



FINAL

Operational Range Assessment Program Phase I Qualitative Assessment Report Douglas Training Area, 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
AZARNG	Arizona Army National Guard
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 is referring to range grouping, pathway designation always precedes E designation.
FMO	Facilities Management Office
GW	Groundwater pathway identified. This is referring to range grouping, M designation always precedes GW designation.
H	Human receptors identified. This is referring to range grouping, pathway designation always precedes H designation.
HE	High Explosives
HMX	Cyclotetramethylenetetranitramine
LS	Limited Source.
M	Munitions used. This is referring to range grouping, M designation always precedes applicable pathway.
MCOC	Munitions Constituents of Concern
NG	Nitroglycerin
NGB	National Guard Bureau
ORAP	Operational Range Assessment Program
PETN	Pentaerythritoltetranitrate
PU	Munitions used. Pathway unlikely or incomplete. This is referring to range grouping, M designation always precedes PU designation.
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
SW	Surface water pathway identified. This is referring 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
WP	White phosphorus
°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 Douglas Training 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 ecological receptors are evaluated as appropriate.

Douglas Training Area was created by Executive Order No. 2138 in 1915 and is located in southeast Cochise County, Arizona. The training area encompasses approximately 640 acres. According to the 30 June 2005 Army Range Inventory Database-Geodatabase, Douglas Training Area consists of one operational range for use as a maneuver and training area. However, the training area also contains a small arms range complex used by the city of Douglas, U.S. Border Patrol, and other law enforcement agencies for training and qualification. In 2001 the Douglas Rifle and Pistol Club began seeking a congressional order for the transfer of the 490-acre small arms complex to the city of Douglas. The 490-acre total is believed to include the four small arms ranges that comprise the complex as well as the ranges' safety fan which extends into the maneuver and training area. Historical range activities within the maneuver and training area and the small arms complex most likely included the use of small caliber munitions, medium caliber projectiles (practice and high explosive rounds), pyrotechnics, obscurants, and other munitions. Current Arizona Army National Guard (AZARNG) training activities within the maneuver and training area include dismounted cross-country training and convoy assault training utilizing small caliber blanks, pyrotechnics, and obscurants (Gene Barber, 2002). Other training activities may include drivers training, communication exercises, tactical bivouac, and other field training exercises. Use of the small arms complex by AZARNG ended in 1986 due to inadequate safety fans for military small arms weapons (Chief Warrant Officer, 2006).

A review of available records and background data as well as interviews with AZARNG personnel indicates that the ranges located at Douglas Training Area have been used for training involving military munitions (live-fire and non-live-fire). As such, several potential sources of MCOC exist at Douglas Training Area. However, no viable off-site transport mechanisms such as erosion, runoff, or infiltration to groundwater exist for potential MCOC to migrate off-range. The two operational ranges at Douglas Training Area are categorized as Unlikely.

Unlikely – Five-Year Review

Two ranges at Douglas Training Area are categorized as Unlikely, totaling 640 acres. These ranges consist of a maneuver and training area and a small arms range complex. 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 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, 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 Douglas Training Area

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	Two operational ranges; 640 acres	Current and historical small and medium caliber munitions, pyrotechnics, obscurants, and other munitions	No migration pathway identified	Not evaluated (no migration pathway identified)		Re-evaluate during the five-year review. No migration pathway identified.