



DEPARTMENT OF THE ARMY
US ARMY CENTER FOR HEALTH PROMOTION AND PREVENTIVE MEDICINE
5158 BLACKHAWK ROAD
ABERDEEN PROVING GROUND MD 21010-5403

EXECUTIVE SUMMARY
QUALITATIVE RANGE ASSESSMENT
PROJECT NO. 38-EH-041G-05
YUMA PROVING GROUND, ARIZONA

1. PURPOSE. The purpose of this Qualitative Assessment Report is to evaluate the Yuma Proving Ground (YPG) operational range complex 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 qualitative assessment of operational ranges is required by Department of Defense Instruction 4715.14, dated 30 November 2005. This instruction is intended to ensure the long-term viability of operational ranges while protecting human health and the environment.

2. CONCLUSIONS.

2.1 Centralized data and existing reports and other documents that were available locally were used to develop a qualitative range assessment for Yuma Proving Ground, Arizona. These were supplemented by data gathered during a site visit. The likely occurrence of MCOC in various environmental media was investigated as was the potential for these to migrate off of the range complex. Soil and air were identified as the primary source media for the ranges. Existing sampling data for soil indicated that MCOC were present in very few of the samples collected (2% detection frequency). In addition, no evidence was found indicating that they are able to migrate off of the range complex via runoff and erosion in the desert washes. Leaching to ground water was discounted based on the lack of precipitation in the area and the usually large depth to ground water.

2.2 Based on the information available, all of the operational ranges for YPG were placed in a single range grouping due to their similar operational and physical characteristics. This group is called the munitions present, pathways unlikely group (MPU).

3. RECOMMENDATION. Place the Yuma Proving Ground operational range Group MPU in the “Unlikely” category due to the lack of migration pathways off of the operational range area. Periodically reevaluate these operational ranges to determine if there is a release or substantial threat of a release of potential MCOC from an operational range to an off range area. This reevaluation shall occur at least every 5 years, or whenever significant changes (e.g., changes in range operations, site conditions, applicable statutes, regulations, Department of Defense issuances, or other policies) occur that affect determinations made during this assessment. This reevaluation is required by Department of Defense Instruction 4715.14, dated 30 November 2005.

ABBREVIATIONS/ACRONYMS

ATSDR	Agency for Toxic Substances and Disease Registry
CSM	Conceptual Site Model
CSRARDC	Central Savannah River Area Regional Development Center
DOD	Department of Defense
DODD	Department of Defense Directive
DODI	Department of Defense Instruction
DNT	Dinitrotoluene
FP	Firing Point
FY	Fiscal Year
GA DNR	Arizona Department of Natural Resources
GIS	Geographic Information System
HE	High Explosive
HMX	Cyclotetramethylenetetranitramine
ID	Identification Number
INRMP	Installation Natural Resource Management Plan
MC	Munitions Constituents
MCOC	Munitions Constituents of Concern
NAVFAC	Naval Facilities Engineering Command
NIMA	National Imagery and Mapping Agency
ORAP	Operational Range Assessment Program
ORIS	Operational Range Inventory Sustainment
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facilities Management Support System
TA	Training Area
TES	Threatened and Endangered Species
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
USAEHA	United States Army Environmental Hygiene Agency
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UXO	Unexploded Ordnance
WP	White Phosphorus
WW	World War
ZOC	Zone of Contribution

