

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
CAMP ASHLAND TRAINING SITE
ASHLAND, NEBRASKA**

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Prepared for:

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ABBREVIATIONS/ACRONYMS

amsl	above mean sea level
ARID-GEO	Army Range Inventory Database-Geodatabase
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cfs	cubic feet per second
CSM	Conceptual Site Model
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.)
ERT	Earth Resources Technology, Inc.
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
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCL	Maximum Contaminant Level
MCOC	Munitions Constituents of Concern
mg/L	milligrams per liter
mm	millimeter
NEARNG	Nebraska Army National Guard
NG	Nitroglycerin
NGB	National Guard Bureau
NOP	Nebraska Ordnance Plant
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
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.)
TNT	Trinitrotoluene
TS	Training Site
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
USFWS	United States Fish and Wildlife Service
WLC	Warrior Leadership Course

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 Ashland Training Site (TS) 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 Ashland TS encompasses approximately 1,117.72 acres in eastern Nebraska, approximately 20 miles northeast of Lincoln and 10 miles southwest of Omaha. The training site is Department of the Army property that is licensed to the Nebraska Army National Guard for training. Camp Ashland is divided into two parcels of land by the Platte River. The western portion, which lies in Saunders County, contains maneuver and training ranges, obstacles courses, a rappelling range, and the cantonment area. The eastern portion lies in Sarpy County and is used for maneuver and training. The 15 operational ranges encompass approximately 1,022.81 acres; the remaining 94.91 acres is cantonment area. In the Army Range Inventory Database-Geodatabase (2007), one range (6.18 acres in size) overlaps three smaller ranges; hence, the sum of range areas (1028.99 acres) is greater than the total operational use area (1022.81 acres).

MCOC sources identified at Camp Ashland TS consist of three inactive small arms ranges and one inactive light anti-armor weapons range. MCOC from the primary source areas potentially impact the soil media (e.g., berms and localized impact areas). Potential MCOC at Camp Ashland TS can be released to groundwater (down gradient) by leaching from the soil. Additionally, potential MCOC in shallow groundwater can be transported eastward as it migrates with groundwater underlying the training site and then discharges into the Platte River. Potential receptors are users of off-range groundwater supplies down gradient of the firing ranges, and recreation users (i.e. fishing) in the Platte River downstream from Camp Ashland TS. Wetlands located along the Platte River, downstream of the training site, as well as threatened and endangered species that use the sandbars along the plate River for habitat indicate the potential presence of ecological receptors. The soil composition underlying the ranges, the slow mobilization of MCOC through soil, and the depth at which the groundwater wells are screened makes it unlikely that a groundwater pathway from potential MCOC sources to down gradient receptors exists. Additionally, the small volume of groundwater discharging potential MCOC to the Platte River in comparison to the much larger surface water volume of the river would not be present at concentrations that would present an unacceptable risk to off-range human and ecological receptors.

The 15 operational ranges at Camp Ashland TS are categorized as Unlikely (e.g., Referred, Inconclusive, or Unlikely).

Unlikely – Five-Year Review

Fifteen ranges at Camp Ashland TS are categorized as Unlikely, totaling 1,028.99 acres, which includes the overlapping range acreage. These ranges consist of maneuver and training ranges, inactive small arms ranges, and non live-firing ranges. 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 Ashland TS

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	4 operational ranges; 9.34 acres	Small arms berms, firing points/lines	Leaching/infiltration to paleovalley aquifer; recharge/discharge of shallow groundwater to Platte River	None	None	Re-evaluate during the five-year review. No receptors were identified.
	11 operational ranges; 1,019.65 acres	No source—limited or no military munitions use	Not evaluated (no MCOC source was identified)			Re-evaluate during the five-year review. No source was identified.