

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
BARADA LOCAL TRAINING AREA
BARADA, NEBRASKA**

SEPTEMBER 2008

Prepared for:

UNITED STATES ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
P.O. Box 1715
Baltimore, Maryland 21203

and

UNITED STATES ARMY ENVIRONMENTAL COMMAND
Aberdeen Proving Ground, Maryland 21010

Prepared by:

EARTH RESOURCES TECHNOLOGY, INC.
10810 Guilford Road, Suite 105
Annapolis Junction, MD 20701



ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
ARNG	Army National Guard
bgs	Below Ground Surface
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.)
ERT	Earth Resources Technology, 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.)
LS	Limited Source
LTA	Local Training Area
LUA	Land Use Agreement
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOG	Munitions Constituents of Concern
NEARNG	Nebraska Army National Guard
NG	Nitroglycerin
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RFMSS	Range Facility Management Support System
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
TNT	Trinitrotoluene
TOW	Tube-launched Optically tracked Wire-guided
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 Barada Local Training Area (LTA) 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.

Barada LTA, occupying 84.42 acres of land in Richardson County in southeast Nebraska, is located approximately three and a half miles southeast of Barada and 12 miles northeast of Falls City. The training area was established due to the assortment of terrain, which allows for numerous maneuver and training exercises. The terrain includes waterways to conduct river crossings and sufficient land area for mounted, dismounted, and airmobile (helicopter landing) operations.

As part of the Operational Range Inventory Sustainment, an update to Army Range Inventory Database-Geodatabase (ARID-GEO) was submitted to the U.S. Army Environmental Command in March 2007. The ARID-GEO (2007) identified one operational range encompassing the entire 84.42 acres of training area.

There are no known concentrated munitions constituents of concern (MCOC) sources identified at Barada LTA. Based on the limited use of Barada LTA and the lack of concentrated sources, it is unlikely that MCOC would migrate off of the operational range at concentrations that may pose an unacceptable risk to human health or the environment.

The one operational range at Barada LTA is categorized as Unlikely.

Unlikely – Five-Year Review

The one range at Barada LTA is categorized as Unlikely, totaling 84.42 acres. This range consists of maneuver and training. 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 Barada LTA

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 84.42 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.