



FINAL

Operational Range Assessment Program Phase I Qualitative Assessment Report Pine Bluff Arsenal, Arkansas

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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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.



ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Geodatabase
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
DNT	Dinitrotoluene
DoD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
H/E	Human/Ecological
HMX	Cyclotetramethylenetetranitramine
LS	Limited or No Source Munition
MC	Munitions Constituents
MCOC	Munitions Constituents of Concern
MPU	Migration Pathway Unlikely
MSW	Munitions/Surface Water
OB/OD	Open Burn/Open Detonation
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
RCRA	Resource Conservation and Recovery Act
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
TNT	Trinitrotoluene
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
U.S.C.	United States Code
USEPA	United States Environmental Protection Agency

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 Pine Bluff Arsenal'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. In conducting the Phase I Assessment, MCOC sources, potential off-range migration pathways, and potential off-range human and/or ecological receptors are evaluated as appropriate.

Pine Bluff Arsenal is 13,497 acres, and there are nine operational ranges totaling 98.73 acres. It is located approximately 30 miles southeast of Little Rock, Arkansas along the Arkansas River in Jefferson County. The range areas are predominantly used for testing pyrotechnic/obscurant munitions produced at the arsenal and one range is used for small arms qualification training.

The ranges at Pine Bluff Arsenal were grouped as Limited Source and Munitions Used, Surface Water Pathway and no receptors. One of the ranges in the northeast section has been operated under an interim Resource Conservation and Recovery Act permit as a 2.1-acre open burn/open detonation range and is now undergoing closure, which programmatically removes it from the scope of this Phase I Assessment program, as it is being addressed under a different program. The eight operational ranges at Pine Bluff Arsenal that were included in the qualitative assessment have been placed into the following category:

- **Unlikely** – A total of eight ranges consisting of production testing areas, small arms ranges, and training and maneuver areas totaling 96.63 acres

Unlikely – Five Year Review

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. 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, 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 Pine Bluff Arsenal

Category	Group Identification	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	Limited source	7 operational ranges; 64.4 acres	No source – limited or no military munitions use	Not evaluated (no source was identified)	Re-evaluate during the five-year review. No source was identified, see Section 5.2 for details.		Re-evaluate during the five-year review.
	Munitions used; Surface water pathway	1 operational range; 32.7 acres	Small arms impact berms	Surface water, Arkansas River	None		Re-evaluate during the five-year review.