FINAL
Operational Range Assessment Program Phase I Qualitative Assessment Report Malaeloa Training Area, American Samoa

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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OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
MALAELOA TRAINING AREA
AMERICAN SAMOA

SEPTEMBER 2009

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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 the operational range area at Malaeloa Training Area (TA) 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.

Presently the Sergeant First Class Pele United States Armed Forces Reserve Center (SFC Pele USAFRC) in American Samoa is comprised of the U.S. Army Reserve Training Center in Tafuna and the Malaeloa TA, formerly referred to as the American Samoa Local Training Area (LTA). Malaeloa TA encompasses 78.7 acres of land located northwest of the Village of Malaeloa on the westside of the Malaeloa Valley. The village of Malaeloa is located approximately four miles west of the SFC Pele USAFRC and the Pago Pago International Airport and approximately seven miles southwest of Pago Pago, the capital city of American Samoa. The training area consists of a single operational range: a light maneuver training area. Historically a 25-meter small arms range, located in the center of the training area, was used for approximately one year, but has remained inactive since 1999. There is no non-operational use area at Malaeloa TA (Army Range Inventory Database-Geodatabase, 2008).

Malaeloa TA is leased from a private citizen of American Samoa under temporary lease agreements that recently expired in September 2008 and has been used sporadically since 1988 by the U.S. Army Reserve. The SFC Pele USAFRC in American Samoa is presently re-negotiating lease agreements to continue use of the Malaeloa TA in the future.

Potential MCOC sources identified at Malaeloa TA consist of the impact berm for the historical 25-meter small arms firing range. In general, MCOC from primary source areas potentially impact soil. Although military munitions have been used at Malaeloa TA, the migration of on-range MCOC to off-range receptors is unlikely. Physical factors such as topography, vegetation, and soils limit the potential for potential MCOC to migrate off-range at levels which may negatively impact human health or the environment. Existing sampling analysis confirms that potential MCOC migration is limited, even within the historical small arms range. The single operational range at Malaeloa TA is categorized as Unlikely.

Unlikely – Five-Year Review

The single operational range at Malaeloa TA, totaling 78.7 acres, is categorized as Unlikely. Based upon a review of readily available information, ranges where there is sufficient evidence to show that there are no known releases or source-receptor interactions off-range 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 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 Malaeloa TA

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 78.7 acres	Historical live-fire small arms range impact berm	Groundwater	Persons receiving potable water from American Samoa Power Authority public water system	Not applicable	Re-evaluate during the five-year review. The receptors identified are not affected by potential MCOC based on limited exposure, and analytical data (see Section 5.1 for details).

ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
ASEPA	American Samoa Environmental Protection Agency
ASPA	America Samoa Power Authority
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DoD	Department of Defense
DODI	Department of Defense Instruction
DPTMS	Directorate of Plans, Training, Mobilization and Security
DU	Decision Unit
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
ECP	Environmental Condition of Property
FUDS	Formerly Used Defense Site
GW	Groundwater pathway identified. (This refers to range grouping; M designation always precedes GW designation.)
H	Human receptors identified. (This refers to range grouping; pathway designation always precedes H designation.)
LS	Limited Source
LTA	Local Training Area
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCL	Maximum Contaminant Level
MCOC	Munitions Constituents of Concern
mg/kg	Milligrams per Kilogram
Mgal/day	Million Gallons per Day
MMRP	Military Munitions Response Program
NPS	National Park Service
NRCS	Natural Resources Conservation Service
ORAP	Operational Range Assessment Program
PRG	Preliminary Remediation Goals
PWS	Public Water System
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RFMSS	Range Facility Management Support System
RRC	Regional Readiness Command
SDWA	Safe Drinking Water Act
SFC Pele USAFRC	Sergeant First Class Pele United States Armed Forces Reserve Center
SMA	Special Management Area

SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
T&E	threatened or endangered
TA	Training Area
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
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VA	Veterans Administration
°F	Degrees Fahrenheit
µg/L	Micrograms per Liter