

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
CLARKS HILL TRAINING SITE
PLUM BRANCH, SOUTH CAROLINA**

MARCH 2008

Prepared for:

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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. This Phase I Assessment evaluates the operational range area at Clarks Hill Training Site 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.

Clarks Hill Training Site occupies approximately 891 acres of land in west-central South Carolina and is located about four miles south of Plum Branch and 80 miles west of Columbia. The training site is located in McCormick County, near the border of Georgia and on the shore of Thurmond Lake. The training site offers a variety of challenge courses, as well as sports and recreational facilities, that are used by the South Carolina Army National Guard (SCARNG) and outside groups (e.g., Reserve Officers' Training Corps, businesses, schools).

As part of the Operational Range Inventory Sustainment, an update to the Army Range Inventory Database-Geodatabase (ARID-GEO) was submitted to the U.S. Army Environmental Command in March 2006. The ARID-GEO (2006) identified one operational range area encompassing all 891 acres of the training site. Currently, training conducted at Clarks Hill Training Site is limited to light maneuver training and field training exercises conducted during the summer months. Historically, Clarks Hill Training Site has been used infrequently for convoy training occasionally involving the use of small arms blanks, pyrotechnics, and smoke grenades. According to SCARNG personnel, in the previous seven years there have been approximately five instances in which training has involved the use of pyrotechnics and smoke grenades. A review of available records and background data, as well as interviews with SCARNG personnel, indicated that the range at Clarks Hill Training Site has never been used for training involving live-fire military munitions.

The operational range at Clarks Hill Training Site is categorized as Unlikely.

Unlikely – Five-Year Review

The single operational range at the Clarks Hill Training Site is categorized as Unlikely, totaling 891 acres. This range consists of a light infantry maneuver training area. The SCARNG has used blank munitions and infrequent pyrotechnics on the installation, currently and historically, that make it unlikely that there is a significant source of MCOCs. 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 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 Clarks Hill Training Site

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale	
Unlikely	1 operational range; 891 acres	Limited source – no current or historical use of live-fire munitions; limited use of pyrotechnics, smoke grenades, and small caliber blanks				Not evaluated (limited source was identified)	Re-evaluate during the five-year review. Limited source was identified.

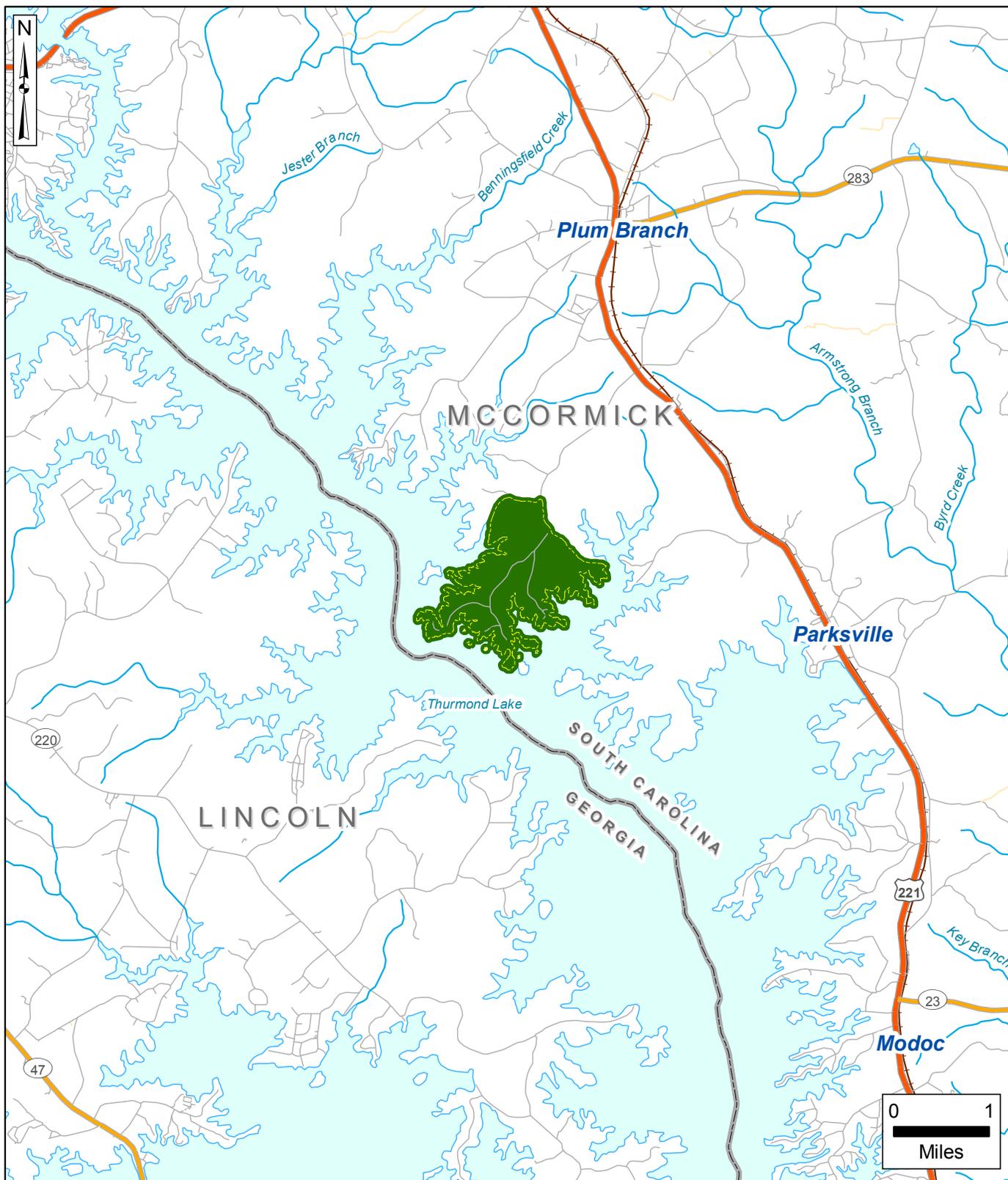
ABBREVIATIONS/ACRONYMS

AKO	Army Knowledge Online
ARID-GEO	Army Range Inventory Database-Geodatabase
ARNG	Army National Guard
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.)
gpm	Gallons per Minute
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.)
JFHQ	Joint Forces Headquarters
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
NGB	National Guard Bureau
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
SC	South Carolina
SCARNG	South Carolina Army National Guard
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
USAEC	United States Army Environmental Command
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
°F	Degrees Fahrenheit



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**Operational Range Assessment Program
Phase I Qualitative Assessment
Clarks Hill Training Site, SC
Figure 1-1
General Location of Clarks Hill Training Site**



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

- Hydrology**
- Stream/Ditch
 - Water Body

Data Sources:
AEC, ARID-GEO, Oct 2006
ESRI, StreetMap USA, 2005

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