FINAL
Operational Range Assessment Program
Phase I Qualitative Assessment Report
Deming Training Site, New Mexico

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
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.)
EEM	Engineering-Environmental Management, Inc.
ESRI	Environmental Systems Research Institute, Inc.
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
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
MRA	Munitions Response Area
NG	Nitroglycerin
NMARNG	New Mexico Army National Guard
NRCS	Natural Resources Conservation Service
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.)
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
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
°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 Deming Training Site 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.

Deming Training Site occupies 2,193.71 acres of land approximately 10 miles northwest of the city of Deming in Luna County, New Mexico. Deming Training Site consists of an operational range footprint of 2,114.23 acres, which includes a maneuver and training area and a firing range used for small caliber munitions. Additionally, Deming Training Site has a non-operational use area of 79.48 acres (Army Range Inventory Database-Geodatabase [ARID-GEO], 2007). The total operational range area was derived from the Operational Use Area (total range area) acreage as reported in ARID-GEO (2007).

Primarily, MCOC sources identified at Deming Training Site consist of small caliber munitions used at the firing range. In general, MCOC from the primary source area potentially impacts soil. Although small caliber munitions were used on the firing range on Deming Training Site, the migration of on-range MCOC to off-range receptors is unlikely; there are no perennial surface water bodies or stormwater washes located within the firing range and the impact berm is located approximately 1.6 miles from the nearest intermittent surface water—the Mimbres River. Given the overland distance to the nearest intermittent surface water, the high permeability of area soils, limited precipitation, and high evapotranspiration rate in the area, transport of MCOC is unlikely via a surface water pathway. Potable groundwater is located approximately 145 feet beneath Deming Training Site under unconfined conditions. Considering the depth to groundwater, the pH of soil beneath the berm (approximately 8.2) not being conducive to lead migration, and the limited precipitation available for infiltration into subsurface soils, combined with the high rate of evapotranspiration in the area, transport of MCOC is unlikely via a groundwater pathway. The two operational ranges at Deming Training Site are categorized as Unlikely.

Unlikely – Five-Year Review

Two ranges at Deming Training Site are categorized as Unlikely, totaling 2,114.23 acres. These ranges consist of a firing range used for small caliber munitions and a maneuver and training area. Based upon a review of readily available information, ranges where 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 Deming Training Site

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	2 operational ranges; 2,114.23 acres	Firing range used for live-fire small caliber munitions	None	Not evaluated (no pathway identified)		Re-evaluate during the five-year review. No source was identified.
		Maneuver and training area; no source—limited or no military munitions use	Not evaluated (no source identified)			Re-evaluate during the five-year review. No source was identified.