

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

NOVEMBER 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



EXECUTIVE SUMMARY

The United States (U.S.) Army is conducting qualitative assessments at operational ranges to meet the requirements of Department of Defense (DoD) 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 the Mead 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.

Mead LTA is located four miles southeast of Mead, Nebraska in the southeast portion of Saunders County in eastern Nebraska. The local training area is comprised of 1,196.45 acres and is a sub training area of the Camp Ashland Training Site which is located approximately seven miles to the southeast of Mead LTA. The training area is located on land that was formerly the Nebraska Ordnance Plant, and a U.S. Air Force Atlas missile launch facility. In the early 1960s, much of the land was sold to various individuals; the DoD retained the current acreage designated as the Mead LTA and leased it to the Nebraska Army National Guard.

As part of the Operational Range Inventory Sustainment, an update to Army Range Inventory-Geodatabase (ARID-GEO) was submitted to the U.S. Army Environmental Command in March of 2007. The ARID-GEO (2007) identified nine operational ranges encompassing 1,184.65 acres. There is an 11.8 acre cantonment area located approximately two miles west of the training area.

There are no known concentrations of MCOC sources identified at the Mead LTA. Based on 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 nine operational ranges at the Mead LTA are categorized as Unlikely.

Unlikely – Five-Year Review

Nine ranges at the Mead LTA are categorized as Unlikely, totaling 1,184.65 acres. These ranges consist of light and heavy maneuver and training ranges, and one non live-fire range. 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 Mead LTA

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	Nine operational ranges; 1,184.65 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.

ABBREVIATIONS/ACRONYMS

ACSIM	Assistant Chief of Staff for Installation Management
AMSL	Above mean sea level
ARDC	Agricultural Research and Development Center
ARID-GEO	Army Range Inventory Database-Geodatabase
ARNG	Army National Guard
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DNT	Dinitrotoluene
DoD	Department of Defense
DOE	Department of Energy
DODI	Department of Defense Instruction
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
EDR	Environmental Data Report
F	Fahrenheit
Ft	Feet
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.)
HE	High Explosives
HMX	Cyclotetramethylenetetranitramine
HQ IMCOM	Headquarters Installation Management Command
IMCOM	Installation Management Command
ISE	Installation Services Environmental Division
ITAM	Integrated Training Area Management
LLRW	Low-Level Radiological Waste
LS	Limited Source
LTA	Local Training Area
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MM	Millimeter
MCOC	Munitions Constituents of Concern
NEARNG	Nebraska Army National Guard
NGB	National Guard Bureau
NMD	Nebraska Military Department
NOP	Nebraska Ordnance Plant
OB/OD	Open Burn / Open Detonation
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
PgM	Program Manager
PM	Project Manager
POC	Point of Contact

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.)
TCE	Trichloroethylene
TNT	Trinitrotoluene
UNL	University of Nebraska-Lincoln
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
USAF	United States Air Force
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
WP	White Phosphorus
°F	Degrees Fahrenheit



Operational Range Assessment Program
Phase I Qualitative Assessment
Mead Local Training Area, NE

