FINAL
Operational Range Assessment Program
Phase I Qualitative Assessment Report
Happy Valley, 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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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 Happy Valley 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.

Happy Valley is a 720.82-acre New Mexico Army National Guard facility located approximately three miles northwest of the city of Carlsbad, New Mexico. The seven operational ranges at Happy Valley encompass the entire facility and include six small caliber firing ranges and one maneuver/training area (Army Range Inventory Database-Geodatabase, 2007). Additionally, there is a historical small caliber range located within the maneuver/training area. Small caliber munitions as well as pyrotechnics are currently, and were historically, used at Happy Valley. Although there are potential human receptors located down gradient of the operational ranges, there are no potential migration pathways via surface water or groundwater due to the limited amount of precipitation, high evapotranspiration, and depth to groundwater.

The seven operational ranges at Happy Valley are categorized as Unlikely.

Unlikely – Five-Year Review

All seven ranges at Happy Valley are categorized as Unlikely, totaling 720.82 acres. These ranges consist of six small caliber ranges and one maneuver/training area for light forces. 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 Happy Valley

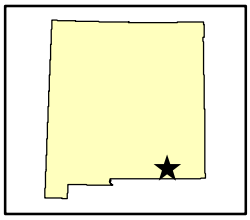
Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	7 operational ranges; 720.82 acres	Firing lines and impact berms of the current small caliber ranges as well as the firing lines and impact berms of the historical small caliber range within the maneuver/training area	No pathways identified due to the limited amount of precipitation, high evapotranspiration, and depth to groundwater	Not evaluated (no pathways identified)		Re-evaluate during the five-year review. No pathways were identified.

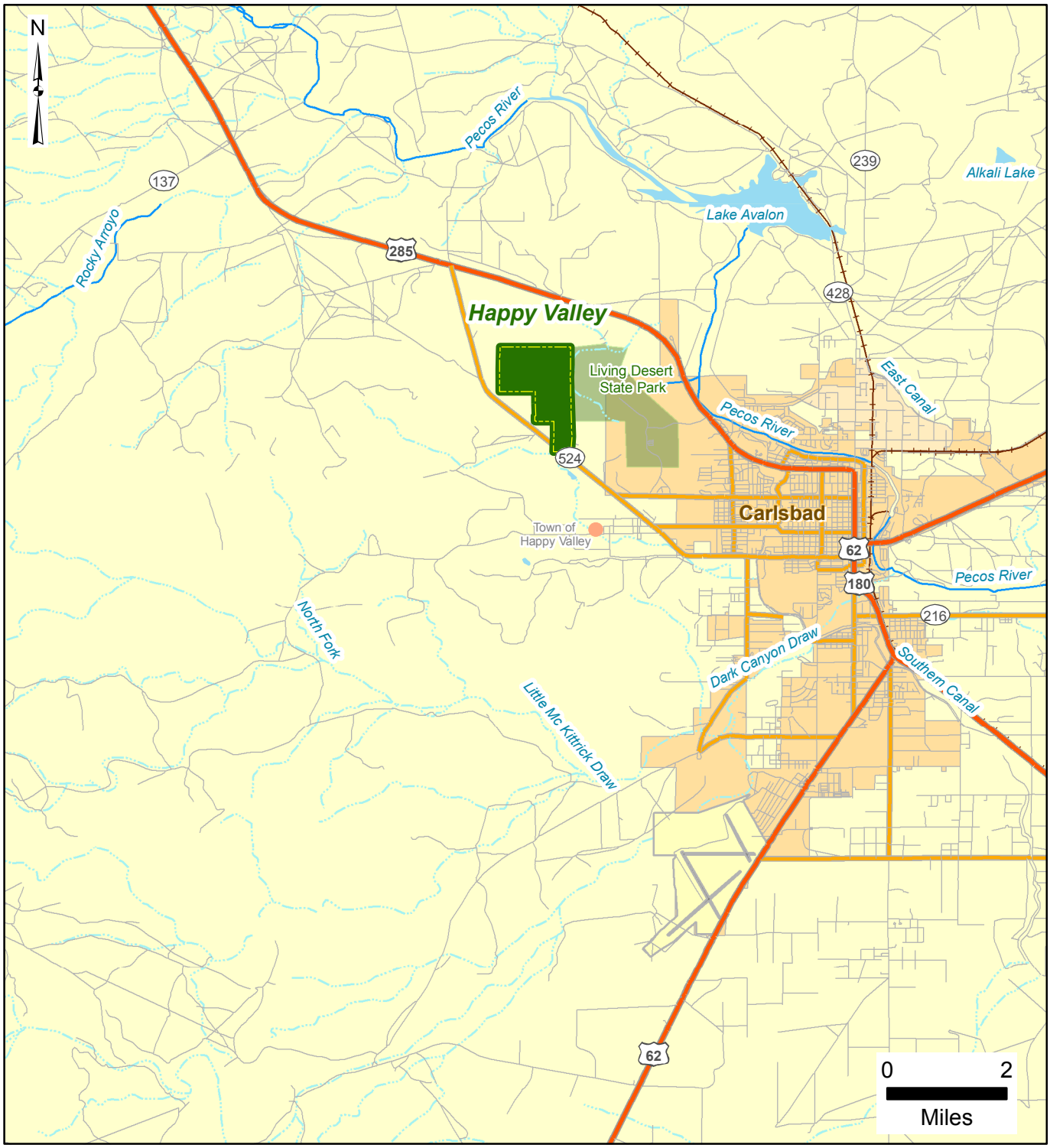
ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
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.)
LAW	Light Anti-Tank Weapons
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
NDNODS	Non-Department of Defense Non-Operational Defense Sites
NG	Nitroglycerin
NMARNG	New Mexico Army National Guard
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
USEPA	United States Environmental Protection Agency
°F	Degrees Fahrenheit

Operational Range Assessment Program
Phase I Qualitative Assessment
Happy Valley, NM

Figure 1-1
General Location of Happy Valley





Facility Data
- Facility Boundary
- Operational Area

Transportation
- Limited Access
- Highway
- Major Road
- Local Road

Hydrology
- Waterbody
- Intermittent Stream/River
- Perennial Stream/River

Data Sources:
ARID-GEO, April 2007
ESRI, StreetMap, 2006

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