

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
CAMP MERRILL
DAHLONEGA, GEORGIA**

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.
300 East Lombard Street
Suite 610
Baltimore, Maryland 21202



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 Camp Merrill'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 ecological receptors are evaluated as appropriate.

Camp Merrill occupies 345,125.35 acres within the Chattahoochee National Forest, in Lumpkin County, Georgia. The Army is able to utilize a portion of the National Forest land for Camp Merrill via a Special Use Agreement between the U.S. Army and the U.S. Department of Agriculture (USDA) Forest Service. The installation lies adjacent to the city of Dahlonega to the northwest and approximately 75 miles northeast of Atlanta, Georgia. Camp Merrill is the home to the second phase, or Mountain Phase, of the U.S. Army Ranger training and is a sub-installation to Fort Benning, Georgia. The primary mission of Camp Merrill is to serve as a major training area for the 5th Ranger Training Battalion, the U.S. Army Ranger School, other military units, civilian government agencies, and youth groups.

An Operational Range Inventory Sustainment update was submitted to the U.S. Army Environmental Command in July 2006 (Army Range Inventory Database-Geodatabase (ARID-GEO) [2006]). ARID-GEO (2006) identified two operational range areas encompassing a total of 341,969.57 acres. A total of 3,155.78 acres was identified as other than operational acreage. Various types of training activities occur at Camp Merrill, including live-fire weapons training, mountaineering training, and light maneuver exercises. The site conducts 11 classes annually, each with a duration of three weeks.

The two operational ranges at Camp Merrill are categorized as Unlikely.

Unlikely – Five-Year Review

Two ranges at Camp Merrill are categorized as Unlikely, totaling 341,969.57 acres. These ranges consist of a small arms range and a training and maneuver area. Ranges categorized as Unlikely are those operational 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. 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 Camp Merrill

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	1 operational range; 341,969.54 acres	No source – limited or no military munitions use	Not evaluated (no source identified)			Re-evaluate during the five-year review. (Based on current munitions use, no source area was identified.)
	1 operational range; 0.22 acres	Small arms firing	None		Not evaluated (no pathway identified)	Re-evaluate during the five-year review. (Current munitions use indicates that a source area is present; however, no pathway was identified.)

