a village site: a nearby supply of fresh water, a beach where boats could be landed in rough weather, and a location offering safety against surprise attack.

For some villages, accounts of native population were estimated by Russians during times of contact. In 1753-1754, Adak Island and its close neighbors, east to Tagalak Island, were said to contain approximately 5,000 to 6,000 Aleuts. Although Adak Island, at the time of Russian contact, was one of the more populous of the Aleutian Islands, by 1835 only 193 natives were living on the entire island. This dramatic reduction in population after 90 years of Russian contact with Aleut people in the area is indicative of what happened throughout the entire Aleutian chain, which had at one time the largest population (approximately 16,000) of hunter-gatherers in North America.

There are 39 reported prehistoric archaeological sites on Atka Island. Atka Island remained part of the Alaska Maritime National Wildlife Refuge until the land selection under the Alaska Native Claims Settlement Act of 1971. In 1979, the U.S. Department of the Interior transferred ownership of the project site to the Atxam Corporation. The Alaska Department of Transportation and Public Facilities also owns property at the former site including the airstrip and adjacent taxiway. Other parts of the island are controlled by the U.S. Fish & Wildlife Service as part of the Alaska Maritime National Wildlife Refuge (Aleutian Islands Wilderness).

### **HISTORICAL FEDERAL AGENCY USE OF SITE**

The Akta Air Force Auxiliary Field was acquired from the U.S. Department of the Interior in September

1942. The site was jointly used by the Army Air Corps and the U.S. Navy from 1942 to 1945 (please see site map – Appendix 1). In June 1942, the U.S. Navy evacuated the inhabitants of the island and destroyed all the buildings to prevent their possible use by the Japanese. Military facilities were constructed primarily along the Nazan Harbor north of the village site. Observation posts were established on Korovin Bay and an Aircraft Control Service (ACS) site was located on a mountainside north of the harbor. The U.S. Army constructed an airfield near the harbor which became operational in November 1942. Atka was primarily a U.S. Army installation although the U.S. Navy also performed air operations from there and serviced weather stations and submarine cable systems.

During WW II, Atka became secondary in importance behind the base on Adak Island. By late 1945, the base at Atka was largely abandoned and the Aleuts who had survived the evacuation and internment returned to their island. In a letter forwarded to the U.S. Army Corps of Engineers (the Corps) on October 22, 1953, the Department of the Air Force relinquished the property. At that time the Corps advised the Department of Interior that “the Department of Defense constructed improvements on Atka Island which (now) have a negative salvage value.” In other words, the construction and/or improvements done on Atka during WW II had been abandoned and the restoration of this site was to be the responsibility of the United States government. In February of 1979, the land was transferred to the Atxam Corporation; the transferred land included the “improvements” abandoned by the Department of the Army. There are no restrictions on the conveyance document that would preclude the restoration of this site. In a letter dated June 4, 1984, Colonel Neil E. Saling determined that the abandoned site on Atka Island was deteriorated. Furthermore, he suggested that it was in the “best interest” of the Government to restore this site and that this restoration was within the requirements of Public Law 98-212 (97 STAT 1427).

## **FUTURE LAND USE**

Not known at this time.