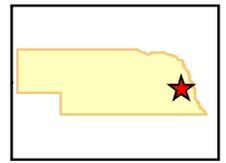
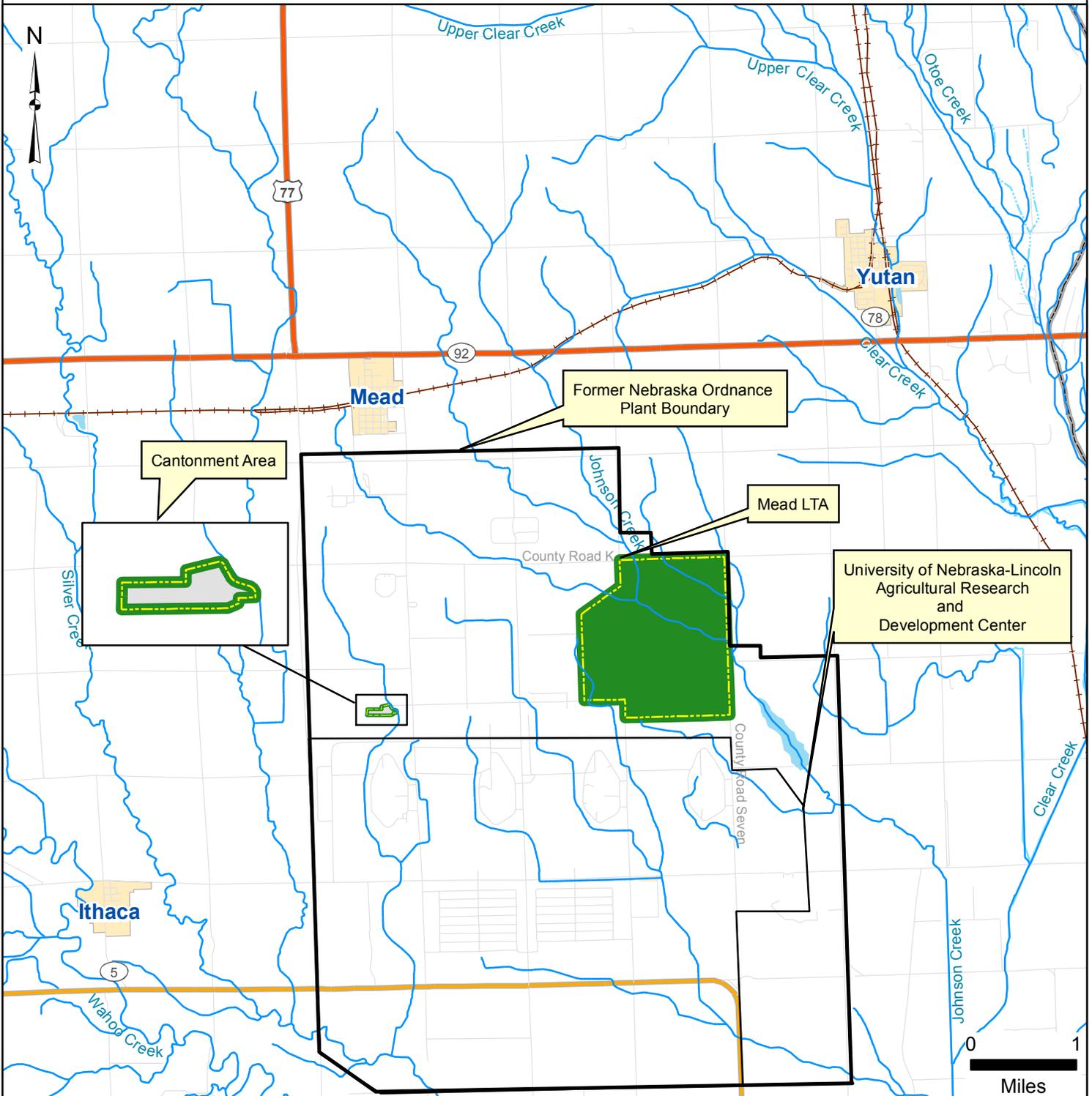


Figure 1-1
General Mead Local Training Area Location



Installation

- Installation Boundary
- Operational Area
- Other than Operational Area

Roads

- Highway
- Major Road
- Local Road

Hydrology

- River/Stream
- Waterbody

Administrative

- Urbanized Area
- Former Nebraska Ordnance Plant Boundary
- University of Nebraska-Lincoln Agricultural Research and Development Center Boundary

Data Sources:
ARID-GEO, 2007
ESRI, StreetMap USA, 2005

Date:.....November 2008
Prepared By:.....ERT, Inc.
Prepared For:.....U.S. Army
Contract Number:.....W912DR-06-D-0002