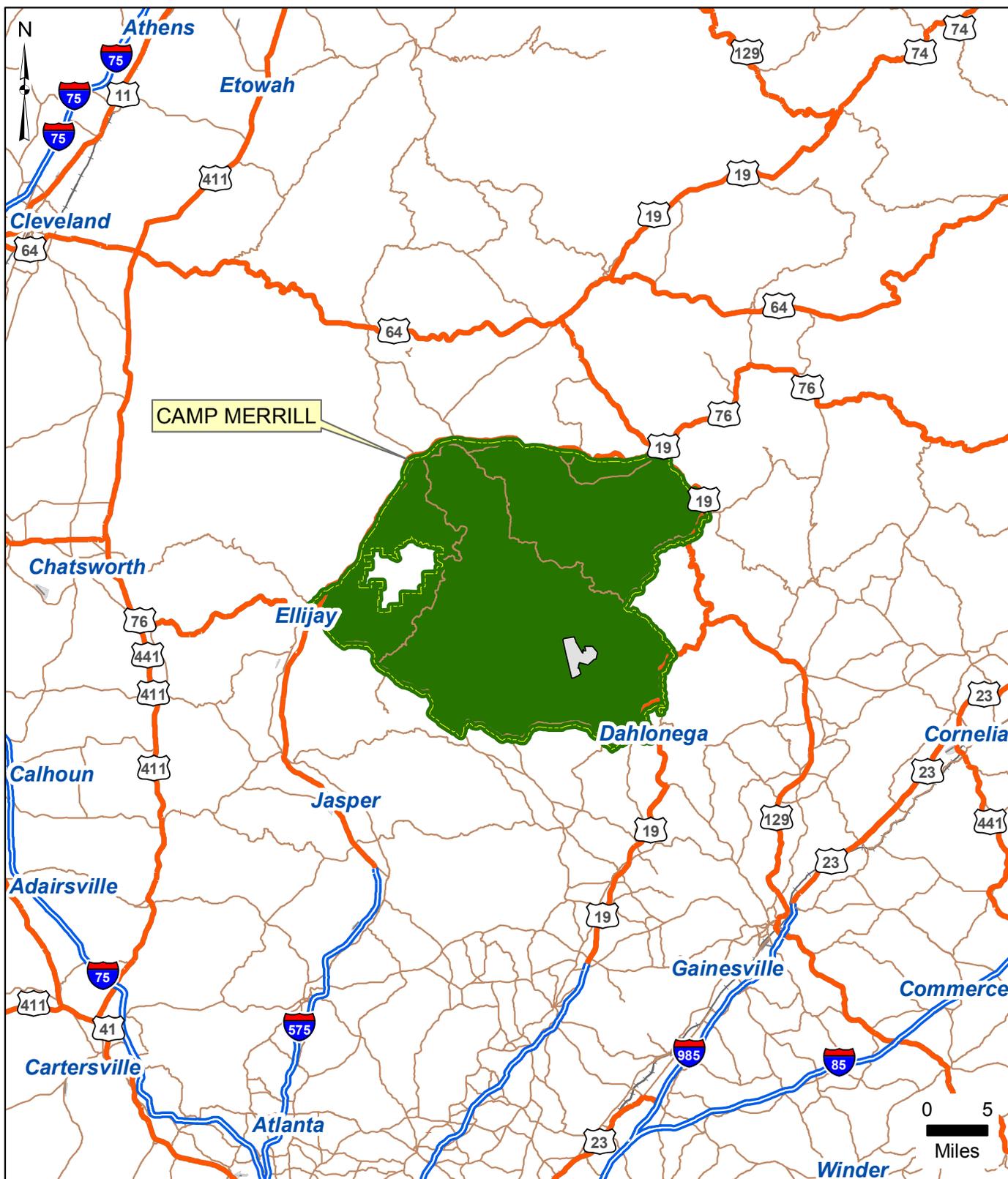
ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
ASP	Ammunition Supply Point
CAL	Caliber
cm/sec	Centimeters/Second
CSM	Conceptual Site Model
DoD	Department of Defense
DODI	Department of Defense Instruction
DPW	Department of Public Works
E	Ecological receptors identified. This is referring to range grouping, pathway designation always precedes E designation.
EMD	Environmental Management Division
GW	Groundwater pathway identified. This is referring to range grouping, M designation always precedes GW designation.
H	Human receptors identified. This is referring to range grouping, pathway designation always precedes H designation.
HMX	Cyclotetramethylenetetranitramine
LS	Limited Source
M	Munitions used. This is referring to range grouping, M designation always precedes applicable pathway.
MCL	Maximum Contaminant Level
MCOC	Munitions Constituents of Concern
MG/L	Milligrams per Liter
MGW (H/E)	Munitions used. Groundwater pathway identified (human and ecological receptors).
MM	Millimeter
MPU	Munitions used. Pathway unlikely.
MSW	Munitions used. Surface water pathway identified.
MSW (H/E)	Munitions used. Surface water pathway identified (human and ecological receptors).
MSWGW	Munitions used. Surface water and groundwater pathways identified.
MSWGW (H/E)	Munitions used. Surface water and groundwater pathways identified (human and ecological receptors).
NGVD	National Geodetic Vertical Datum
ORAP	Operational Range Assessment Program
PU	Munitions used. Pathway unlikely or incomplete. This is referring to range grouping, M designation always precedes PU designation.
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
SW	Surface water pathway identified. This is referring to range grouping, M designation always precedes SW designation.
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
USDA	U.S. Department of Agriculture
USEPA	United States Environmental Protection Agency



Operational Range Assessment Program
Phase I Qualitative Assessment
Camp Merrill, GA

Figure 1-1
Installation Location



- Installation**
- Installation Boundary
 - Operational Area
 - Other than Operational Area

Data Sources:
AEC, ARID-GEO, June 2005
ESRI, StreetMap USA, 2005

Date: May 2007
Prepared By: Malcolm Pirnie, Inc.
Prepared For: U.S. Army
Contract: W912DR-05-D-0004