## **ATKA – TIMELINE OF EVENTS**

- **1741** – Russian contact in the Aleutians – pre-Russian Aleut population estimated between 15,000 and 25,000 (Petroff, 1884).
- **1831** – Aleut population estimated at less than 2,000 with Aleuts inhabiting only 16 islands on the Aleutian Chain.
- **1867** – U.S. purchase of Alaska from Russia.
- **1913** – President Taft sets aside the Aleutian Island Reservation as preserve and breeding ground for native birds, reindeer, fur-bearing animals, and for the encouragement of the fisheries.
- **1910-1940s** – Aleutian Islands fox farming operations occurred.
- **1942** – June 3 - Dutch Harbor military installation bombed by the Japanese.
- **1942** – June – Aleut evacuation from Atka – demolition of original buildings by U.S. forces to prevent possible use by the Japanese.
- **1942** – September – Department of Defense authorization to begin construction of military site at Atka.
- **1942** – December – Construction of 100' by 3,000' airstrip complete.
- **1943** – March – Airstrip extended to 4000'.
- **1944** – January – Completion of military construction project.
- **1945** – Fall – The base at Atka abandoned and the Aleuts allowed to return.
- **1953** – Letter of relinquishment from Department of the Air Force forwarded to the Army Corps of Engineers; land is transferred to the Department of Interior.
- **1971** – Alaska Native Claims Settlement Act – creates Native Corporations and allows for selection of 40 million acres of land Alaska wide.
- **1977** – U.S. Army Corps of Engineers document: *Debris Removal and Cleanup Study – Aleutian Islands and Lower Alaska Peninsula*, Alaska (Appendix 2).
- **1979** – February 27 – Department of the Interior transfers a large portion of this site to the Atxam Native Corporation.
- **1984** – Atka Air Field clean-up action recommended and approved.
- **1985-1986** – Atka Air Field debris cleanup and site restoration.

- **1996** – *Final Landfill Closure Report*, Permit #8521-BA023, Chris Berg, Inc.
- **1997** – City of Atka requests further investigation of the site due to concerns over WWII dock pilings.
- **1998** – *Site Investigation Report, Atka Air Force Auxiliary Field Site, Atka, Alaska*, U.S. Corps of Engineers Site Investigation – identifies projects still needing attention from the 1984 Inventory Project Report (INPR) approval.
- **2001** – Atka site visit by EPA: START personnel perform sampling.
- **2002** – January – *Preliminary Assessment Atka Air Force Auxiliary Field Site Atka, Alaska*, prepared by Herrera Environmental Consultants for U.S. EPA (Appendix 6).
- **2002** – October - *Draft Atka Airport Site Assessment Report, Atka, Alaska*, prepared by OASIS Environmental for Alaska DOTPF (Appendix 5).
- **2003** – June - Recommendation for proposed projects at Atka signed off by Colonel Timothy J. Gallagher, U.S. Army Corps of Engineers.
- **2003** – A/PIA and Aleut tribes complete *Tribal Policy for Restoration of Federal Sites, Aleutian/Pribilof Region, Alaska*.

## **SUMMARY OF FEDERAL FACILITIES**

For approximately three years during World War II, several military facilities existed on Atka Island (Appendix 1). The largest facility was the airbase, which included airfield operations, maintenance shops, fuel storage tanks, warehouses, living quarters, and other miscellaneous operations. In addition, an aircraft control system and at least one radar site were also on the island. These smaller facilities would have included electronic equipment, fuel storage tanks, and several buildings for operations and living quarters.

Atka was intended as a base for long-range fighter and medium bomber operations against Japanese-held Kiska Island. Subsequently, Adak was found to be better suited to these operations with Atka was maintained primarily as a way-station between Fort Glenn and Adak. Construction was initiated at Atka after authorization was received in September 1942. The original authorization provided for a landing strip 150' by 3000' with steel mat surface, taxiways, and hard stands; 50-bed hospital, lighterage dock for fuel and supply deliveries, necessary access roads and housing, utilities, and all necessary facilities for approximately 950 officers and other military personnel. Due to a combination of problems and shifts in priority, construction on Atka was hampered. By December 1942, a 100' by 3000' airstrip was ready for use and successful landings were made by two B-24 bombers. Taking off from this strip was much more difficult and by March 1943 the runway steel matting was extended to 4000'.

In summary, the primary military facilities at Atka included:

- a 4,000-foot runway constructed of steel matting with associated taxiways and hard stands;
- dock for ships;
- 50-bed hospital;
- numerous warehouses;
- quarters for approximately 950 personnel;
- an ACS station;
- radar station; and
- several observation posts.

