



# CERCLA PROCESS

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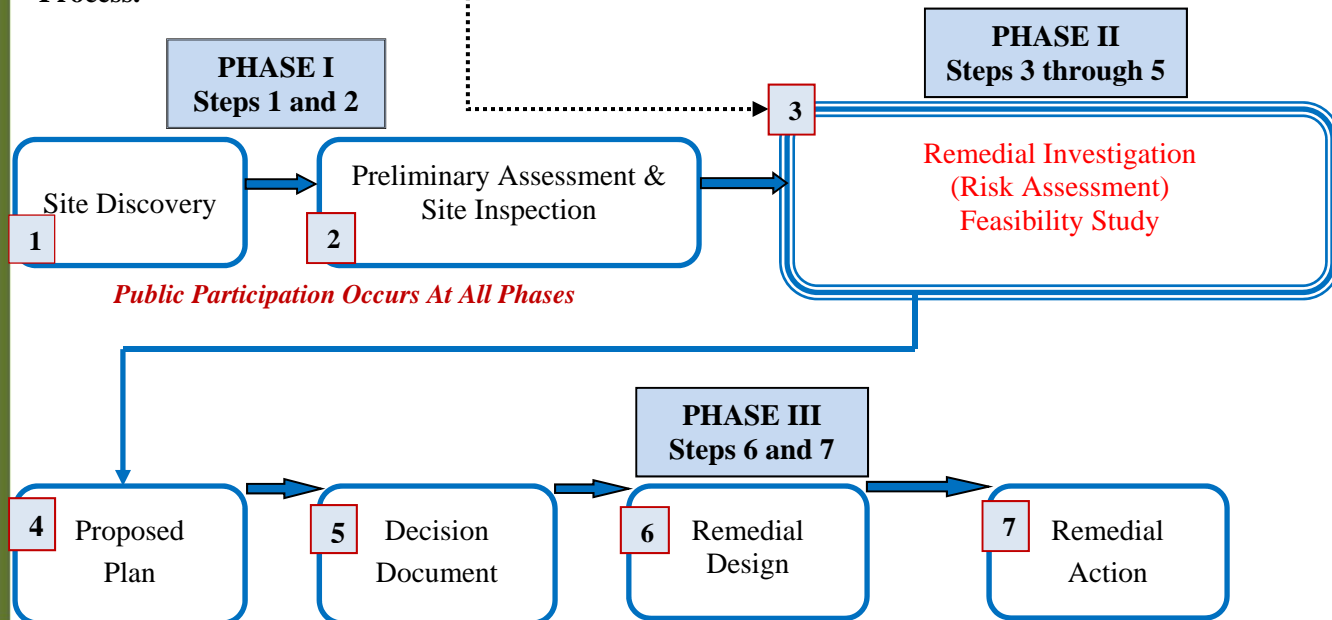
The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remedial process begins when a site is discovered. Once a site is discovered, the next step is a **Preliminary Assessment and a Site Inspection** (PA/SI). This involves historical records reviews, field visits, 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 Pali Training Camp project is currently in the **RI/FS** phase of the CERCLA

Process.



The U.S. Army Corps of Engineers (USACE) is conducting a Remedial Investigation/Feasibility Study (RI/FS) at Pali Training Camp (PTC) (FUDS Project Number H09HI027701). 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 Remedial Investigation portion of the project has been completed. The primary objectives of the Remedial Investigation were to determine 1) if munitions are present at the site and if so, where are they located and 2) if there is contamination from the munitions at the site. Data was gathered between July 2013 and March 2014 to meet these objectives and assess the potential risks to both humans and ecological receptors. 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 PTC site is located in Kailua at the foot of the Koolau Mountain range, near the southeast end of the island of Oahu (Figure 1). It consists of four noncontiguous parcels situated in portions of the Maunawili and Makalii Valleys: Maunawili Valley Impact Area, (3,432 acres), Maunawili Site (400 acres), Makalii Valley (46 acres), and Ulumawao (500 acres). The former PTC site is mostly undeveloped, rugged, and densely forested land with limited residential, agricultural, and recreational uses.

