



SPRING 2006 FACT SHEET

Kodiak Island Update

Defense Environmental Restoration Program - Formerly Used Defense Sites

The U.S. Army Corps of Engineers, Alaska District (USAED) is pleased to provide this update concerning environmental cleanup and remediation efforts on Kodiak Island. This fact sheet reports to the community on our work under the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS). As always, the Corps would like to encourage public involvement in the remediation planning process, and we hope to see you at the Borough Assembly Meeting and meet you in person at our Open House.

NOTICE OF OPEN HOUSE

In addition to the KIB Assembly Meeting presentation, the Corps of Engineers will host an Open House:

**Friday, June 2, 2006
3:00 until 6:00 p.m.
Safeway Lobby
2685 Mill Bay Road**

Photographs of project activities will be on display, and key members of the project team will be present to answer questions and receive comments from community members.

KODIAK ISLAND PUBLIC MEETING

The Corps of Engineers will provide the public with an update on the DERP-FUDS field work planned for 2006 on Kodiak Island. This presentation will be given during the Kodiak Island Borough (KIB) Assembly Meeting:

**Thursday, June 1, 2006
at 7:30 p.m.
KIB Assembly Chambers
710 Mill Bay Road**



Groundwater Monitoring

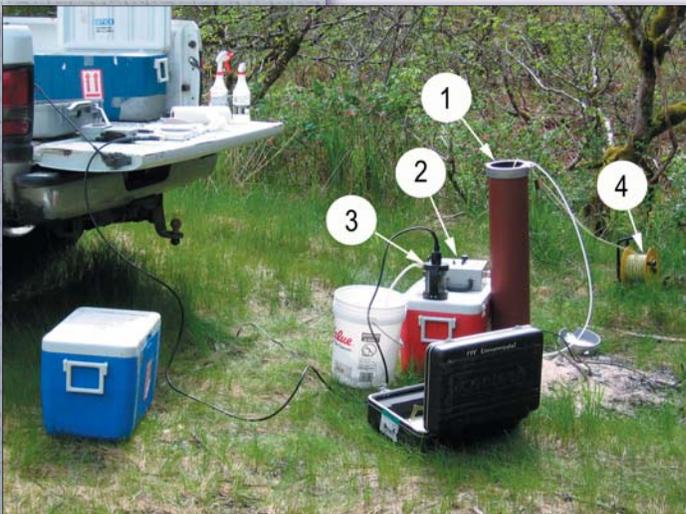


Mobile drill with hollow stem auger.

An aquifer is an underground layer of rock, sand, or gravel capable of storing water within cracks and pores or between grains. The water contained in the aquifer is groundwater. The primary goal of groundwater monitoring is to determine whether site groundwater meets federal and state regulatory requirements and to verify that no contaminated groundwater is migrating offsite.

Groundwater monitoring includes several activities:

- ➔ Review of historical activities and previously collected site data.
- ➔ Installation of groundwater monitoring wells in locations within and around the contaminated area.
- ➔ Conducting groundwater sampling events.
- ➔ Evaluation of test results and comparison against established regulatory criteria.
- ➔ Determine if groundwater is safe. If not, determine whether it is migrating offsite.



1. Monitoring well
2. Peristaltic pump
3. Water quality meter
4. Interface probe

In the 2006 field season groundwater monitoring will take place at the Little Navy Annex site.

The Little Navy Annex was originally part of a Naval Security Group Activity site. Some of the cleanup activities performed during 1997, 1998, 1999, and 2002 included excavation of approximately 4,500 tons of fuel-contaminated soil, and removal of a fuel-contaminated septic system.

During the cleanup activities, groundwater monitoring wells were installed to evaluate groundwater quality. Groundwater monitoring began in 2002 and one more monitoring event is scheduled for Spring 2006.