## **CURRENT SITE STATUS**

Two main areas with World War II sites were visited by a U.S. Army Corps of Engineers' (USACOE) team on June 20-21, 1998. The following text in this section was summarized from the USACOE's site visit report. The main areas consisted of the following:

- 1986 Disposal Sites "A", "B", and "C" near Atka village: In 1986, USACOE contractor was hired to demolish the abandoned military building at the site. Debris from the buildings, thousands of steel drums,

over 400,000 square feet of steel runway matting, and other materials were landfilled in five known disposal sites. No sampling for contaminants was performed during this clean up.

- A "new" site at Cape Kudugnak, at the north entrance to Nazan Bay and approximately 5 miles northeast of Atka village: The site consisted of two small buildings, at least two ASTs, six radio tower masts, living quarters, and a large drum dump. Although this site was not included in the 1984 clean-up scope, it is presumably a FUDS site.

- Six potential contaminant source areas were identified during this site investigation: Samples were collected at several of the source areas previously identified for clean-up. In addition, samples were collected at the "new" Cape Kudugnak site. Samples were analyzed for a number of possible contaminants of concern including gasoline range organics (GRO), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals, and asbestos.

Disposal Sites "A", "B", and "C" are the result of a USACOE project involving the removal of WWII facilities. These efforts also included some cleanup and environmental restoration work. USACOE's assessment of their 1986 project was that it was rather effective in terms of general debris removal. At most former building locations, there is little sign of the structure other than the general outline of the building revetments. Very heavy vegetation growth around most of the former building footprints made the search for signs of USTs unproductive.

**Disposal Site "A"** is the site at the old Navy Hospital and is located near the southern shore of Korovin Lake. This site also served as an asbestos disposal cell. During the 1998 site visit, the site was located easily, however the wooden asbestos warning signs had been removed. The disposal site cover appeared to be in good condition with no signs of obvious erosion. However, the vegetation on parts of the cover was sparse, and erosion could start to affect the exposed soil in the future. A soil sample was collected from exposed soil at the cap, and sediment was collected from a stream draining the area of the landfill. The three samples taken were found to contain up to 320 mg/kg RRO and 82 mg/kg DRO. Concentrations of BTEX and GRO were very low, when detected. No PAHs, PCBs, pesticides, or chlorinated solvents were detected in significant concentrations. Metals concentrations were within background levels, except for cadmium (46 mg/kg), lead (110 mg/kg), and vanadium (200 mg/kg).

**Disposal Site "B"** occupies a long strip of land between the airport hangar and the village school. Parts of this disposal site were obvious, but it was difficult to determine the limits of the disposal site, or where the cap began and ended. The site is basically a long, wind-scoured strip of sand dunes, sparse vegetation, with debris exposed in low areas. The debris is predominantly rusted fragments of Marston matting (perforated steel runway matting), along with bits of wood and an occasional crushed drum. No samples were collected there.

**Disposal Site "C"** was very difficult to locate precisely, even with photographs from the Site Closure Report. Both Disposal Sites "B" and "C" appeared to have been constructed in an active dune-building region; the caps of these sites have probably not so much eroded as migrated away as sand dunes. In the general area of "C," there were signs of more recent disposal, and of a possible WWII-era disposal site. Mr. Louis Nevzoroff, the Village Public Safety Officer, reported that the WWII-era disposal site had not been visible in 1986, but had been uncovered by the sand dunes only in recent years. These other disposal areas tended to greatly confuse the COE's assessment of the 1986 disposal area. A stream also crosses the site and has cut through the area thought most likely to be Disposal Site "C," exposing more of the ubiquitous Marston matting, as well as a number of drums. Most of the drums present had been welded together end-to-end for use as culverts. A sample was collected from the bottom of a large depression in the general location of Disposal Site "C." The analytical results of these samples showed trace concentrations of RRO (16 mg/kg) and DRO (3.8 mg/kg) were present at this location; no PCBs, PAHs, pesticides, chlorinated solvents, or significant concentrations of metals were detected.

