

8 February 2012

INFORMATION PAPER

SUBJECT: Formerly Used Defense Site (FUDS), Waikane Training Area, Oahu, Hawaii

1. **Purpose:** To provide information on the subject project.

2. **Points of Major Interest and Facts.**

a. **Background:**

- The Waikane Training Area (WTA) is an 874-acre Formerly Used Defense Site (FUDS) located in Waikane Valley, on Oahu's windward side, approximately 10 miles northwest of Kaneohe Bay. Some FUDS, like WTA, were used by the military to train soldiers, airmen, sailors, and Marines, as well as to test new weapons and warfare capabilities. After World War II, many of these properties were no longer needed, and they were cleaned up using the best practices available at the time and then transferred back to the owners.

- Congress established the FUDS Program in the mid-1980s to restore properties formerly owned, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense. The Corps is responsible for implementing this program.

b. **Site History:**

- The 1,061-acre Waikane Valley Training Area (WVTA) was used by the Army and Marine Corps for training from 1942 to 1976. It is located within Waikane Valley, which also includes the 187-acre Waikane Valley Impact Area (WVIA) The WVIA is currently undergoing a separate investigation by the Marines; this fact sheet only addresses investigation activities at the WTA.

- The WVTA was established in 1942 after the Department of the Army entered into a lease agreement with Lincoln L. McCandless heirs and Waiahole Water Company, Ltd. for the right to use approximately 1,061 acres in Waikane Valley for advanced offensive warfare training. Authorization for the Army to use WVTA continued until July 1953, when the Marine Corps was substituted as lessee. Due to its geographic location and rugged terrain, WVTA was utilized for advanced training in offensive warfare and air-to-ground practice bombing during World War II. According to the lease, the Marine Corps was authorized continued use of WVTA from 1953 to 1976. However, due to its potential as a fire hazard, no tracer ammunition or incendiary shells were to be used at any time on the leased premises, and all weapons in excess of .50-caliber were to be fired into the designated impact areas. WVTA was formerly used as a training and artillery impact area from 1942 to 1976.

- In May 1944, a 60 millimeter (mm) mortar was found in Waikane Valley by several boys which killed two and injured others. In May 1963, three children were injured when a rifle grenade, reportedly discovered in Waikane Valley, was thrown against a wall.

- In 1975, the McCandless Estate Trustees and Kamaka family heirs elected to terminate the lease as of July 1976.

- The United States Marine Corps conducted ordnance clearance sweeps in 1976 and 1984. The 1976 clearance effort resulted in the removal of over 24,000 pounds of practice ordnance and fragments, including 42 items of unexploded ordnance (UXO). In June 1984, an intensive ordnance clearance resulted in the removal of 16,000 pounds of demilitarized practice ordnance and 190 items of UXO from the parcel.



c. Previous Investigations:

- An Inventory Project Report (INPR), completed in June 1996, documented Department of Defense (DOD) responsibility for MEC contamination at WTA. Based on the findings of fact from the INPR, WTA was determined to be formerly used by the DOD and met the statutory requirements to be eligible for Defense Environmental Restoration Program – FUDS funding.
- An Engineering Evaluation/Cost Analysis (EE/CA) evaluating MEC risk within the WTA was conducted in 2006. During the EE/CA, seven MEC items were recovered including: two 81mm high explosive (HE) mortar rounds, three 60mm HE mortar rounds, and two 37mm HE projectiles. All of the MEC items were recovered in the southeastern portion of the WTA, which adjoins the southern boundary of the WVIA. One hundred and seventy-two munitions debris items were also found. Most of the site was also apparently used for foot maneuvers as evidenced by the significant amount of small arms throughout the valley.
- An abbreviated Site Investigation (SI) focusing on the WTA was conducted in 2008. The sampling team collected two multi-incremental soil samples in areas where MEC was found during the EE/CA, and collected two co-located surface water and sediment samples from Waikane Stream, down stream of locations where MEC was found. The samples were analyzed for Target Analyte List metals and explosives. Resulting contaminants of potential concern identified in the SI were chromium, iron, vanadium, cobalt, mercury, and RDX. While chromium, iron, and vanadium exceeded project action levels, it is not known if these are background levels. Further analysis will be conducted to validate the levels.
- A Removal Action (RA) was conducted at a 40-acre portion of the WTA within two Areas of Concern. The contractor performed instrument-aided, surface and subsurface clearance of MEC to a depth of 24 inches. Standard procedures for removal of MEC included blow-in-place (BIP) and moving MEC items that could be safely relocated for consolidated detonation. An archaeologist was on site with the contractor to monitor all phases of the RA including pre- and post-BIP, and consolidated detonation activities. Fifty-one MEC items were found and destroyed.

d. Project Description

- A Remedial Investigation (RI) and Feasibility Study (FS) is being conducted at the former WTA to determine what types of cleanup actions are needed to reduce risks from MEC comprised of UXO, discarded military munitions, or munitions constituents (MC) (chemical components of munitions) remaining from past training activities.
- After completion of the RI/FS, it will be determined if clean-up of this investigated area will be required. Follow-on projects will be planned as required.

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