



### CERCLA PROCESS

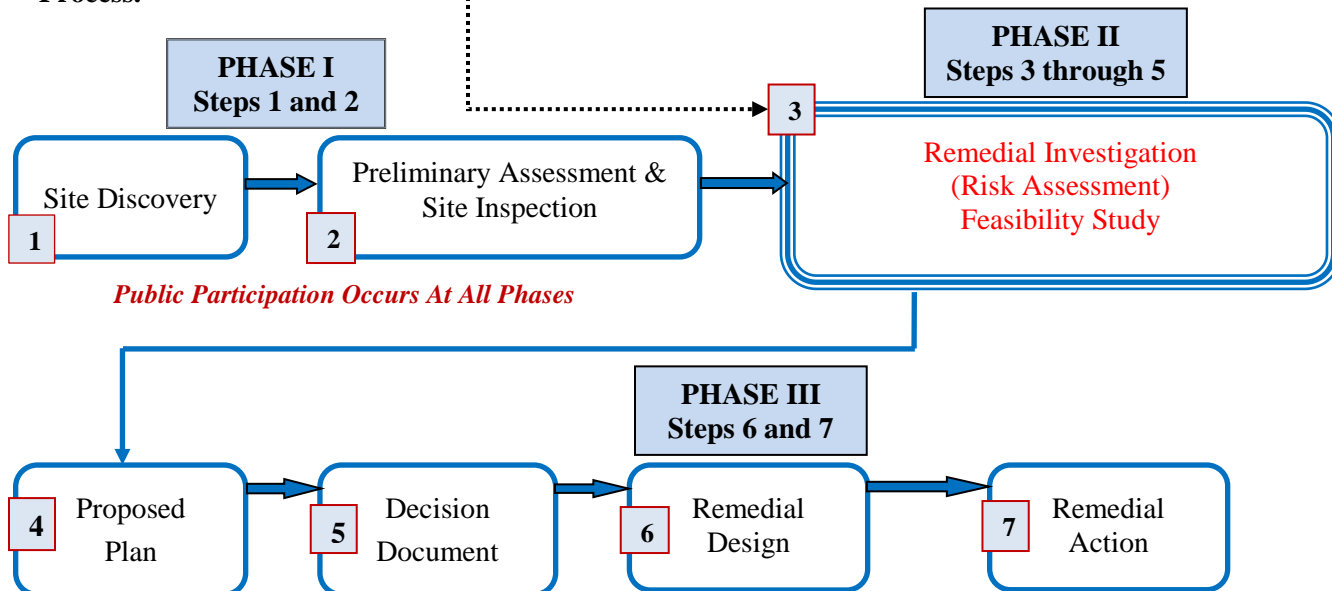
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The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial process begins when a site is discovered. Once a site is discovered, the next step is a **Preliminary Assessment and a Site Inspection** (PA/SI). This involves historical records reviews, field visits, and limited sampling to determine the likelihood of contamination and to identify possible contamination sources. If contamination exists or a source is identified, then the project team conducts a **Remedial Investigation** (RI). The remedial investigation involves more intensive sampling and analysis to determine the nature and extent of contamination at the site. Once data is collected, a Risk Assessment is conducted as part of the RI to determine the significance of the contamination in terms of human health and ecological impact. The results of the risk assessment assist in the development of remedial alternatives.

Following the Remedial Investigation, a **Feasibility Study** (FS) is conducted to evaluate remedial alternatives, new technologies, and ultimately identify the most suitable solution. When evaluating remedial alternatives, project managers consider risk, compliance with federal and state regulations, ability to reduce the toxicity, mobility and volume of the contaminant(s), implementability of a remedial alternative, long-term effectiveness, short-term effectiveness, cost, state acceptance, and community acceptance. Project managers plan strategies to reduce or prevent risk by limiting or stopping exposure to contaminants.

Once the project team determines a recommended remedial alternative, a public notice is placed in a local paper and public comments are solicited at a public meeting presenting the **Proposed Plan** (PP). Following a public comment period, the U.S. Army Corps of Engineers (USACE) will publish a **Decision Document** (DD) that includes a description of the selected remedial alternative. If appropriate, the project team will prepare a **Remedial Design** (RD), including engineering specifications for the remedial alternative, and conduct the **Remedial Action** (RA), which involves construction and operation of the selected remedy.