Wetlands Restoration

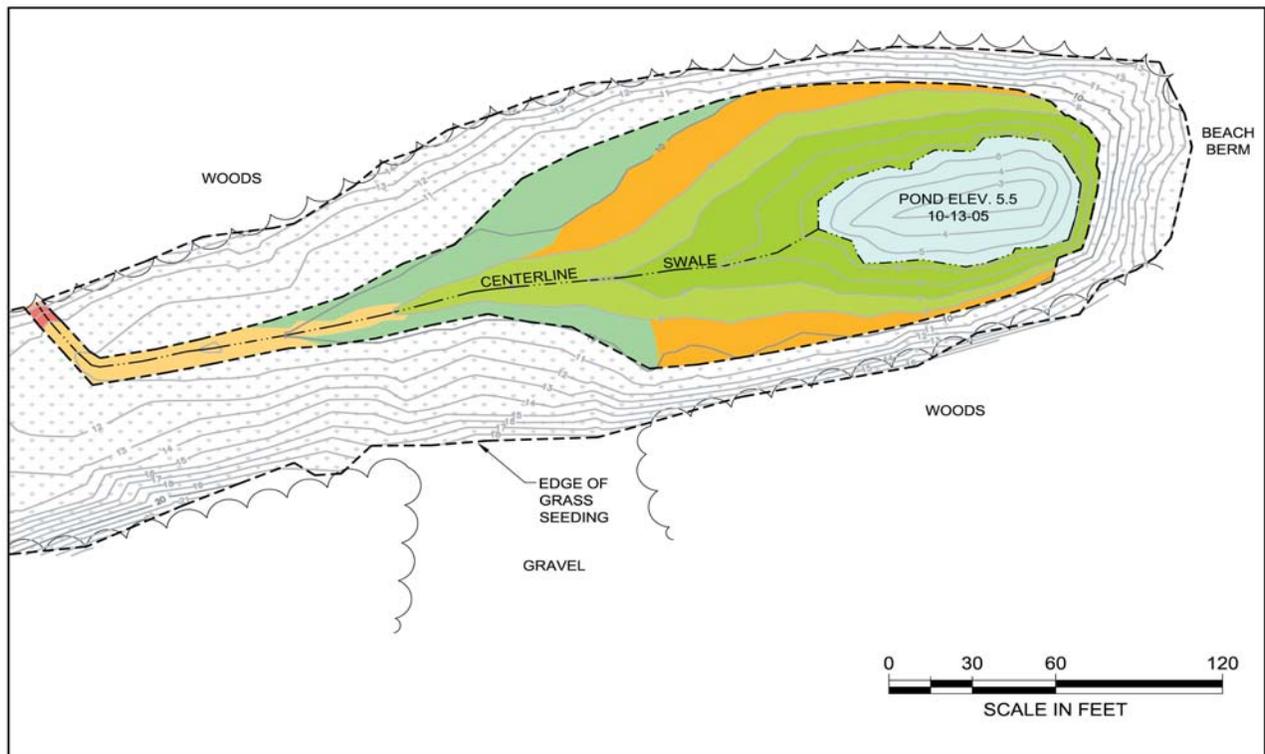
Summer 2006 will see completion of wetlands restoration at the Asphalt Disposal Area valley.

Following excavation of 4,600 tons of metallic debris and 52,000 tons of contaminated soil in 2000 and 2001, the USAED placed preliminary backfill of clean shot rock. The USAED and the landowner (Natives of Kodiak) agreed to final restoration plans and the USAED completed the first stage of wetlands restoration in September 2005, placing a one-foot layer of soil across the entire site and adding a layer of organic-rich silty topsoil to the area of the future wetland. Upland areas were seeded with grass for erosion protection until native vegetation (salmonberry, devils club, alder, and spruce) takes over.



The wetland area, comprised of approximately 20,000 square feet surrounding a brackish pond at the east end of the valley, will be planted in seven zones with species native to sub-arctic wetlands. Going from uplands to the pond, the zones reflect progressively wetter and more saline environments, with plant species changing from grasses to rushes and sedges.

The success of the planting will be monitored over the course of the next year, both qualitatively over the whole valley, and quantitatively in a number of surveyed plots. The upland grass is already well established, and the wetland plants are expected to cover much of the wetland by the end of the 2007 growing season.





Soil gas sampling during air injection.



Air injection test.



Drilling and pumping test setup at the FTP.

Pilot Treatability Studies

The USAED will be conducting pilot studies this summer to evaluate the ability of two technologies, biosparging and in-situ chemical oxidation (ISCO), to reduce levels of contamination in the soil at the former Fire Training Pit (FTP) and at Building A-711. Both technologies treat the contamination in place rather than requiring further excavation.

