



FINAL

Operational Range Assessment Program Phase I Qualitative Assessment Report Safford Training Site, 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



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ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
ADEQ	Arizona Department of Environmental Quality
AZARNG	Arizona Army National Guard
BLM	Bureau of Land Management
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
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.)
ERM	Environmental Resources Management, 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.)
HMX	Cyclotetramethylenetetranitramine
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
MPU	Munitions used, pathway unlikely
NG	Nitroglycerin
NGB	National Guard Bureau
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RDX	Cyclotrimethylenetrinitramine
SRL	Soil Remediation Level
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
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
USEPA	United States Environmental Protection Agency
°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 Safford 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.

Safford Training Site encompasses approximately 400 acres in Graham County, Arizona. The site is located near the foothills of the Pinaleno Mountains, approximately 1.5 miles southwest and south of the towns of Safford and Thatcher, respectively. The primary mission of Safford Training Site is to serve as a maneuver/training area (light forces) for the Arizona Army National Guard (AZARNG).

The Bureau of Land Management has permitted AZARNG to use the Safford Training Site since 1927. The Army used a historical rifle range at the training site from 1958 to the late 1970s. The rifle range was closed in 1980 and the surface soils from the range's impact berm were removed in 2002; however, the footprint of the former closed rifle range resides within the current operational range area. Today, Safford Training Site is composed of one operational range utilized four weekends per year for bivouac training of approximately 50 AZARNG personnel.

Despite the utilization of historical munitions at Safford Training Site, the migration of on-range MCOC to off-range areas is unlikely. Pathways via surface water and groundwater are hindered by a number of factors including limited precipitation, high evaporation rates, water extracting vegetation, and low mobility of metals in the area's alkaline soils.

The one operational range at Safford Training Site is categorized as Unlikely.

Unlikely – Five-Year Review

The one range at Safford Training Site is categorized as Unlikely, totaling 400.43 acres. This range consists of one maneuver/training area. 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 Safford Training Site

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	1 operational range; 400.43 acres	Historical Use – small caliber munitions, very limited medium caliber munitions	Migration pathways are unlikely or incomplete.	Not Evaluated, migration pathways are unlikely or incomplete.		Re-evaluate during the five-year review. (No pathways present)