



FINAL

Operational Range Assessment Program Phase I Qualitative Assessment Report Kawailoa Training Area, 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



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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.



ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Geodatabase
ARNG	Army National Guard
BSA	Biologically Sensitive Areas
CEMML	Center for Environmental Management of Military Lands
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DNT	Dinitrotoluene
DoD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
DoE	Department of Energy
DPTMS	Directorate of Plans, Training, Mobilization and Security
°F	Degrees Fahrenheit
ft	Foot or Feet
GIS	Geographic Information System
gpm	Gallons Per Minute
H/E	Human/Ecological
HMX	Cyclotetramethylenetetranitramine
ID(L)	Infantry Division (Light)
in.	Inch(es)
KTA	Kahuku Training Area
LS	Limited or No Source Munition
MCOG	Munitions Constituents of Concern
MGW	Munitions Groundwater
mm	Millimeter
MPU	Migration Pathway Unlikely
msl	Mean Sea Level
MSW	Munitions Surface Water
MSWG	Munitions/Surface Water and Groundwater
NRCS	Natural Resources Conservation Service
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
SBMR	Schofield Barracks Military Reservation
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
USARHAW	United States Army Hawai'i
U.S.C.	United States Code
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

EXECUTIVE SUMMARY

PURPOSE

This qualitative assessment, hereafter referred to as Phase I Assessment, evaluates Kawailoa 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. The Phase I Assessment results in the categorization of operational ranges as appropriate, as follows:

- **Referred – Refer to Appropriate Cleanup Program:** Ranges with compelling evidence (e.g., sampling data) to indicate the presence of an off-range release that potentially poses an unacceptable risk to human health or the environment;
- **Inconclusive – Phase II Quantitative Assessment Required:** Ranges where existing information either is insufficient to make a source-receptor interaction determination or indicates the potential for such interaction to be occurring; or
- **Unlikely – Five-Year Review¹:** 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 based on a review of the information available.

SUMMARY OF FINDINGS

The 20 operational ranges at Kawailoa Training Area have been placed into the following category:

- **Unlikely** – Limited amounts of non-live-fire munitions are used in the seven maneuver and training areas and no munitions are used in the 13 rotary wing runways on Kawailoa Training Area's 23,455 acres. Therefore, this group has no source of potential MCOC.

These findings are summarized in **Table ES-1**.

¹ All operational ranges must be periodically re-evaluated to determine if there is a release or substantial threat of release of MCOC from an operational range to an off-range area. Range groups categorized as Unlikely are to be re-evaluated at least every five years. Re-evaluation may occur sooner if significant changes (e.g., changes in range operations, site conditions, and regulatory changes) occur that affect determinations made during the Phase I Assessment.

Table ES-1: Summary of Findings, Conclusions, and Recommendations for Kawaiiloa Training Area

Category	Group Identification	Total Number of Ranges and Acreage	Source(s)	Pathway(s)*	Human Receptors*	Ecological Receptors*	Recommendations (Future Steps)
Unlikely	Limited source	20 operational ranges; 23,455 acres	No source – no live-fire military munitions use within training areas and rotary wing runways	Not evaluated	Not evaluated	Not evaluated	Re-evaluate during the five-year review.
* Indicates the specific pathways of concern.							