



FINAL

# Operational Range Assessment Program Phase I Qualitative Assessment Report FORT HUACHUCA, ARIZONA

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



Final Operational Range Assessment Program Phase I Qualitative Assessment Range Assessment Reports will be released beginning in March 2008 per the Direction of Army Headquarters. The cover page of this Report reflects the official finalization date. The date on subsequent pages/figures reflects the date upon which this document's conclusions are based.

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March 2008



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## EXECUTIVE SUMMARY

### PURPOSE

This qualitative assessment, hereinafter referred to as Phase I Assessment, evaluates Fort Huachuca's operational range area 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. The Phase I Assessment results in the categorization of operational ranges as appropriate, as follows.

- **Referred – Refer to Appropriate Cleanup Program:** Ranges with compelling evidence (e.g., sampling data) to indicate the presence of an off-range release that potentially poses an unacceptable risk to human health or the environment;
- **Inconclusive – Phase II Quantitative Assessment Required:** Ranges where existing information either is insufficient to make a source-receptor interaction determination or indicates the potential for such interaction to be occurring; or
- **Unlikely – Five-Year Review<sup>1</sup>:** 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 that could present an unacceptable risk to human health or the environment based on a review of the information available.

### SUMMARY OF FINDINGS

The 85 operational ranges at Fort Huachuca that were included in the qualitative assessment have been placed in the following category.

- **Unlikely** – A total of 85 ranges consisting of live-fire training areas, non-live-fire training areas, historic artillery impact area, and firing points totaling 73,950 acres.

These findings, conclusions, and recommendations are summarized in **Table ES-1**.

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<sup>1</sup> All operational ranges must be periodically re-evaluated to determine if there is a release or substantial threat of release of MCOC from an operational range to an off-range area. Range groups categorized as Unlikely are to be re-evaluated at least every five years. Re-evaluation may occur sooner if significant changes (e.g., changes in range operations, site conditions, and regulatory changes) occur that affect determinations made during the Phase I Assessment.

