



FINAL

# Operational Range Assessment Program Phase I Qualitative Assessment Report Fort Ruger, O'ahu, 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



March 2008

Final Operational Range Assessment Program Phase I Qualitative Assessment Range Assessment Reports will be released beginning in March 2008 per the Direction of Army Headquarters. The cover page of this Report reflects the official finalization date. The date on subsequent pages/figures reflects the date upon which this document's conclusions are based.



## 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. This Phase I Assessment evaluates the operational range area at Fort Ruger 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 ecological receptors are evaluated as appropriate.

Fort Ruger is comprised of approximately 360 acres of land located within the Diamond Head State Monument Park, five miles northwest of downtown Honolulu. Based on the available Army Range Inventory Database-Geodatabase (ARID-GEO) data (dated 31 December 2005), Fort Ruger consists of a single approximate 312-acre operational range. However, this area appears to include two former small arms firing ranges encompassing approximately 10 acres in size which were closed in the 1960s and are currently being remediated under the Defense Environmental Restoration Program, Formerly Used Defense Sites (DERP-FUDS) according to the Comprehensive Environmental Response, Compensation, and Liability Act. Due to the DERP-FUDS remedial action at the two small arms ranges, the 10 acres are excluded from the Operational Range Assessment Program (ORAP) assessment. Therefore, the current operational range area at the installation is approximately 302 acres. The remaining 58 acres associated with Fort Ruger are considered a non-operational use area.

Throughout its history, Fort Ruger has been utilized by the military for two main purposes: as a coastal defense battery from 1906 until approximately 1950 by the U.S. Army, and, for training purposes by the Hawai'i Army National Guard (HIARNG) from 1950 to present day. Currently, Fort Ruger is largely a part of the Diamond Head State Monument Park and is utilized for training and various administrative purposes by HIARNG. Additionally, the installation is the home of the Joint Force Headquarters-Hawai'i.

A review of available records and background data as well as interviews with installation personnel indicate that the single range at Fort Ruger has never been used for training involving military munitions (live-fire or non-live-fire). Because training activities do not involve, and historically have not involved, the use of military munitions, there are no potential sources of MCOC. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated, and the range at Fort Ruger is categorized as Unlikely.

Installations with operational ranges where no munitions or only small caliber blanks have been utilized are categorized as Unlikely. That is, based on a review of available information, there is sufficient evidence to show that due to the lack of munitions use there are no known releases or source-receptor interactions that could present an unacceptable risk to human health or the environment. 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 or 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 Fort Ruger**

<b>Category</b>	<b>Total Number of Ranges and Acreage</b>	<b>Source(s)</b>	<b>Pathways(s)</b>	<b>Human and Ecological Receptors</b>	<b>Conclusions</b>
Unlikely	One operational range; 302 acres	No source—no current or historical use of live-fire military munitions	Not evaluated (no source identified)		Re-evaluate during the five-year review.

## ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DERP-FUDS	Defense Environmental Restoration Program – Formerly Used Defense Sites
DoD	Department of Defense
EPA	Environmental Protection Agency
HIARNG	Hawai'i Army National Guard
MCOC	Munitions Constituents of Concern
ORAP	Operational Range Assessment Program
U.S.	United States
USACE	United States Army Corps of Engineers

