



FINAL

Operational Range Assessment Program Phase I Qualitative Assessment Report Pohakuloa Training Area, Hawaii

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



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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 Pōhakuloa Training Area’s 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.

Pōhakuloa Training Area encompasses approximately 110,063 acres in Hawai‘i County, Hawai‘i. The installation is located 36 miles west of Hilo on a plain formed by the convergence of the Mauna Kea, Mauna Loa and Hualalai volcanoes. The primary mission of PTA is to provide combat training for brigade-strength units of the 25th Infantry Division, Hawai‘i Army National Guard, Army Reserves, and the U.S. Marine Corps.

Pōhakuloa Training Area is composed of 153 operational ranges encompassing a total of 109,950.42 acres. The installation’s remaining 112 acres are identified as non-operational range area (cantonment area). Training activities at PTA include live-fire weapons training, aerial drops, rotary wing training, and light maneuver exercises. Over the course of one year, 15,000-20,000 troops train at PTA. This training is year round, but adds up to three months annually (Interview, 2006).

Despite the utilization of a variety of munitions at PTA, the migration of on-range MCOC to off-range areas is unlikely. Pathways via surface water and groundwater pathways are hindered by limited precipitation, great depth to aquifer, densely vegetated washes, and highly permeable soil/geology.

The 153 operational ranges at PTA are categorized as unlikely (e.g., Referred, Inconclusive, or Unlikely).

Unlikely – Five Year Review

153 ranges at PTA are categorized as Unlikely, totaling 109,950.42 acres. These ranges consist of live-fire ranges, maneuver training areas, and an impact area. Ranges where, based upon a review of readily available information, there is sufficient evidence to show that there are no known 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 PTA

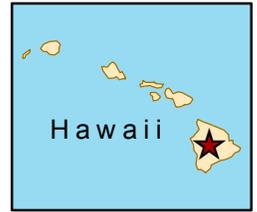
Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	129 operational ranges; 50,660.49 acres	Small caliber, medium caliber, large caliber, pyrotechnics, obscurants, and other munitions	Migration pathways are unlikely or incomplete.	Not Evaluated- migration pathways are unlikely or incomplete.		Re-evaluate during the five-year review. (No pathways present)
	24 operational ranges; 59,289.93 acres	Limited small caliber munitions	Not Evaluated, Limited or no munitions have been used on range.		Re-evaluate during the five-year review. (Limited Source of MCOC)	

