



FINAL

Operational Range Assessment Program  
Phase I Qualitative Assessment Report  
Camp Hartell, Connecticut

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
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFMO	Construction and Facilities Management Office
CSM	Conceptual Site Model
CSMS	Combined Support and Maintenance Shop
CTARNG	Connecticut Army National Guard
CTDEP	Connecticut Department of Environmental Protection
DoD	Department of Defense
DODI	Department of Defense Instruction
DTC	Diversified Technologies Corporation
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.)
MCOC	Munitions Constituents of Concern
MOUT	Military Operations on Urban Terrain
NG	Nitroglycerin
NRCS	Natural Resources Conservation Service
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RDT&E	Research, Development, Test, and Evaluation
RFMSS	Range Facility Management Support System
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
U.S.	United States
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Command
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
°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 (ORAP). This Phase I Assessment evaluates the operational range area at Camp Hartell 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 Hartell is a 58-acre facility located in the city of Windsor Locks, Connecticut, approximately one mile northeast of State Highway 20, three miles east of Interstate Highway 91, and due east from Bradley International Airport. Camp Hartell encompasses 57.71 acres of state-owned land located approximately 1.6 miles south-southwest from Suffield Depot.

The Army Range Inventory Database-Geodatabase (ARID-GEO) (2007) identifies five operational ranges encompassing 30.9 acres that include three maneuver and training areas, one military operations on urban terrain (MOUT) range area, and one research, development, test, and evaluation (RDT&E) range area. The remaining 26.81 acres at Camp Hartell consist of a centrally-located non-operational area (ARID-GEO, 2007). The northern-most maneuver and training area at Camp Hartell contains an abandoned railroad spit and is no longer used. Historically, the small area was used to load material supplies onto railroad cars. The adjoining maneuver and training area contains large warehouses that are currently and have historically been used for the storage of material goods by the Army National Guard. The southeastern maneuver and training area contains three small buildings for storage of material goods (one unit also stores the small quantities of small caliber munitions fired at the installation) (Material Examiner, pers. comm.). The RDT&E range area is used to test small caliber weapons that have been serviced by the installation. This range area consists of a hollow, concrete tube through which small caliber munitions are fired into a bullet trap. Bullets that do not reach the bullet trap are retrieved by installation personnel (Combined Support and Maintenance Shop [CSMS] General Foreman, pers. comm.).

Historically, small caliber blanks were used within the MOUT range area. No live-fire munitions or pyrotechnics/obscurants are currently, or were historically, used in the MOUT range area or within the maneuver and training areas. According to munitions data collected during the Phase I Qualitative Assessment, current munitions expended at Camp Hartell consist of live-fire small caliber munitions within the RDT&E range area. The RDT&E range area is used to test small caliber weapons that have been serviced by the installation, and consists of a hollow concrete tube through which bullets are fired into a wooden bullet trap set into an earthen berm enclosing the end of the concrete tube. Based on the annual number of weapons serviced by Camp Hartell, the number of times the weapons are test fired, and the number of rounds used each time the weapons are test fired, approximately 110 rounds of small caliber munitions are expended at the RDT&E range area annually. Lead is removed from the bullet trap and earthen berm on a biennial basis (CSMS General Foreman, pers. comm.).

Historically, the mission of Camp Hartell was to support the Connecticut Army National Guard (CTARNG) as the central equipment supply depot and vehicle maintenance facility. The installation also housed a prisoner of war camp during World War II. Currently, the mission of Camp Hartell is

to support the CTARNG at the U.S. Fiscal Property and Fiscal Office Storage Warehouse and the CSMS, as well as a staging area and supply storehouse for the CTARNG in the event of hostile attack, natural disaster, or other mass casualty event (CSMS General Foreman, pers. comm. and ENSR Corporation, 2008).

The primary MCOC source identified at Camp Hartell consists of limited numbers of live-fire small caliber munitions expended on an RDT&E range area. In general, MCOC from the primary source area potentially impact soil. Due to the limited numbers of live-fire small caliber munitions expended at the RDT&E range area and the biennial cleanup of the bullet trap and berm, the migration of on-range MCOC to off-range receptors is unlikely.

The five operational range areas at Camp Hartell are categorized as Unlikely.

### **Unlikely – Five-Year Review**

Five range areas at Camp Hartell are categorized as Unlikely, totaling 30.90 acres. These range areas consist of three maneuver and training range areas, a MOUT range area, and RDT&E range area. Range areas 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. Range areas 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 Camp Hartell**

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	5 operational ranges; 30.90 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.