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## **US Army Corps of Engineers**

Honolulu District

#### **BUILDING STRONG**

## **CERCLA CLEANUP PROCESS**

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) cleanup process begins when a site is discovered. The first step in the CERCLA process is to conduct a **Preliminary** Assessment and Site Inspection (PA/SI). The PA/SI involves historical records reviews, field visits, and limited sampling to determine the likelihood of contamination and to identify possible contamination sources. If contamination is suspected or a source is identified, then the project team conducts a Remedial Investigation (RI). The RI involves more intensive sampling and analysis to determine the nature and extent of contamination at the site. Using the data collected, a risk assessment is conducted to determine whether the contamination poses an unacceptable risk to human health, safety, or the environment. The results of the risk assessment determine what, if anything, needs to be cleaned up.

If the risk assessment identifies an unacceptable risk to human health, safety, or the environment, a Feasibility Study (FS) is conducted to evaluate cleanup options, new technologies, and ultimately identify the most suitable solution. As required by the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), when evaluating cleanup alternatives, the U.S. Army Corps of Engineers (USACE) considers overall protection of human health and the environment, compliance with applicable or relevant and appropriate requirements under federal environmental laws and state environmental or facility siting laws, ability to reduce the toxicity, mobility and volume of the contaminant(s), implementability of each cleanup alternative, long and short-term effectiveness, cost, and state regulatory and community acceptance.

Once USACE identifies the alternative that best meets the requirements of the NCP, it presents that alternative in a Proposed Plan. After considering comments provided during the public comment period, USACE will make the final remedy selection decision and document that decision in a **Decision Document** (DD).

The next step is **<u>Remedial Design</u>** (RD), where engineering specifications for the cleanup are developed. Then in Phase III, the Remedial Action (RA), the project moves forward to construction and operation of the selected remedy.

The Makanalua Bombing Range, Molokai project is currently in Phase II and has completed step 3, the **RI/FS** and is currently on step 4 the Proposed Plan of the CERCLA Cleanup Process.





The U.S. Army Corps of Engineers (USACE) has completed a Remedial Investigation/Feasibility Study (RI/FS) at the former Makanalua Bombing Range (MBR), Molokai, Hawaii (FUDS Property No. H09HI0203). The MBR RI/FS was performed under the authority of the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS). During the RI/FS a total of 99 Unexploded Ordnance (UXO) items and 1.024 pounds of munitions debris (MD) was found and disposed of off the site. The UXO and MD found was practice bombs of the following types: AN-Mk5, AN-Mk19, AN-Mk23, and AN-Mk43. No high explosive ordnance was found during the RI. Figure 1 shows the locations of where the munitions were found and from this information it can be determined the size of the area that is recommended for further cleanup. For more detailed information please refer to the RI Report located at the Molokai Public Library. The FS evaluated the information from the RI and developed seven alternatives that would meet the requirements found in the National Contingency Plan. Each alternative is evaluated to determine its protectiveness of human health and the environment to be eligible for selection as the remedy. The seven alternatives evaluated range from alternative number 1 - No Action (required) to alternative Figure 1 Location of UXO and MD number 7 Unlimited Use/Unlimited Exposure. To review the seven alternatives please refer to the FS document



located in the Molokai Public Library.

**Project Location.** The former Makanalua Bombing Range, also known as Kalaupapa Bombing Target and Kalaupapa Naval Bombing Range, is located on the north central coast of the island of Molokai, Hawaii, southeast of the Kalaupapa Airport and east of the Molokai Lighthouse within Kalaupapa National Historical Park on the Makanalua Peninsula see Figure 2.

Property and Project History. In 1941, the Territory of Hawaii issued a permit to the U.S. Navy (Navy) to use the area for aerial bombing. Typical aircraft involved in the training were Hellcats, Wildcats, Dauntless, and Corsairs. Active bombing practice took place between 1942 and



State of Hawaii Department of Land and Natural Resources, and State of Hawaii Department of Health. The USACE conducted both an Inventory Project Report (INPR) (equivalent to a CERCLA Preliminary Assessment (PA)) in 1990 and a Site Inspection (SI) in 2009 for this Munitions Response Site. Munitions and Explosives of Concern (MEC) and munitions debris (MD) were reported during the INPR site visit and SI field work activities, see figure 3. Due to the SI findings the site was recommended to move into the RI/FS phase of the CERCLA process.