The Pacific Jungle Combat Training Center project is currently in the **RI/FS** phase of the CERCLA Process.



The U.S. Army Corps of Engineers (USACE) is planning to conduct a Remedial Investigation/Feasibility Study (RI/FS) at Pacific Jungle Combat Training Center (FUDS Project No. H09HI027401). The investigation is being addressed under the Military Munitions Response Program (MMRP) initiative of the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS). The primary objectives of the Remedial Investigation will be to determine if munitions are present and if so, where they are located. An additional objective is to determine if there is contamination from the munitions at the site. Once this information is gathered, the potential risks to both humans and ecological receptors will be assessed. The Feasibility Study will evaluate a range of potential actions for this site, called alternatives, in order to determine the best path forward.

**Project Location.** The former training site is located on the northeast coast of Oahu within the Punaluu Valley and Kahana Valley State Park. (Figure 1). The former training site consists of several non-contiguous parcels within the adjacent Kahana and Punaluu Valleys. Kahana Valley was designated a state park in 1960 and is currently under the purview of the State of Hawaii and managed by the State Department of Land and Natural Resources (DLNR). Punaluu Valley is owned by several private owners.

**Project Property History.** The U.S. Army acquired 2,545 acres in Kahana and Punaluu Valleys between 1943 and 1947. The Pacific Jungle Combat Training Center was established and used as a unit level jungle combat center to supplement Department Ranger and Combat School Training. The Center was divided into three courses: Red, Blue, and Green. Basic jungle warfare was conducted at the Red and Blue courses. Advanced jungle warfare training and Instructor Jungle Training School were conducted at the Green course. Munitions known to have been used or recovered include 75-millimeter (mm) armor piercing (AP) rounds, 105-mm high explosive (HE) rounds, 81-mm HE and practice mortar rounds, and small arms. In 1946, parcels in Kahana Valley were returned to its landowner. Leases and licenses for parcels in Punaluu Valley were terminated between 1945 and 1950. De-dudging efforts were conducted in Punaluu Valley in 1949.

