



FINAL

Operational Range Assessment Program
Phase I Qualitative Assessment Report
Brigadier General Thomas Baker Training Site, Maryland
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



Printed on
recycled
paper



March 2009



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 Brigadier General (BG) Thomas Baker Training Site (TS) 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.

BG Thomas Baker TS is located in Maryland, approximately 22 miles east of Cumberland and 16 miles west of Hancock. The Army Range Inventory Database-Geodatabase (2006) indicates that the installation encompasses 870.54 acres comprised of seven operational range areas, including five maneuver and training areas and two miscellaneous training areas.

BG Thomas Baker TS was established in 1991 with the lease of 870.54 acres of land from the Maryland Department of Natural Resources to the Maryland Army National Guard for the purpose of land navigation, light infantry, and survival training. The majority of munitions used at the training site consist of small caliber blanks which are not considered a source of MCOC. Limited use of pyrotechnics (10 each year) was permitted throughout the installation from 2000 to 2005. The scattered use of limited numbers of pyrotechnics over the course of five years constitutes a limited potential source of MCOC at BG Thomas Baker TS. In 2007, obscurants were approved for limited use (i.e., detonation in five-gallon buckets) in the southern-most and central maneuver and training range areas (Environmental Supervisor, pers. comm.). Due to the method of detonation, the limited use of obscurants does not constitute a potential source of MCOC.

Release mechanisms and potential pathways and receptors are present at the installation. Release mechanisms for soil may include erosion and runoff to off-range surface soil or to Sideling Hill Creek and the Potomac River. Once potential MCOC are deposited in surface water / sediment of Sideling Hill Creek, they have the potential to migrate downstream or be taken up by aquatic plants or animals. Surface water / sediment drainage at BG Thomas Baker TS is directed toward Sideling Hill Creek and the Potomac River, which constitute natural release mechanisms for potential MCOC from these source media.

Potential human receptors include users of water from down gradient, off-installation wells and recreational use of the Potomac River downstream from BG Thomas Baker TS. The main ecological receptors are sensitive wetlands located off-installation and down gradient from the southwest corner of the training site.

Despite the source media, release mechanisms, and receptors present, the potential that levels of MCOC are present at a significant concentration that could pose an unacceptable risk to off-range receptors is unlikely.

The seven operational ranges at BG Thomas Baker TS are categorized as Unlikely.

Unlikely – Five-Year Review

Seven ranges at BG Thomas Baker TS are categorized as Unlikely, totaling 870.54 acres. These ranges consist of five maneuver and training areas and two miscellaneous training areas. 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 Brigadier General Thomas Baker Training Site

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	7 operational ranges; 870.54 acres	No source—limited or no military munitions use		Not evaluated (no source identified)		Re-evaluate during the five-year review. No source was identified.

ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
BG	Brigadier General
C&O	Chesapeake and Ohio
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.)
ESRI	Environmental Systems Research Institute, Inc.
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
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOG	Munitions Constituents of Concern
MDARNG	Maryland Army National Guard
MDDNR	Maryland Department of Natural Resources
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
TS	Training Site
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
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
°F	Degrees Fahrenheit



Operational Range Assessment Program
Phase I Qualitative Assessment
Brigadier General Thomas Baker Training Site, MD