**Table ES-1: Summary of Findings, Conclusions, and Recommendations for Fort Huachuca**

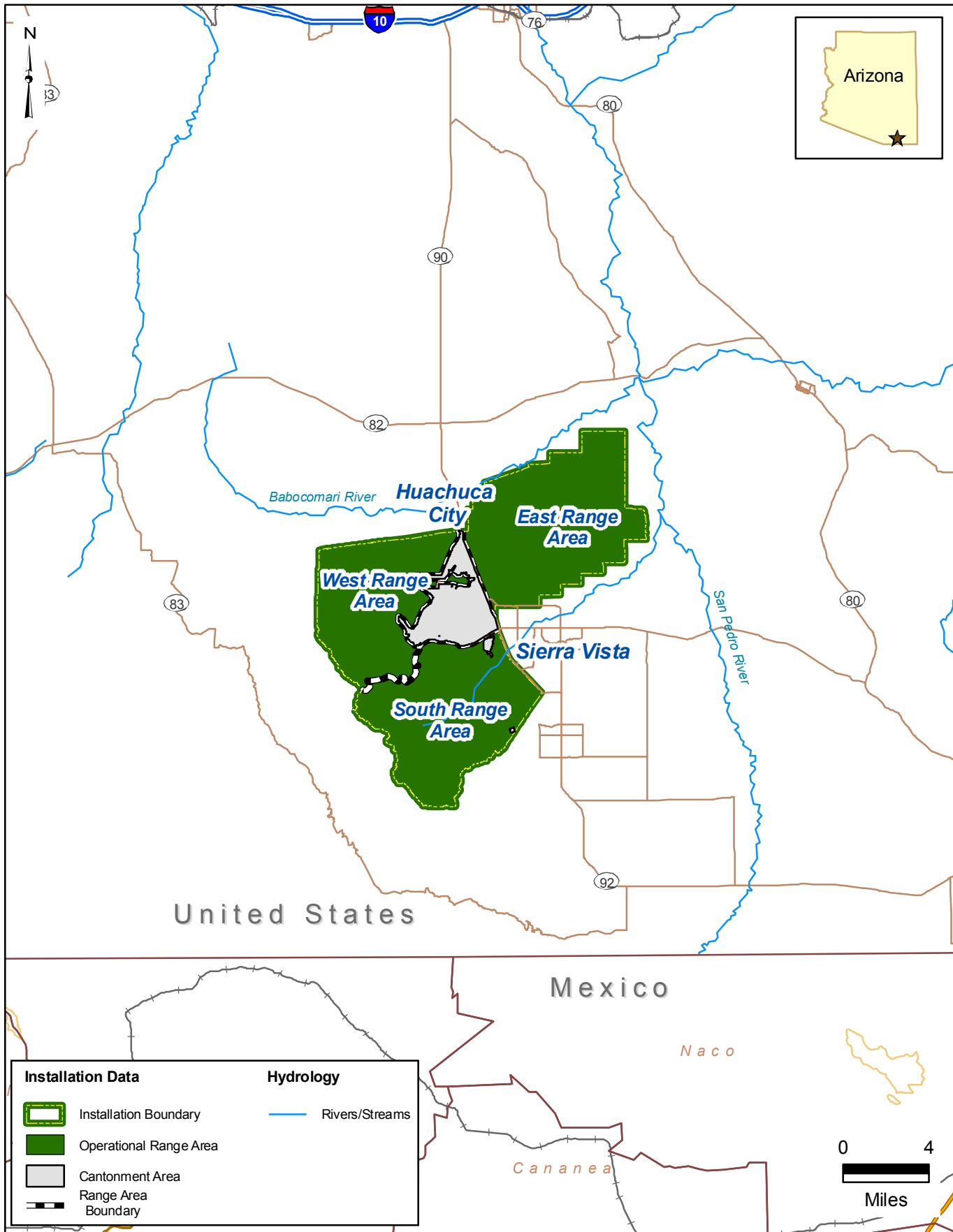
Category	Group Identification	Total Number of Ranges and Acreage	Source(s)	Pathway(s)*	Human Receptors*	Ecological Receptors*	Recommendations (Future Steps)
Unlikely	Limited Source	53 operational ranges; 61,055 acres	No source – limited or no military munitions use	Not evaluated	Not evaluated	Not evaluated	Re-evaluate during the five-year review.
	Munitions used; surface water/sediment and groundwater pathways incomplete	32 operational ranges; 12,895 acres	Small, medium, and large caliber, grenades, obscurants, propellants, and riot control agents	Incomplete due to erosion control measures and depth to groundwater	Not evaluated	Not evaluated	Re-evaluate during the five-year review.
* Indicates the specific pathways of concern.							

## ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Geodatabase
ARNG	Army National Guard
bgs	Below Ground Surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DEH	Directorate of Engineering and Housing
DNT	Dinitrotoluene
DoD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
DoE	Department of Energy
DPTMS	Directorate of Plans, Training, Mobilization, and Security
ENRD	Environmental and Natural Resources Division
ft	Foot or Feet
GIS	Geographic Information System
H/E	Human/Ecological
HMX	Cyclotetramethylenetetranitramine
in.	Inch(es)
ITAM	Integrated Training Area Management
LS	Limited or No Source Munitions
MC	Munitions Constituents
MCOC	Munitions Constituents of Concern
MGW	Munitions/Groundwater Migration Pathway
MPU	Migration Pathway Unlikely
MSW	Munitions/Surface Water Migration Pathway
MSWGW	Munitions/Surface Water and Groundwater Migration Pathways
OB/OD	Open Burn/Open Detonation
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
RCRA	Resource Conservation and Recovery Act
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facilities Management Support System
SAM	Surface-to-Air Missile
SPRNCA	San Pedro River National Conservation Act
TNT	Trinitrotoluene
U.S.	United States
USACE	United States Army Corps of Engineers
USACE-OD	United States Army Corps of Engineers, Omaha District
USACE-SD	United States Army Corps of Engineers, Sacramento District
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Center
USAIC	United States Army Intelligence Center
USASC	United States Army Signal Command
USATHAMA	United States Army Toxic and Hazardous Materials Agency
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency

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USFWS	United States Fish and Wildlife Service
USPB	Upper San Pedro Basin
UXO	Unexploded Ordnance
WP	White Phosphorous



## Qualitative Operational Range Assessment Fort Huachuca, AZ

Figure 1-1  
Installation Location

Data Sources:  
ARID-GEO 24 Sept. 2001  
ESRI StreetMap USA, 2005

Date: September, 2006  
Prepared By: EA Engineering, Science, and Technology  
Prepared For: U.S. Army  
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