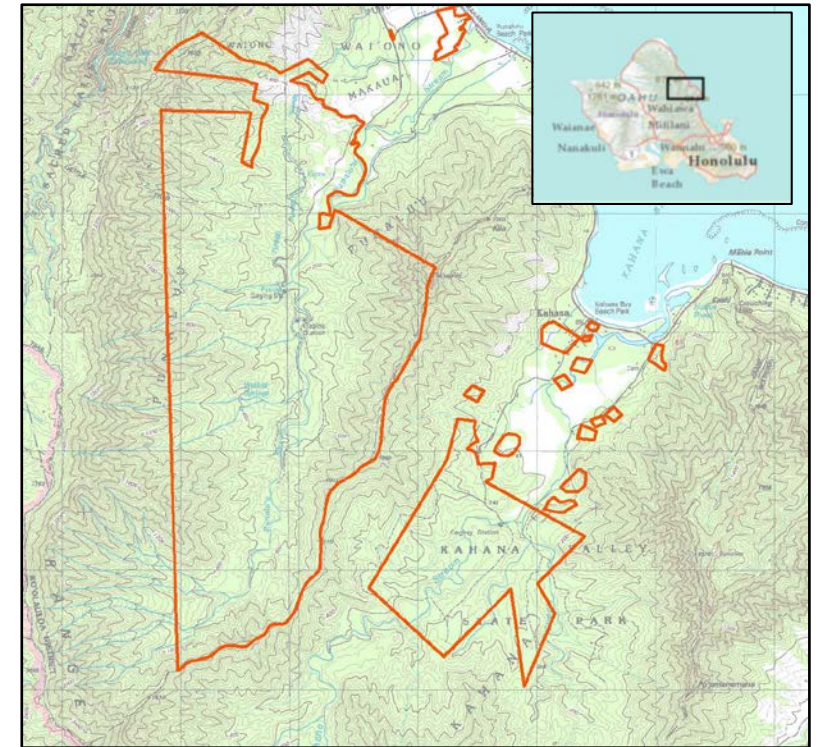


Figure 1 - Project Location

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Figure 2 - 81-mm Mortar

The USACE conducted an Inventory Project Report (INPR) (December 1993), an INPR Supplement (November 2004), and a Site Inspection (SI) (December 2008) for this Munitions Response Site (MRS). Munitions and Explosives of Concern (MEC) and munitions debris (MD) were reported during the INPR and SI site visits. The unexploded munitions, small arms ammunition, and munitions debris observed at the site included an expended 105-mm AP projectile; unexploded .30-caliber bullets; .30-caliber casings; expended M1 and M2 cartridges; a 75-mm HE or AP projectile; an unexploded smoke grenade; a 2.36-inch bazooka round; an expended MK28 sea marker; and a live 81-mm mortar round (Figure 2).



**Description of Remedial Investigation (RI)/ Feasibility Study (FS) Investigation.** The RI will consist of investigating both Kahana Valley and Punaluu Valley. The work may involve records reviews, surveying the site to identify subsurface anomalies; exposing the anomalies to determine the potential presence of munitions; collecting environmental samples where any munitions are found; and analyzing the samples for explosives and metals. The surveys will take place along three-foot wide paths called transects and within areas called grids that are typically between 2,500 and 10,000 square feet in size. Approximately 11.11 acres of transects will be investigated. The number and acreage of grids that will need to be investigated cannot be determined until the data from the transect surveys has been analyzed. The data gathered during the RI will be used to determine the nature and extent of munitions at the site. Once the data from the RI has been collected, an RI report will document the results of the investigation and assess the risk to receptors. The FS will develop, screen, and evaluate potential future alternatives at this site.

**Proposed Plan/Decision Document.** After the Remedial Investigation/Feasibility Study (RI/FS) is completed a Proposed Plan will be prepared that provides a brief summary of all alternatives studied in the RI/FS. The Proposed Plan highlights the key factors that led 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 will be made 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 prepare a Decision Document.

**Cultural and Natural Resources.** USACE is committed to protecting the precious cultural and nature resources at the site. To enable the avoidance and minimization of any potential impacts to these resources, an archaeologist and a biologist will monitor the proposed transects and grids, rerouting, or relocating them when appropriate, and will accompany the field teams when transects and grids are established and investigated. The archaeologist and biologist will also monitor all munitions disposal activities that may be required during the investigation. There are archaeological/cultural resources as well as endangered bird, snail, and plant species potentially present within the project site.

**Public Involvement.** Public involvement is an important part of the FUDS Program. USACE may host public meetings, distribute news releases, print public notices, and mail fact sheets and other information to interested citizens. USACE will also gauge interest for the addition of new members to the existing Restoration Advisory Board composed of various stakeholders, including community members and government representatives.

**Information Repository.** The information repositories for this project are the Kaneohe and Kahuku Public Libraries, the Kahana Valley State Park, and the USACE Honolulu District Office at Ft. Shafter, Honolulu, Hawaii.

**Questions.** If you have questions about the FUDS Program and/or media queries, contact the Honolulu District's Public Affairs Office at (808) 835-4004. For technical questions, please contact Project Manager, Kevin Pien at (808) 835-4091.

**Ordnance Finds.** If you find any item you suspect might be ordnance – **RECOGNIZE**, leave the area immediately warning others in the vicinity – **RETREAT**, leave the area but note the location of the suspicious item – **REPORT**, notify local law enforcement officials. 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 –**

**Kaneohe Public Library**  
45-829 Kamehameha Hwy.  
Kaneohe, HI 96744  
Telephone: (808) 233-5676

**Kahuku Public Library**  
56-490 Kamehameha Hwy.  
Kahuku, HI 96731  
Telephone: (808) 293-8935

**Kahana Valley State Park**  
Renee Kamisugi, Park Coordinator  
[Renee.Y.Kamisugi@hawaii.gov](mailto:Renee.Y.Kamisugi@hawaii.gov)  
(808) 237-7767

**RECOGNIZE**  
Military Items can be  
**DANGEROUS.**

**RETREAT**  
DO NOT TOUCH IT!  
Move away from the area.

**REPORT**  
CALL 911



## 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) 835-4004

**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 remedial activities at former Department of Defense sites in the United States and its territories.