A number of **concrete building foundations** were found left in place. Three foundations were identified as having been a power plant, a motor pool building (situated approximately 1,200 feet northwest of the runway), and a bathhouse, using WWII-era site plans. Evident soil contamination was found at the power plant and motor pool building sites, with a distinct odor of diesel fuel. Near the northeast corner of the motor pool building foundation was a stained black mound, overlain by a red precipitate. The water in the

drywell was observed to have sheen on it. Soil samples were collected to characterize this contamination. Three samples were collected in this area and found to contain up to 660 mg/kg RRO and 88 mg/kg DRO. Concentrations of BTEX and GRO were very low, when detected. Naphthalene (up to 0.35 mg/kg) and 2-methylnaphthalene (up to 0.1 mg/kg) were the only PAHs detected. No PCBs, pesticides, chlorinated solvents, or metals were detected at significant concentrations, except for a detection of 220 mg/kg of lead from a sample collected northeast of the foundation. The sources of contamination at these sites did not appear to be present.

A potential military disposal site was reported near the village dock and Dock Creek. Nearby villages reported that the creek had sheen and a fuel odor at high water. Trace concentrations of RRO were detected in the sample collected in this area; no DRO, BTEX, PCBs, PAHs, metals, or pesticides were detected at significant concentrations.

**Cape Kudugnak, "New" Site:** Following a lead from one of the village officials, the site investigation team flew to Cape Kudugnak, approximately 5 miles to the east, supported by the Atka Air Force Auxiliary Field during operations. A small but heavily contaminated site (presumably FUDS) was found there. No apparent environmental removal or restoration actions appear to have occurred here. The site consists of an east camp, consisting of two small buildings (still standing), six large radio tower masts (five collapsed and one standing), a large AST, and a large drum dump; a west camp 200 feet away appeared to be the living quarters, and consisted of one large collapsed building and one large AST. One definite transformer was noted at the west camp, and two probable transformers were noted at the east camp. One east building also contained numerous batteries with cracked casings. A number of samples were collected. Samples collected in this area were found to contain up to 2,800 mg/kg RRO and 26,000 mg/kg DRO. Naphthalene (up to 1.0 mg/kg) and 2-methylnaphthalene (up to 0.53 mg/kg) were the only PAHs detected. PCBs were detected in concentrations of 0.30 to 2.30 mg/kg in soil samples collected near suspected transformers. No pesticides or BTEX were detected at significant concentrations. Lead was detected at a concentration up to 49,000 mg/kg in the area containing batteries. A sample from a refrigeration unit was determined to contain asbestos.

## **SUMMARY OF WORK COMPLETED**

- In 1986, the U.S. Army Corps of Engineers (USACOE) completed an extensive debris removal project at the location of Disposal Sites "A", "B", and "C."
- A USACOE contractor demolished the abandoned military buildings and buried the debris in three large areas.
- Debris from hundreds of buildings, thousands of steel drums, and over 400,000 square feet of steel runway matting were buried in the disposal pits. This demolition was done as a construction project and not as environmental restoration. Therefore, the contractor was not concerned with sampling or gathering information about contamination.
- Underground Storage Tanks (USTs) may exist at these sites since removal during 1986 operations is not confirmed.
- Other than this initial site investigation and debris removal operations, no work has been completed at this site.
- In June of 1998, three personnel from the USACOE, Alaska District Office, performed a field investigation on several sites on Atka Island.
- The objectives of the 1998 field investigation were to:
  - Investigate representative sites of the former military facilities for evidence of chemical contamination of the environment;
  - Investigate reports of drums, attempt to determine if they are of military or civilian origin, and reports of military structures remaining after the 1986 removal action;
  - Collect samples of contaminated surface soil or sediment for chemical analysis;
  - Inspect and document the current condition of the three 1986 disposal sites; collect samples of soil or sediment if contamination is suspected at or leaching from disposal sites;
  - Interview local citizens for information on potential FUDS chemical contamination; and
  - Obtain information necessary to fill out an Alaska Department of Environmental Conservation (ADEC) Ecological Checklist.

## **PROJECTED/REMAINING WORK**

- Further site investigation work.
- Completion of debris removal, cleanup, and restoration efforts.
- Re-capping and re-vegetation of 1986 landfills being exposed by wind and weather
- Full site investigation, cleanup, and environmental restoration of the Cape Kudugnak site.