Figure 3 MEC, unexpended Mk5 practice bomb

# Makanalua Bombing Range, Molokai, Hawaii

# **Fact Sheet**



Figure 2 Makanalua Bombing Range RI/FS Project Site

1945. In 1946, the land was returned to the Territory (subsequently State) of Hawaii. The land is currently owned by the State of Hawaii, and managed by the US National Park Service, **Proposed Plan** /Decision Document. Currently the project is in step 4 of phase III the Proposed Plan. The Proposed Plan uses the information from the RI/FS and input from the Stakeholders and Community to put forth an alternative. The Proposed Plan highlights the key factors that lead to the selection of the preferred alternative. The Proposed Plan does not select the remedial action; it merely sets forth the preferred alternative. The Proposed Plan is currently available for public comment so that the public can participate in the remedy selection process. After the Proposed Plan has been issued for public review and comment and any changes, revisions, or modifications have been appropriately addressed, USACE will make the final remedy selection decision and document it in a Decision Document. The Proposed Plan is available at the Molokai Public Library for review and comment.

**Cultural and Natural Resources.** USACE is committed to protecting the cultural and nature resource at the site. To avoid and minimize potential impacts to these resources, during the RI/FS both a qualified archaeologist and biologist conducted a pre-survey of the proposed transects and grids, rerouting or relocating them when appropriate, and they accompanied the field teams when transects and grids were established and investigated. Both qualified archaeologist and biologist also monitored all munitions destruction activities that during the investigation. Within the project site there are threatened and endangered species such as the Blackburn's Sphinx moths, Molokai Creeper, Newell's Shearwater, Hawaiian Common Moorhen, Hawaiian Petrel, Laysan Duck, Hawaiian Stilt, Hawaiian Coot, Hawaiian Duck, Hawaiian Hoary Bat, Molokai Thrush, 'o'u, Maui Parrotbill, Crested Honeycreeper, Hawaiian Hawk, Hawaiian Goose, and the following plants Centaurium sebaeoides, Tetramolopium rockii. During the RI field activities none of these species were negatively impacted.

Public Involvement. Public involvement is an important part of the FUDS Program. The USACE may host public meetings, distribute news releases, print public notices, and mail fact sheets and other information to interested citizens.

**Information Repository.** The information repositories for this project are the Molokai Public Library, Hawaii State Library, and the USACE Honolulu District Office at Ft. Shafter, Honolulu, Hawaii.

Questions. If you have questions about the site, FUDS Program and/or media queries, contact the Honolulu District's Public Affairs Office at (808) 835-4002/4003.

Ordnance Finds. If you find any item you suspect might be ordnance - RECOGNIZE, leave the area immediately warning others in the vicinity – **RETREAT**, and notify local law enforcement officials – **REPORT**, note the location of the suspicious item, but never touch, move, or disturb the item. Ordnance, regardless of age, or physical shape, can be dangerous. The USACE encourages communities to educate children about ordnance hazards including proper procedures to follow if they find a suspected ordnance item.

Remember the **3Rs** –



Molokai Public Library 15 Ala Malama Street Kaunakakai, HI 96748 Mon, Tue, Thur, Fri: 9:30 – 5:00 pm Weds: 12:30 pm - 8:00 pm Sat-Sun: Closed



## **US Army Corps of Engineers BUILDING STRONG**

#### Honolulu District

Defense Environmental Restoration Program-Formerly Used Defense Site (DERP FUDS) FACT SHEET

### **DERP FUDS Program**

- The Department of Defense (DoD) is committed to correcting environmental damage caused by its activities. The Defense Environmental Restoration Program (DERP) is the vehicle to accomplish this. The cleanup of Formerly Used Defense Sites (FUDS) is a part of this program (DERP-FUDS).
- FUDS are properties that the DoD once owned or used, but no longer controls. These properties can range from privately-owned residences to National parks, schools, colleges, and industrial areas.
- The DERP-FUDS program includes property formerly owned or used by the Army, Navy, Air Force, or any other DoD agency.
- The Army is the Executive Agent for the program and the U.S. Army Corps of Engineers is the agency that manages and directs the program's administration.
- The objective of the DERP-FUDS program is to reduce, in a timely, cost-effective manner, the risk to human health, safety, and the environment resulting from past DoD activities.

#### The goals of DERP-FUDS cleanup are:

- Identification, investigation, and cleanup of contamination from DoD-related hazardous, toxic, and radioactive waste substances (HTRW);
- Detection and disposal of munitions and explosives of concern (MEC); and
- Demolition and removal of unsafe buildings and structures located on formerly-owned DoD properties that are currently owned by private parties, States, or municipalities.

#### **Telephone:**

Please call the US Army Corps of Engineers, Telephone Number: 808-835-4002/4003.

#### Mail:

US Army Corps of Engineers, Honolulu District Attn: CEPOH-PP-E, Building 230 Fort Shafter, Hawaii 96858-5440

#### DERP, CERCLA, and SARA

The Defense Environmental **Restoration Program (DERP) was** established by the Comprehensive **Environmental** Response, Compensation, and Liability Act of 1980 (CERCLA), and the Superfund Amendments and Reauthorization Act of 1986 (SARA). This legislation provides the authority for certain cleanup activities at former Department of Defense sites in the United States and its territories.