FINAL

Operational Range Assessment Program
Phase I Qualitative Assessment Report
Aahoaka Local Training Area, Kapa‘a, Kaua‘i, Hawai‘i

U.S. Army Operational Range Assessment Program
Qualitative Operational Range Assessments

Prepared for:
U.S. Army Environmental Command and
U.S. Army Corps of Engineers Baltimore District

Printed on recycled paper

August 2008

ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
CTAHR	College of Tropical Agriculture and Human Resources
DoD	Department of Defense
DODI	Department of Defense Instruction
E	Ecological receptors identified. This is referring to range grouping; pathway designation always precedes E designation.
GW	Groundwater pathway identified. This is referring to range grouping; M designation always precedes GW designation.
H	Human receptors identified. This is referring to range grouping; pathway designation always precedes H designation.
HIARNG	Hawai'i Army National Guard
LS	Limited Source.
LTA	Local Training Area
M	Munitions used. This is referring to range grouping; M designation always precedes applicable pathway.
MCOC	Munitions Constituents of Concern
ORAP	Operational Range Assessment Program
PU	Munitions used. Pathway unlikely or incomplete. This is referring to range grouping; M designation always precedes PU designation.
SW	Surface water pathway identified. This is referring to range grouping; M designation always precedes SW designation.
U.S.	United States
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Command
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

EXECUTIVE SUMMARY

The United States (U.S.) Army is conducting qualitative assessments at operational ranges to meet the requirements of Department of Defense policy and to support the U.S. Army Sustainable Range Program. The operational range qualitative assessment (hereinafter referred to as Phase I Assessment) is the first phase of the U.S. Army Operational Range Assessment Program (ORAP). This Phase I Assessment evaluates Aahoaka Local Training Area's (LTA) operational range area to assess whether further investigation is needed to determine if potential munitions constituents of concern (MCOC) are or could be migrating off-range at levels that may pose an unacceptable risk to human health or the environment. In conducting the Phase I Assessment, MCOC sources, potential off-range migration pathways, and potential off-range human and/or ecological receptors are evaluated as appropriate.

Aahoaka LTA is located along the island of Kaua'i's east-central coast, three miles northwest of Hanamaulu, Hawai'i. This 3,128-acre site is bounded by Kalepa Forest Reserve and Nounou Mountain to the east and Wailua Homelands to the north. Aahoaka LTA, which is leased from the state, was established in January 1975. The primary mission of Aahoaka LTA is to provide a light forces maneuver training area for the Hawai'i Army National Guard (HIARNG).

As part of the Operational Range Inventory Sustainment, an update to the Army Range Inventory Database-Geodatabase (ARID-GEO) was submitted to the U.S. Army Environmental Command in March 2006 (ARID-GEO, 2006). The ARID-GEO (2006) identified one operational range encompassing 3,128 acres. The one operational range encompasses the entire footprint of the site, which contains no non-operational acreage. Current activities conducted at Aahoaka LTA include bivouacking and light maneuver training. Historical small arms live-fire training may have occurred in the past (CAPT, Retired, HIARNG, pers. comm.).

Potential MCOC can be released to groundwater (down gradient), surface water / sediment (downstream), off-range soil, or the food chain via a variety of release mechanisms. Release mechanisms for soil may include leaching from soil to groundwater or erosion and runoff to off-range surface soil or to nearby streams. Once potential MCOC are deposited in surface water / sediment, they have the potential to migrate downstream, recharge the shallow groundwater, or be taken up by aquatic plants or animals. Release mechanisms for surface water / sediment are natural stream flow and sediment transport. Aahoaka LTA is drained to the east by the Wailua River system, which eventually reaches the Pacific Ocean. Aahoaka LTA's groundwater is encountered at shallow depths in an unconfined layer of freshwater overlying saltwater. Area wells are located cross gradient and up gradient of the training area.

Because a minimal amount of historical small caliber munitions have been utilized within Aahoaka LTA, the potential MCOC source is considered limited and is not thought to pose a threat to off-range receptors via surface water and groundwater pathways.

The one operational range at Aahoaka LTA is categorized as unlikely.

<u>Unlikely – Five-Year Review</u>

One range at Aahoaka LTA is categorized as Unlikely, totaling 3,128 acres. This range consists of one maneuver training area. Ranges where, based upon a review of readily available information, there is sufficient evidence to show that there are no suspected releases or source-receptor interactions that could present an unacceptable risk to human health or the environment are categorized as

Unlikely. Ranges categorized as Unlikely are required to be re-evaluated at least every five years. Re-evaluation may occur sooner if significant changes (e.g., change in range operations, site conditions, regulatory changes) occur that affect determinations made during this Phase I Assessment.

Table ES-1 summarizes the Phase I Assessment findings.

Table ES-1: Summary of Findings and Conclusions for Aahoaka LTA

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 3,128 acres	No source – limited or no military munitions use	Not evaluated (no source was identified)			Re-evaluate during the five-year review. No source was identified.