## **MAJOR CONCERNS REGARDING SITE**

The Atka Air Force Auxiliary Field site covers a two-mile long strip of land bordering Nazan Bay that includes several military building and disposal sites. Portions of the disposal sites are beginning to erode, exposing some contents.

The USACE conducted a site investigation in 1998 identifying numerous contaminant source areas. Based on a review of the available documents, it appears that further investigation is necessary.

Drums were observed in and around several surface water bodies at the site; one drum was observed to be leaking with the remainder empty. The disposal sites and former operational areas are located in the vicinity of the village of Atka and are freely accessible to the residents of Atka.

There is a high potential for contamination of surface water at numerous locations from hazardous substances identified to be present in the drums and disposal sites based on USACE and START sampling results. Present or former contents of drums have a potential to contaminate on-site surface water. Surface soil and sediment samples collected at sources within the overland surface water route indicated the presences of BTEX and SVOC contaminants, as reported in the Preliminary Assessment, Atka Air Force Auxiliary Field Site, Herrera 2002. One surface water sample collected from Korovin Lake showed low xylenes concentrations, but no other contaminants of concern. Hazardous substances identified by USACE could be expected to migrate to surface water bodies. Local residents practice subsistence hunting and fishing within 15 miles of the site.

Possible contaminant release to soil has a high potential to cause a threat to the environment or humans due to their close proximity to the school and village.

A release to the air pathway is possible, due to the exposure of debris and soil at the disposal sites. Atka experiences an average wind velocity of 13 knots and storms may produce winds over 120 knots (USACE 1999).

- The most significant potential sources of contamination are the present and former Underground Storage Tanks (USTs) and Aboveground Storage Tanks (ASTs). These tanks were for storing and transporting of gasoline and/or diesel fuel for aircraft, vehicles, generators, and heaters.
- The main contaminants of concern associated with the UST and AST sites would be diesel and gasoline constituents; benzene, toluene, ethyl benzene, and xylene (BTEX); volatile organic compounds (VOCs); and semi-volatile organic compounds (SVOCs).
- Potential sources for lead are leaded gasoline and lead-based paint. For many years, tetra-ethyl lead was added to gasoline, therefore leaks and spills of leaded gasoline are potential sources of lead and areas of concern.
- Potential sources for polychlorinated biphenyls (PCBs) are electrical equipment such as transformers, capacitors, and wire insulation.
- Asbestos was used in insulation, gaskets, and heat shields for engines, heaters, and generators and is a contaminant of concern.
- Explosive items such as bombs, flares, and small arms ammunition were commonly carried on aircraft. The U.S. Army Air Corps established an auxiliary airfield on Atka Island; however, no information was encountered during research for this summary concerning the amount of supplies

that were stored there, including explosives. Many explosives including unexploded ordnance are still present on other islands in the Aleutians and they could exist on Atka.

- The soil cover on the disposal sites including an asbestos landfill site is eroding and is a concern as it exposes buried debris.

### **Key References Used for Preparation of this Summary**

1. *Site Visit Preliminary Trip Notes, Atka Island, Alaska*, U.S. Army Corps of Engineers, Alaska District June 20-21, 1998.
2. *Draft Site Investigation Report, Atka Island, Alaska*, Environmental Engineering Branch, Alaska District, U.S. Army Corps of Engineers, Anchorage, Alaska, February 1999.
3. *Preliminary Assessment, Atka Air Force Auxiliary Field Site, Atka, Alaska*, Herrera Environmental Consultants, Inc. January 2002.
4. *Debris Removal and Cleanup Study, Aleutian Islands and Lower Alaska Peninsula, Alaska*, U.S. Army Corps of Engineers, June 1977.

### **Other Available Studies and Reports Not Included in Appendices**

1. U.S. Department of Defense. February 2001. NALEMP Phase I Assessment Report, Atka Island Air Force Auxiliary Field.
2. U.S. Army Corps of Engineers. September 1999. Site Investigation Report, Atka Island, Alaska.
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## **Appendices**

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