

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
BOX BUTTE RESERVOIR LOCAL TRAINING AREA
HEMINGFORD, NEBRASKA**

AUGUST 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
CSM	Conceptual Site Model
DoD	Department of Defense
JFHQ	Joint Force Headquarters
LTA	Local Training Area
LUA	Land Use Agreement
MCOG	Munitions Constituents of Concern
NEARNG	Nebraska Army National Guard
ORAP	Operational Range Assessment Program
U.S.	United States
USACE	United States Army Corps of Engineers

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 Box Butte Reservoir 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.

Box Butte Reservoir LTA encompasses approximately 2,330 acres in Dawes County, Nebraska. The training area is located approximately 10 miles east of Marsland and 10 miles north of Hemingford. According to the Army Range Inventory Database-Geodatabase from 2007, a maneuver and driver's training area comprises 13.35 acres and a non-operational area of approximately 2,316.65 acres comprises the remaining training area.

A review of available records and background data, as well as interviews with the Nebraska Army National Guard (NEARNG) and Chadron Armory personnel, indicated that the range at Box Butte Reservoir LTA has never been used for training involving military munitions (live-fire or non-live-fire). The land use agreement (LUA) was effective from 1 October 2000 to 30 September 2005, and the area has not been used for training by the NEARNG since the LUA expired. During the five year period, the training was limited to wheeled vehicle and field training exercises. The LUA specifies that no live ammunition, blank ammunition, or pyrotechnics could be used on the site. Because training activities have not involved the use of military munitions, there are no potential sources of MCOC. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated, and the range at Box Butte Reservoir LTA is categorized as Unlikely.

Installations with operational ranges where no munitions or only small caliber blanks have been utilized are categorized as Unlikely. That is, based on a review of available information, there is sufficient evidence to show that due to the lack of munitions use there are no known releases or source-receptor interactions that could present an unacceptable risk to human health or the environment. 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 Box Butte Reservoir LTA

Category	Total Number of Ranges and Acreage	Source(s)	Pathways(s)	Human and Ecological Receptors	Conclusions
Unlikely	One operational range; 13.35 acres	No source—no current or historical use of live-fire military munitions	Not evaluated (no source identified)		Re-evaluate during the five-year review.