



FINAL

Operational Range Assessment Program Phase I Qualitative Assessment Report Camp Rell, 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 |
| CSM | Conceptual Site Model |
| CTARNG | Connecticut Army National Guard |
| CTDEP | Connecticut Department of Environmental Protection |
| DNT | Dinitrotoluene |
| DoD | Department of Defense |
| DODI | Department of Defense Instruction |
| E | Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.) |
| EDR | Earth Data Resources Inc. |
| ESRI | Environmental Systems Research Institute, Inc. |
| GIS | Geographic Information System |
| 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.) |
| LES | Logical Environmental Solutions, LLC |
| 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 |
| ppm | Parts per million |
| PU | Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.) |
| RSR | Remediation Standard Regulations |
| SW | Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.) |
| UIC | United International Corporation |
| 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 (ORAP). This Phase I Assessment evaluates the operational range area at Camp Rell 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 Rell, previously known as Camp Rowland, encompasses 86.18 acres along the southern coast of Connecticut, within New London County. The site is located in the village of Niantic, approximately 40 miles southeast of Hartford, Connecticut and 35 miles east of New Haven, Connecticut. The operational area consists of three ranges encompassing 37.21 acres and including two parade fields and a land navigation course. Camp Rell also contains 48.97 acres designated for non-operational use (Army Range Inventory Database-Geodatabase [ARID-GEO], 2007).

Camp Rell was established in 1882 by the initial purchase of 65 acres (Rossano & Donohue, 2003). Camp Rell has been used as a mobilization site during most of America's historical military engagements, including the Spanish-American War, World War I, World War II, and the Korean War (Global Security, 2005). From 1893 to 1902, the current land navigation course was used as a firing range. This area was also used as a machine gun firing range during World War I. The parade fields were also historically used as a 206-yard shooting range from 1894 to 1906 (ARID-GEO, 2007). The current mission of Camp Rell is to provide a military training environment for battalion-sized maneuver training area and quarters for National Guard units, Department of Defense personnel, and state and federal agencies. Camp Rell is also the location of the Connecticut Army National Guard Military Academy, which operates the State Officer Candidate and Non-Commissioned Officer School (Rossano & Donohue, 2003).

Potential MCOC sources identified at Camp Rell consist of historical small arms ranges (i.e., the former firing range, machine gun range, and former 206-yard shooting range). In general, MCOC from primary source areas potentially impact soil. Although military munitions historically have been used on Camp Rell, the quantities of munitions expended are unknown. In addition, these areas have been disturbed by the construction of buildings, roads, and other infrastructure. Soil and groundwater samples collected from the approximate area of the historical machine gun range indicate levels of lead that exceeded Connecticut's surface water and groundwater protection standards, as well as leachable lead criteria; however, fill materials placed in this area subsequent to the cessation of training were attributed as the source for these elevated lead concentrations. Additionally, no surface water pathways exist on the installation. Based on past investigations at the installation, the limited munitions use at Camp Rell, limited time period of operation, and disturbances and reconstruction at these former range areas, the three operational ranges at Camp Rell are categorized as Unlikely.

Unlikely – Five-Year Review

Three ranges at Camp Rell are categorized as Unlikely, totaling 37.21 acres. These ranges consist of two parade fields and a land navigation area. 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 Camp Rell

| Category | Total Number of Ranges and Acreage | Source(s) | Pathway(s) | Human Receptors | Ecological Receptors | Conclusions and Rationale |
|----------|-------------------------------------|---|------------|---|----------------------|--|
| Unlikely | 3 operational ranges; 37.21acres | No source – limited or no military munitions use. | | Not evaluated (no MCOC source identified) | | Re-evaluate during the five-year review. No source was identified. |