ABBREVIATIONS/ACRONYMS

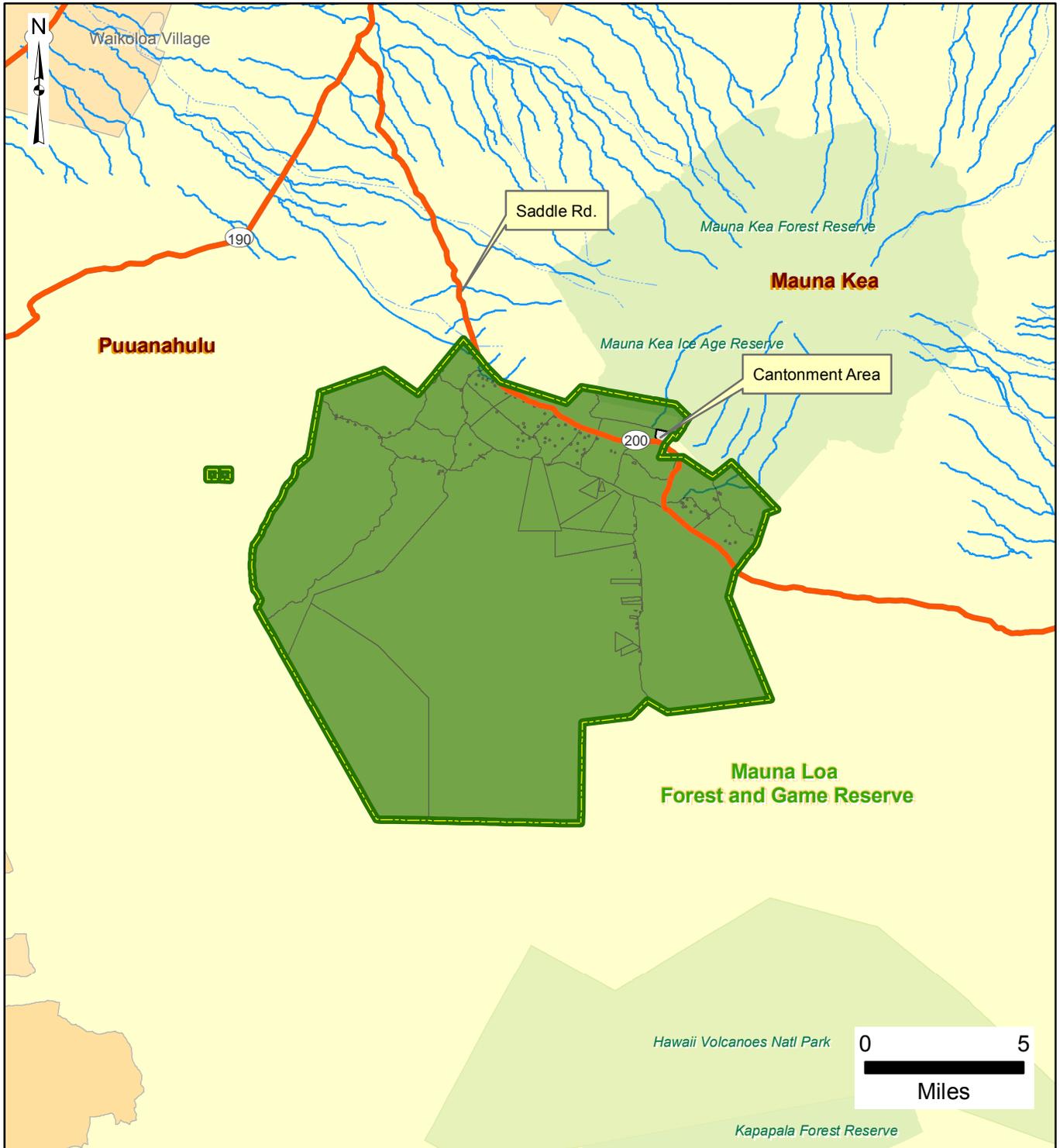
ARID-GEO	Army Range Inventory Geodatabase
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DNT	Dinitrotoluene
DoD	Department of Defense
DODI	Department of Defense Instruction
°F	Degrees Fahrenheit
ft	Feet
HMX	Cyclotetramethylenetetranitramine
LS	Limited Source
MCOC	Munitions Constituents of Concern
MGW	Munitions used/Groundwater Pathway
MGW (H/E)	Munitions used/Groundwater Pathway (Human and Ecological)
mm	Millimeters
MPU	Munitions used/Pathway Unlikely
MSW	Munitions used/Surface Water Pathway
MSW (H/E)	Munitions used/Surface Water Pathway (Human and Ecological)
MSWGW	Munitions used/Surface Water and Groundwater Pathways
MSWGW (H/E)	Munitions used/Surface Water and Groundwater Pathways (Human and Ecological receptors)
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
PRC	PRC Environmental Management, Inc.
PRG	Preliminary Remediation Goal
PTA	Pōhakuloa Training Area
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
TNT	Trinitrotoluene
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
WP	White Phosphorus



Operational Range Assessment Program
Phase I Qualitative Assessment
Pohakuloa Training Area, Hawai'i, HI



**Figure 1-1
Installation Location**



Installation Data

- Installation Boundary
- Operational Range Area
- Non-Operational Area

Transportation

- Highway

Hydrology

- River/Stream

Data Sources:
ARID-GEO, May 2006
ESRI, StreetMap, 2006

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