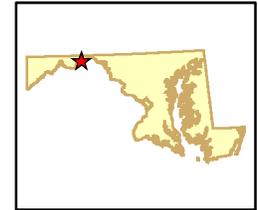
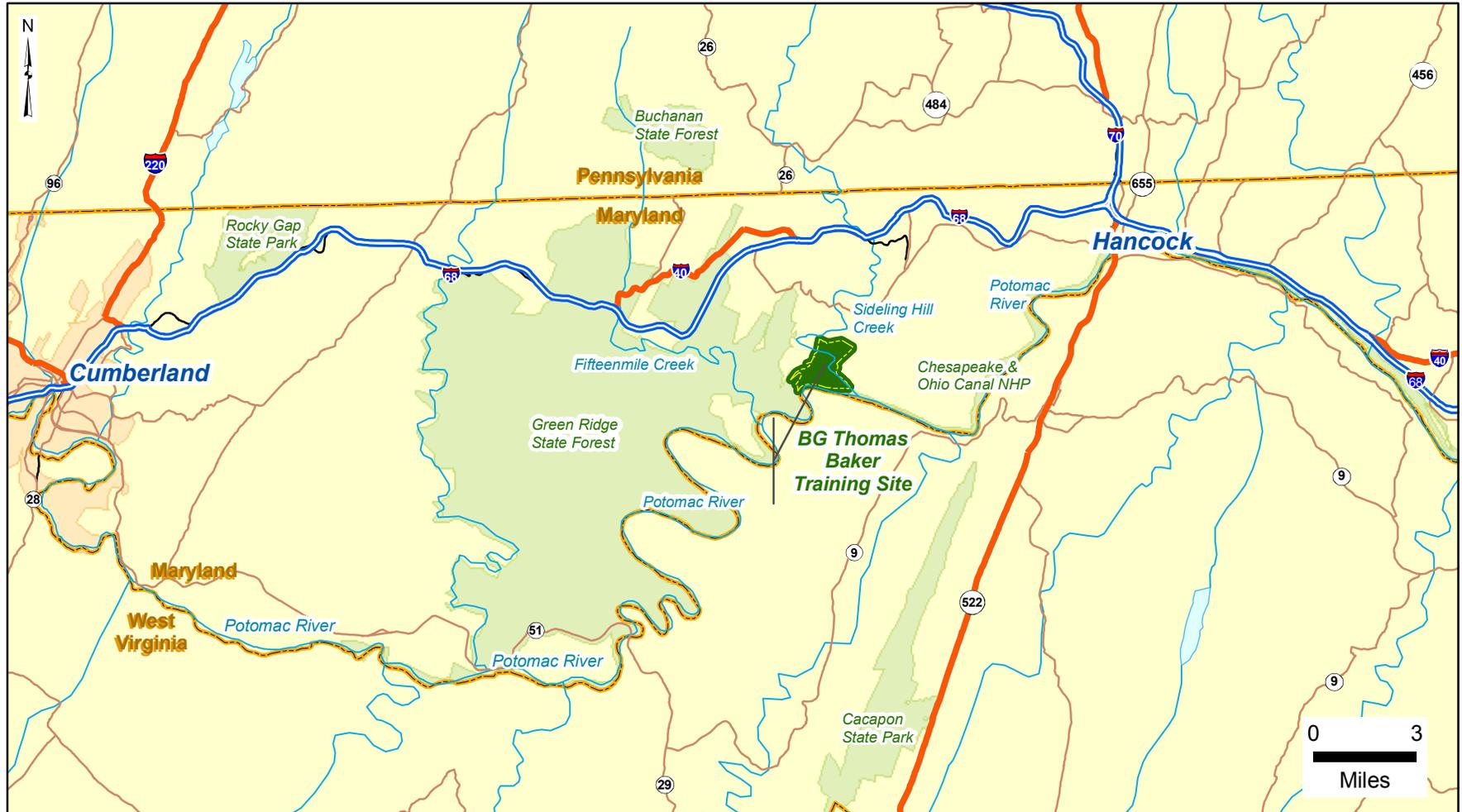


Figure 1-1
General Brigadier General Thomas Baker Training Site Location



Installation Data

- Installation Boundary
- Operational Range Area

Transportation

- Interstate Highway
- Highway
- Major Road
- Local Road

Hydrology

- Waterbody
- River/Stream

Administrative

- Urban Areas
- State and National Park/Forest
- State Boundaries

Data Sources:
ARID-GEO, 2006
ESRI, 2006
National Park Service, 2008

Date:.....March 2009
Prepared By:EA Engineering, Science, and Technology
Prepared For:.....U.S. Army
Contract Number:..... W912DR-05-D-0008