The FS recommended subsurface removal of MEC and munitions debris (MD) from the 108 acres within the boundaries of the two AOCs. The subsurface removal will involve instrument-aided search and removal of all detected munitions-related items in these areas, to a depth of two feet.

Public education, which will help manage risks by educating the local populace concerning the potential explosive hazards at the site, was also recommended in the FS.

Following implementation of the recommended munitions response actions, USACE will maintain responsibility for the residual risk at the site by performing recurring reviews. The 5-year reviews involve returning to the site five years after the recommended munitions response actions have been initiated, to assess their effectiveness and reliability. After the initial review has been conducted, recurring reviews will be performed at 5-year intervals. The need for recurring reviews will be coordinated with regulators and stakeholders and justified in each recurring review report.

# **REMOVAL ACTION**

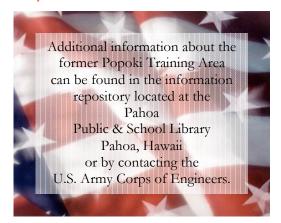
A MEC subsurface clearance action to a depth of two feet to remove and dispose of MEC and MD is scheduled for Fall 2010. All MEC encountered on-site will be destroyed and all MD will be removed from the site

People have been seriously hurt or killed by unexploded ordnance (UXO). Do not touch anything that could be UXO. UXO can be found in many shapes, sizes, and types. Age and size does not matter. Old and small items can kill and injure. Items may not look bad but they are very dangerous.

To keep yourself and your friends safe

#### REMEMBER THE 3Rs

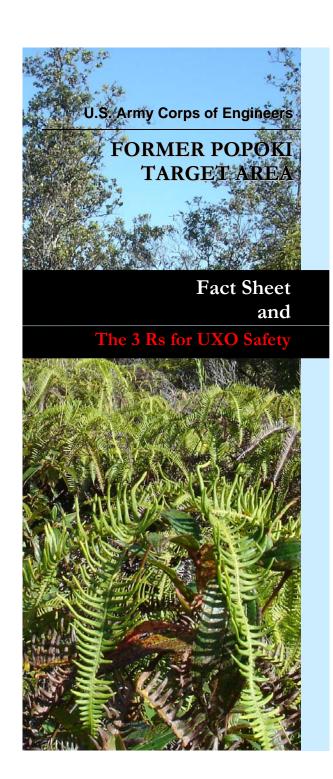
- 1. **RECOGNIZE** suspicious items and remember their locations
- 2. **RETREAT** without touching or going near them
- 3. **REPORT:** Call 911 and report what you saw





#### **U.S. Army Corps of Engineers**

Honolulu Engineer District Fort Shafter, HI 96858 Phone (808) 438-1232 Fax (808) 438-7801



### **FUDS PROGRAM**

Congress established the Formerly Used Defense Sites (FUDS) program in 1986 to clean up properties that were formerly owned, leased, possessed or used by the military or other defense agencies. The U.S. Army Corps of Engineers (USACE) manages the FUDS Program.

The FUDS property formerly known as the Popoki Target Area occupies 640 acres and is located on the eastern side of the Big Island, at Makuu Popoki Halona, District of Puna.

# SITE HISTORY

Approximately 640 acres were acquired by the U.S. Navy through a sublease (date unknown), either with W.H. Shipman, Ltd., or H. Blackshear, then executor of Shipman Estate. The site was reportedly used by the Navy as a target practice area during World War II. Though records could not be found to document such activity, ground reconnaissance revealed deteriorating air-to-ground practice bombs on site. The lease was cancelled on November 1, 1945.

# PREVIOUS INVESTIGATIONS

A site visit was conducted in 1990 by Donaldson Enterprises, Inc. During the investigation of the site, two types of air-toground ordnance were identified within the Makuu Farm Lots subdivision. A total of 12 practice bombs were identified, one of which contained a spotting charge. The practice bombs were identified as AN-MK 23 practice bombs with AN-MK 4 spotting charges, and M38A2 1OO-lb water-/sand-filled practice bombs.

Another site visit was conducted by USACE in 1991. Since vegetation was dense and reached heights of six to eight feet, no evidence of munitions or explosives of concern (MEC) was discovered during this site visit. Subsequently, on December 31, 1991, an Inventory Project Report (INPR) was issued.

On July 7, 1992, based on the findings of the INPR, the Popoki Target Area was determined to have been formerly used by the Department of Defense (DoD) and was therefore eligible for the Defense Environmental Restoration Program FUDS, established under 10 U.S.C. 2701 et seq.

A Remedial Investigation (RI) Report of Popoki Target Area was completed in April 2006. As a result of former DoD ownership and use, MEC and munitions constituents (MC) potentially exist at the former Popoki Target Area and may pose a risk to human safety or health. The RI characterized potential risks and developed appropriate response alternatives to reduce human risks associated with MEC and MC items.

During the MEC risk assessment, the site was evaluated as two non-contiguous Areas of Concern (AOC) consisting of a bombing target and a troop training area, as shown in the figure below. Based on the results of the risk assessment, the potential MEC risk for the project site is assessed as low to moderate. However, the potential for encountering MEC at the site still exists.



A feasibility study (FS) was recommended to develop, screen, and analyze alternatives for remedial action at the bombing target and troop training area. The portion of the Popoki Target Area not located within the two AOCs was determined to require no further DoD Action. Additional MC sampling and analysis was not recommended since sampling during the RI found little to no MC.