



FINAL

# Operational Range Assessment Program Phase I Qualitative Assessment Report Fort George G. Meade, 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



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## ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
bgs	Below Ground Surface
BRAC	Base Realignment and Closure Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DNT	Dinitrotoluene
DoD	Department of Defense
DODI	Department of Defense Instruction
DoI	Department of the Interior
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
EOD	Explosive Ordnance Disposal
ESRI	Environmental Systems Research Institute, Inc.
FGGM	Fort George G. Meade
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.)
HMX	Cyclotetramethylenetetranitramine
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
SW	Surface water pathway identified. (This refers 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
USAEHA	United States Army Environmental Hygiene Agency
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UXO	Unexploded Ordnance
°F	Degrees Fahrenheit
µg/L	Micrograms per Liter

## **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 Fort George G. Meade (FGGM) 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.

FGGM is a 5,415-acre installation located half-way between Washington, D.C. and Baltimore, Maryland, approximately four miles east of Interstate 95 (Malcolm Pirnie, Inc., 2006). The two operational ranges at FGGM include a light maneuver/training area and a confidence/obstacle course, totaling 134.12 acres. There is no current, nor has there historically been, any confirmed munitions use on the operational ranges. Although the operational range area has not been used for munitions training, unexploded ordnance (UXO) surveys have been conducted in the area. The surveys identified 14 historical items including 12 large caliber, one medium caliber, and one other munitions. The UXO items were either blown in place or removed for explosive ordnance disposal. The results of the UXO survey attribute the 14 historical items found to fill material. Potential surface water and groundwater pathways exist and there are potential ecological receptors located down gradient; however, due to the limited presence of a source of MCOC, there is no potential for MCOC to migrate off the operational ranges at levels that may pose an unacceptable risk. The remaining 5,281 acres of FGGM consist of non-operational areas including a main administrative area, six privatized military housing areas, two operational ranges, an industrial/maintenance area, the exchange mall complex, a 36-hole golf course, and the Kimbrough Army Clinic (Malcolm Pirnie, Inc., 2006).

The two ranges at FGGM are categorized as Unlikely, totaling 134.12 acres. These ranges consist of a light maneuver/training area and a confidence/obstacle course. 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. The two operational ranges at FGGM are categorized as Unlikely.

**Table ES-1** summarizes the Phase I Assessment findings.

**Table ES-1: Summary of Findings and Conclusions for Fort George G. Meade**

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	2 operational ranges; 134.12 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.