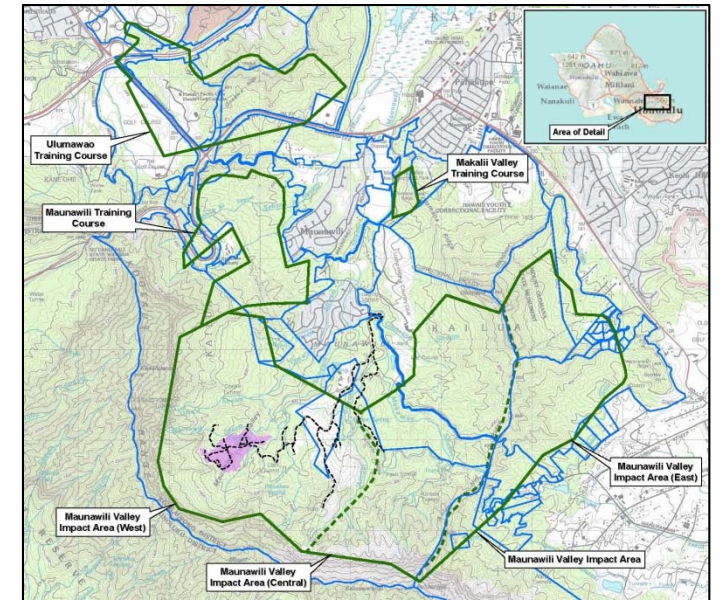


Figure 1 - Project Location

**Project Property History.** The PTC was opened in 1943 on property then belonging to Harold K.L. Castle. It was used from 1943 to 1945 as a regimental combat team training center emphasizing the use of and familiarity with modern arms and field weapons in a rugged terrain and jungle environment. In addition, the PTC provided rugged terrain for jungle and Ranger training. An artillery impact area was also established in the rear of Maunawili Valley. In 1945, the U.S. Army released PTC and the encampment was abandoned by the end of 1945. All on-site buildings were sold for scrap in 1946 and the land reverted back to the previous owner. Currently, the ownership of the former PTC is split between the State of Hawaii and various private landowners.



Figure 2 - 105-mm Projectile

The USACE conducted an Inventory Project Report (1994), an Engineering Evaluation/Cost Analysis (2008), a Site Investigation (SI) (2009), and a Non-Time Critical Removal Action (2012) for the former PTC. Munitions and Explosives of Concern (MEC) and munitions debris (MD) were reported during the INPR, SI, and SSFR site activities. MEC or MD detected or observed at the site included 81-mm high explosive (HE) mortars; 75-millimeter (mm) HE projectiles; 75-mm shrapnel projectiles; 2.36-inch Rocket Motor; 60-mm HE Mortar, M49A2; 57-mm APT Projectile, M70; 37-mm projectiles; 20-mm Ball Cartridge, MK1 (unfired); and small arms.

**Description of Remedial Investigation (RI) / Feasibility Study (FS) Investigation.**

The RI field work was performed in one of the four parcels comprising the former PTC, the Maunawili Valley Impact Area (MVIA) munitions response site (MRS). Right-of-entry was not granted to the Maunawili Training Course (MTC) MRS and no explosive hazards have been identified at the Makalii Valley Training Course (MVTC) and the Ulumawao Training Course (UTC) MRSs. RI activities involved records reviews; surveying the site to identify subsurface anomalies; exposing the anomalies to determine the potential presence of munitions; collecting environmental samples where munitions were found; and analyzing the samples for explosives and metals. The surveys took

place along 1-meter wide paths, called transects, and within areas, called grids, that were typically between 0.1 and 0.4 acres in size. Approximately 22.81 acres of transects were investigated, including well-used public trails. Seven MEC items and 1,346 MD items were found, primarily in the western portion of the MVIA MRS. Three of the seven items were 37-mm projectiles found approximately 400 feet northwest of the Maunawili Falls. The data gathered confirms that western portion of the MVIA MRS was used as an impact area by the military. The RI Report documents the data collected, presents the results of the investigation, and assesses the risk to receptors. The FS Report 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 presents the preferred alternative. A public comment period is a required part of the Proposed Plan so that the public can participate in the remedy selection process. After the Proposed Plan has been issued for public review and comment, any changes, revisions, or modifications will be appropriately addressed, and USACE will present the selected remedy in 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 qualified biologist accompanied the field teams during the transect/grid investigation, rerouting, or relocating the team when appropriate. The archaeologist and qualified biologist also monitored munitions disposal activities that were required during the investigation.

**Public Involvement.** Public involvement is an important part of the FUDS Program. USACE has hosted public meetings, printed public notices, distributed fact sheets and may issue news releases, or mail other information to interested citizens. USACE continually gauges interest for the addition of new members to the existing Restoration Advisory Board which is composed of various stakeholders, including community members and government representatives.

**Information Repository.** The information repositories for this project are the Kaneohe and Kailua Public Libraries and the USACE Honolulu District Office at Ft. Shafter, Honolulu, Hawaii. Public documents related to restoration efforts are located in these repositories for public review.

**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** –



**RECOGNIZE**  
Military Items can be  
DANGEROUS.

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

**REPORT**  
CALL 911

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

**Kailua Public Library**  
239 Kuulei Rd.  
Kailua, HI 96734  
Telephone: (808) 266-9911



# US Army Corps of Engineers

Honolulu District

**BUILDING STRONG**®

## 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 (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.