

The Former Waikoloa Maneuver Area in South Kohala was used by the Military for training. Unexploded ordnance exist throughout the site. It is important to remember the following:



- Do not touch anything that could be a UXO.
- UXO come in various shapes, sizes, and types.
- Age and size do not matter.
- Old and small UXO can kill or injure you.
- Items may not look bad, but can be very dangerous.
- Always recognize when you see a possible UXO, retreat away from it, and report it as soon as possible

Questions

If you have questions, please contact:

Project Manager,
Former Waikoloa Maneuver Area
U.S. Army Corps of Engineers
Honolulu District
808-835-4089

BE SAFE!

- **Recognize**
suspicious items and remember their locations.
- **Retreat**
without touching or going near them.
- **Report**
Call 911 and report what you saw.

Additional information about the former Waikoloa Maneuver Area can be found in the information repository located at the Thelma Parker Memorial Public & School Library Waimea, Hawaii or by contacting the U.S. Army Corps of Engineers



U.S. Army Corps of Engineers

Honolulu District
Fort Shafter, HI 96858
Phone 808-835-4089
Fax 808-835-4129

For more information visit our website at:
<http://www.poh.usace.army.mil/Missions/Environmental/FUDS/Waikoloa.aspx>



UXO Safety Former Waikoloa Maneuver Area

U.S. Army Corps of Engineers

History

The Formerly Used Defense Sites (FUDS) program was established 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 Waikoloa Maneuver Area (demarcated in the red crosshatch below) is located on the western side of the Big Island, encompassing most of the District of South Kohala.

The U.S. Navy through a licensing agreement with Richard Smart of Parker Ranch acquired 123,000 acres in Waikoloa in December 1943 that would become known as Waikoloa Maneuver Area. The land was used as an artillery firing range on which live ammunition and other explosives were employed, with the remaining acreage utilized for troop maneuvers and the largest encampment on the island of Hawaii consisting of approximately 467 acres of tents and Quonset huts. In September 1946, the property comprising the Waikoloa Maneuver Area was returned to Parker Ranch.

Two munitions clearance efforts were conducted, one in 1946 just prior to the departure of the 5th Marine Division and the other in 1954 following an accidental detonation of a dud munition killing two civilians and seriously injuring three others. The 1954 effort detected as many as 400 dud items including hand grenades, 60 and 81mm mortars, 75mm shells, 105 and 155mm shell fuzes, 31mm anti-tank cannon shells, and 4.2-inch mortars.

Fired munitions and explosives continue to be discovered as vacant land is developed which is why the U.S. Army Corps of Engineers—through the Defense Environmental Restoration Program for Formerly Used Defense Sites—is currently investigating the presence and extent of UXO



Figure 1: Former Waikoloa Maneuver Area

on property lands formerly comprising Waikoloa Maneuver Area.

Previous Investigations

A Preliminary Assessment conducted by the U.S. Army Corps of Engineers (Corps) in 1993 confirmed that the property was used by the Department of Defense and qualified as a FUDS.

As part of the FUDS Program, a Phase I Engineering Evaluation/Cost Analysis, known as an EE/CA was conducted from 1997 to 1999 at the request of Parker Ranch on small, restricted areas west of the Waimea-Kohala Airport. The goals of the EE/CA were to identify the extent of the hazard, to identify the objectives of the removal action, and to analyze various alternatives that may be used to satisfy these objectives for cost, effectiveness, and implementability. Results of the Phase I EE/CA indicated that the problem was larger than anticipated and resulted in the second EE/CA.

The Phase II EE/CA was conducted from 1999 to 2002 and covered 113,000 acres. Risk evaluations were completed for the entire area and the areas with the highest risks were Ouli, Waikoloa, and Waimea. The Phase II EE/CA recommended institutional controls, pre-coordinated construction support, surface clearance of munitions and explosives of concern (MEC) of approximately 28,000 acres, and subsurface clearance of MEC of approximately 19,000 acres.

The Corps conducted a Time Critical Removal Action (TCRA) in 2001 after children of the Ouli area discovered hand grenades on the ground. Approximately 300 acres in the Ouli area were cleared of MEC located on the surface.

During the Phase III EE/CA conducted from 2003 to 2005, the Corps investigated the presence and extent of MEC on property along the perimeter of the former Waikoloa Maneuver Area. As a result of the Phase III EE/CA, the boundary of the former Waikoloa Maneuver Area was expanded to include property makai (west) of



Figure 2: UXO may be difficult to identify in the field.

Queen Kaahumanu Highway and north of Kawaihae Road.

Removal Action

Removal Action (RA) is the cleanup or removal of MEC from the environment. The daily operations involve boundary and grid surveys, sweep team operations (anomaly detection), geophysical reacquisition and mapping (anomaly identification), excavation and disposal of MEC.

The first RA at the former Waikoloa Maneuver Area was conducted from 2002 to 2007. Approximately 8,000 acres were cleared and over 1,650 MEC items were removed from areas around Ouli, Waikoloa Village, and Waimea. Types of MEC removed included 60mm and 80mm high explosive mortars, 75mm, 105mm, and 155mm projectiles, 2.36-inch rocket propelled anti-tank rounds, U.S. Mk II hand grenades, M1 anti-tank mines, and Japanese ordnance.

The second RA was conducted in 2008 and 2009 and resulted in approximately 2,695 acres being cleared and disposal of 110 MEC

items.

The current removal action, which started in 2010, continues in the Ouli, Waikoloa Village, and Waimea areas and focuses on areas that were identified in the EE/CA, are easily accessible to the public, were evaluated as medium to high risk areas, and are slated for future development.

MEC continues to be discovered as the former Waikoloa Maneuver Area is developed. While encountering old shells, grenades, and munitions is not common, you should be wary of any type of old metal objects you may find in the area. Regardless of age, ordnance retains its explosive potential. Over time, some of these items can become more sensitive and detonation can occur with the slightest touch. Always remember the 3Rs of Explosive Safety.



Figure 3: UXO Search