Biosparging Study

The FTP was last used in the early 1970s. In 2001, 24,000 tons of contaminated soil were excavated, treated, and returned to the pit; however, contamination is still present at the remainder of the site.

Air-injection wells will be installed this summer to supply pulses of air several feet below the water table. The increase in oxygen will stimulate the growth of microbes, allowing them to consume the diesel fuel. The biosparging study will be conducted at the FTP between August 2006 and March 2008.

In-situ Chemical Oxidation Study

The ISCO Study will be conducted at the Building A-711 site. Building A-711 was originally constructed by the U.S. Army for use as an ordnance shop, but currently the Alaska Department of Transportation and Public Facilities leases the building from the U.S. Coast Guard (USCG).

The Building A-711 site is contaminated by a mixture of heavy heating oil and diesel. In-situ chemical oxidation is an alternative method of introducing oxygen to reduce the contaminant levels. The ISCO Study will be conducted over a period of three months.

Site Investigation

Burma Road was part of the former Kodiak Naval Station. During and just after World War II, the area was used as a storage, demolition, and disposal area for ordnance material. Soil and groundwater sampling was conducted at the site in 1999, 2000 and 2004. Burma Road is currently undergoing a site investigation to assess potential hazards and determine priorities for further action. Following the completion of the site investigation, a Remedial Investigation and Feasibility Study are anticipated at the site.

Soil Thermal Remediation

Fuel-contaminated soil excavated from Bruhn Point will be treated at Soil Processing Inc.'s (SPI) facility on the U.S. Coast Guard base to remove hydrocarbons. After treatment, formerly contaminated soil can be used as backfill once test results confirm that the treated soil meets the cleanup standards set by the Alaska Department of Environmental Conservation.



Burma Road.



Remedial Action

What is a Remedial Action?

Remedial action is site cleanup.

The main goal of the cleanup is to make the site safe for its intended use. Sometimes the best approach is to dig up the soil and clean it. Sometimes the soil is treated in place, or dug up and transported off Kodiak Island for disposal.



Excavation at Drury Gulch, 2005.

Buskin Beach

In 2000 and 2004, approximately 750 tons of contaminated soil were excavated from the Lube Pits site, which is located in the Greely Road Garrison sub-area of Buskin Beach. Two concrete motor pool lube pits existed at the east end of a 2,400 square foot building foundation. Sampling results from the 2004 excavation and 2005 test pits indicated more contaminated soil remains at the site; therefore, an additional 4,000 tons of contaminated soil will be removed from the site this year.

Drury Gulch

Drury Gulch is part of the former Kodiak Naval Station reservation occupied by the U.S. Navy from 1939 until transfer to the U.S. Coast Guard in 1975. The Navy used the area for metal and debris storage and disposal during the withdrawal of the military from Kodiak. Polychlorinated biphenyls (PCBs) were discovered at the site in 1993. They were probably dumped from electrical components such as transformers.

Cleanup work began at Drury Gulch in 1999 and continues today. To date, USAED has removed nearly 10,000 tons of debris and contaminated soil from Drury Gulch. Approximately 2,000 tons remain to be removed in 2006, after which the site will be restored by backfilling, grading, and hydroseeding with native plants and grasses. Other work scheduled for 2006 includes storm drain improvements south of the Rezanof Highway and channel realignment north of the highway to ensure no PCBs leave the site.

Bruhn Point

In 2001, two steel underground storage tanks (1,000 and 1,500 gallons each) were removed from the Bruhn Point site. Approximately 450 gallons of fuel oil was pumped from the USTs and shipped to an environmental recycling company for beneficial reuse. Petroleum-impacted soil from two of the four walls of the excavation was removed and determined to be clean by confirmation samples. The petroleum-impacted soil was excavated and thermally treated. Soil from the remaining two walls was not removed due to its close proximity to a concrete foundation. Work scheduled for 2006 consists of removal of the concrete foundation and excavation of the remaining petroleum-impacted soil.

Proposed Plan

In a proposed plan, cleanup options are evaluated for practicality, effectiveness, cost, compliance with regulations, and safety. The preferred alternative is presented in a proposed plan for public review and comment. A proposed plan will be prepared for the Buskin Lake Drum Disposal Area.

