FINAL OPERATIONAL RANGE ASSESSMENT PROGRAM PHASE I QUALITATIVE ASSESSMENT REPORT SUNNY HILLS LOCAL TRAINING AREA VERNON, FLORIDA

MARCH 2008

Prepared for:

UNITED STATES ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT P.O. Box 1715
Baltimore, Maryland 21203

and

UNITED STATES ARMY ENVIRONMENTAL COMMAND

Aberdeen Proving Ground, Maryland 21010

Prepared by:

MALCOLM PIRNIE, INC. 1300 East 8th Avenue Suite F100 Tampa, Florida 33605



ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database – Geodatabase
ARNG	Army National Guard
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
E	Ecological receptors identified. (This refers to range grouping, pathway
	designation always precedes E designation.)
FDEP	Florida Department of Environmental Protection
FDOH	Florida Department of Health
FLARNG	Florida Army National Guard
FNAI	Florida Natural Areas Inventory
GIS	Geographic Information System
GW	Groundwater pathway identified. (This refers to range grouping, M
	designation always precedes GW designation.)
Н	Human receptors identified. (This refers to range grouping, pathway
	designation always precedes H designation.)
H/E	Human/Ecological
LS	Limited Source
LTA	Local Training Area
M	Munitions used. (This refers to range grouping, M designation always
	precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
MGW	Munitions/Groundwater
mm	Millimeter
MPU	Migration Pathway Unlikely
msl	Mean Sea Level
MSW	Munitions / Surface Water
MSWGW	Munitions / Surface Water and Groundwater
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping, M
	designation always precedes PU designation.)
PWS	Public Water Supply
RFE	Robert F. Ensslin
SW	Surface water pathway identified. (This refers 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
USEPA	United States Environmental Protection Agency
WSRP	Water Supply Restoration Program
°F	Degrees Fahrenheit

Malcolm Pirnie, Inc.

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 Sunny Hills Local Training Area (LTA) 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.

Sunny Hills LTA encompasses approximately 11,119 acres in Washington County, Florida. It is located approximately eight miles southeast of Vernon, Florida, on property owned by the Deltona Corporation, which leases it to the Florida Army National Guard (FLARNG) for weekend training events. This area is used by the 2nd Battalion, 124th Infantry Regiment, which conducts light infantry maneuver training on the site. In 1999, the site was partially developed by the Deltona Corporation as a residential housing area, and a network of paved streets was constructed within the area. However, construction was suspended before the construction of housing units began.

A review of available records and background data, as well as interviews with FLARNG personnel, indicated that the FLARNG is permitted to utilize only 200 acres of the Sunny Hills development and that no live fire is permitted on the property. An ORIS Discrepancy Memorandum will be submitted to the USAEC to correct the ARID-GEO (2005) data for Sunny Hills LTA. Training exercises may be conducted up to three times per year (although only two exercises have taken place since 2002), and current munitions usage is limited to small arms blank ammunition. Historically (approximately 1991-1994), smoke grenades and pyrotechnics were utilized during training exercises; however, munitions debris was collected and removed at the conclusion of training events.

Unlikely – Five-Year Review

The single operational range at Sunny Hills LTA is categorized as Unlikely, totaling 11,119 acres. This range is a light infantry maneuver area. Because historical training activities involved a limited source of military munitions, which were collected and removed at the conclusion of training exercises, and current training activities involve a limited source of munitions that are collected and removed, there are very limited potential sources of MCOC. 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 on 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 reevaluated 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.

Malcolm Pirnie, Inc.

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

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 11,119 acres (only 200 acres identified in land use agreement)	Limited source – no current or historical use of live-fire military munitions; limited use of small caliber blanks, pyrotechnics, and smoke grenades	Not evaluated (limited source was identified)		Re-evaluate during the five- year review. Limited source was identified.	

Malcolm Pirnie, Inc.