

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
MUSCATATUCK URBAN TRAINING CENTER
BUTLERVILLE, INDIANA**

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Prepared for:

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ABBREVIATIONS/ACRONYMS

amsl	Above Mean Sea Level
ARID-GEO	Army Range Inventory Database-Geodatabase
ARNG	Army National Guard
bgs	Below Ground Surface
CSM	Conceptual Site Model
DoD	Department of Defense
DODI	Department of Defense Instruction
DODIC	Department of Defense Identification Codes
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
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.)
MCOC	Munitions Constituents of Concern
NG	Nitroglycerin
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
USEPA	United States Environmental Protection Agency
°F	Degrees Fahrenheit

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 Muscatatuck Urban Training Center (Muscatatuck) 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.

Muscatatuck is located in southeast Indiana within Jennings County, approximately six miles northeast of North Vernon, Indiana, 18 miles west of Versailles, Indiana, 80 miles southeast of Indianapolis, and just north of U.S. Route 50. The installation is approximately 45 miles southeast of the Joint Forces Maneuver Training Center (Camp Atterbury) and five miles from the main gate of Jefferson Proving Ground. Muscatatuck encompasses 966.41 acres with 70 buildings that were owned by the Muscatatuck State Developmental Center until July of 2005, when the property was transferred to the Indiana Army National Guard (ARNG). This former state mental institution is now used by civilian and noncivilian organizations to conduct realistic mock exercises in a contemporary urban environment. According to the Army Range Inventory Database-Geodatabase from April 2006, there is one operational range covering the entire installation area (i.e., there is no other-than-operational area).

A review of available records and background data indicated that the installation has used limited amounts of military munitions since the installation was transferred to the Indiana ARNG in 2005. Training currently conducted at Muscatatuck consists of field operations and live-fire and non-live-fire exercises. Because training activities have involved limited use of military munitions for a short period of time, there are only limited sources of MCOC at Muscatatuck. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated.

The single operational range at Muscatatuck is categorized as Unlikely.

Unlikely – Five-Year Review

The single range at Muscatatuck is categorized as Unlikely, totaling 966.41 acres. This range consists of a series of buildings where realistic urban assault training is conducted. 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 ranges 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 Muscatatuck

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 966.41 acres	Limited source – limited military munitions use				Re-evaluate during the five-year review. Limited source was identified.