The Buskin Lake Drum Disposal Area was used by the U.S. Navy for the disposal of used 55-gallon fuel drums – approximately 3,200 were dumped at the site. Between 1994 and 2004, DERP-FUDS removed the drums and associated soil contamination. A proposed plan recommending No Further Remedial Action Planned status will be distributed for public comment this Spring.

Decision Documents

When all cleanup options for a site have been evaluated and considered, a decision document is published to present the chosen alternative. Decision documents will be prepared for the Little Navy Annex and Cape Chiniak Tracking Station sites.

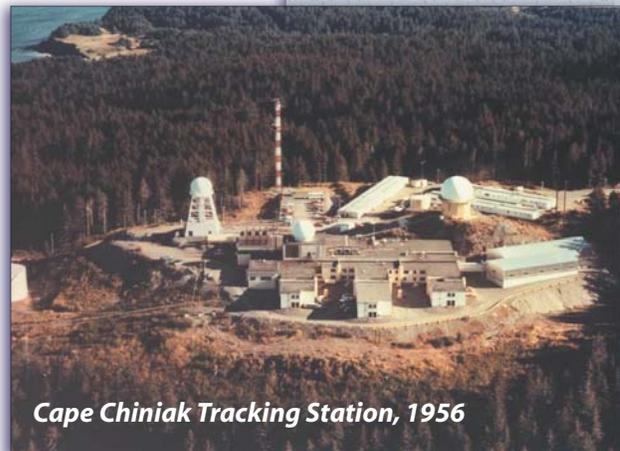
The Little Navy Annex was originally part of a Naval Security Group Activity site. Cleanup activities were performed during 1997, 1998, 1999, and 2002. A proposed plan recommending site closure was distributed to the public in June 2005 and an Open House was held to answer any questions and address public concerns. A final decision document for approval of No Further Remedial Action Planned status was completed in Spring 2006.

The Cape Chiniak Tracking Station was constructed in 1955 as an aircraft control and warning station, and was converted into a U.S. Air Force satellite tracking station in 1958. A series of removal actions was performed between 1997 and 2003 to remediate soil contamination. A proposed plan recommending site closure was distributed to the public in June 2005 and an Open House was held to answer any questions and address public concerns. A draft decision document was issued in August 2005. A final decision document for approval of No Further Remedial Action Planned status was completed in Spring 2006.

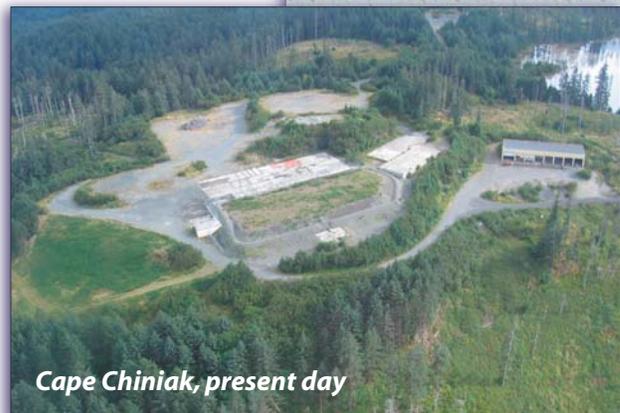
Document Repository

Information on the sites discussed in this fact sheet and key documents associated with DERP-FUDS are available for public review at the local Information Repository. These documents include remedial investigation and removal action work plans and reports. The Information Repository can be found at the following location:

*KODIAK LIBRARY
319 Lower Mill Bay Road
Kodiak, Alaska*



Cape Chiniak Tracking Station, 1956



Cape Chiniak, present day

U.S. Army Engineer District, Alaska
CEPOA-PM-C (TeVrucht)
P.O. Box 6898
Elmendorf AFB, Alaska 99506-0898



Questions or Comments?

The U.S. Army Engineer District, Alaska, will continue to update the community on the progress of DERP-FUDS cleanup activities on Kodiak. If you have questions or comments pertaining to a site, or wish to be added to or removed from our mailing list, please contact Dr. Mollie TeVrucht, FUDS Program Manager, at U.S. Army Engineer District, Alaska, P.O. Box 6898, Elmendorf AFB, AK 99506-0898 or (907) 753-2695. You may e-mail Dr. TeVrucht at Mollie.L.TeVrucht@poa02.usace.army.mil.

