

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
TRUMAN TRAINING SITE
WARSAW, MISSOURI**

MAY 2008

Prepared for:

UNITED STATES ARMY CORPS OF ENGINEERS, BALTIMORE DISTRICT
P.O. Box 1715
Baltimore, Maryland 21203

and

UNITED STATES ARMY ENVIRONMENTAL COMMAND
Aberdeen Proving Ground, Maryland 21010

Prepared by:

MALCOLM PIRNIE, INC.
3101 Wilson Boulevard
Suite 550
Arlington, Virginia 22201



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. This Phase I Assessment evaluates the operational range area at Truman Training Site (TS) to assess whether further investigation is needed to determine if potential munitions constituents of concern (MCO) 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, MCO sources, potential off-range migration pathways, and potential off-range human and ecological receptors are evaluated as appropriate.

Truman TS is a Missouri Army National Guard (MOARNG) installation located in west-central Missouri within Benton County. The installation lies in the Cedar Island Area of the Harry S. Truman Dam and Reservoir and just east of Macks Camp, Missouri. Truman TS is approximately eight miles northwest of Warsaw, Missouri, approximately 20 miles southeast of Clinton, Missouri, and approximately 30 miles southwest of Sedalia, Missouri.

As part of the Operational Range Inventory Sustainment, an update to the Army Range Inventory Database-Geodatabase (ARID-GEO) was submitted to the U.S. Army Environmental Command in October 2006. ARID-GEO (2006) identified two operational range areas encompassing a total of approximately 657 acres. The total operational range area was derived from the Operational Use Area (total range area) acreage as reported in ARID-GEO (2006). These ranges consist of two training and maneuver areas: 1) the mainland portion located on the South Grand Point peninsula, and 2) the three noncontiguous islands, known as the Tebo Islands, located just northwest of the mainland area. The mainland portion of Truman TS consists of approximately 446 acres, and the Tebo Islands encompass approximately 134 acres on the east island, 62 acres on the west island, and 15 acres on the south island, totaling 211 acres. MOARNG training and maneuver exercises conducted at Truman TS include basic soldier skills, tactical and engineer training, pre-mission planning, helicopter landings, fire hazards training, and overnight bivouacs (AMEC, 2006; Parsons, 2002). There is no other than operational area at Truman TS.

A review of available records and background data, as well as interviews with installation personnel, indicated that limited amounts of military munitions have been used at the ranges at Truman TS. Historically, training conducted at Truman TS consisted of exercises using small arms blanks and field operations with occasional use of pyrotechnics and obscurants. Military training operations have not been conducted at Truman TS since 2005. Because training activities have involved limited use of military munitions an average of once or twice a year, there are only limited sources of potential MCO at Truman TS. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated.

The two operational ranges at Truman TS are categorized as Unlikely.

Unlikely – Five-Year Review

Two ranges at Truman TS are categorized as Unlikely, totaling 657 acres. These ranges consist of training and maneuver areas. 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.

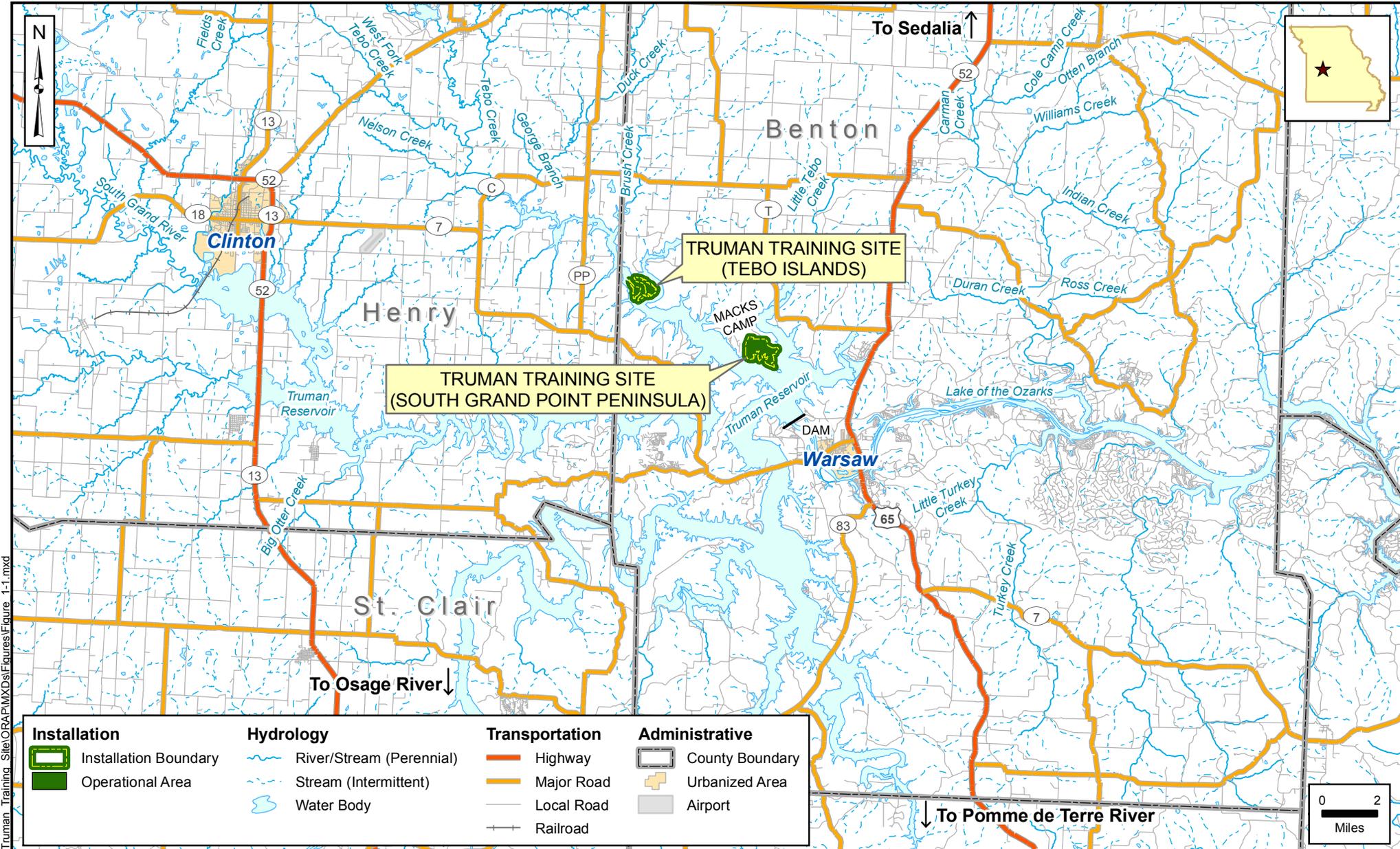
Table ES-1 summarizes the Phase I Assessment findings.

Table ES-1: Summary of Findings and Conclusions for Truman TS

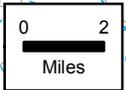
Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	Two operational ranges; 657 acres	Limited source— limited or no military munitions use	Not evaluated (limited source identified)			Re-evaluate during the five-year review. Limited sources were identified.

ABBREVIATIONS/ACRONYMS

AFB	Air Force Base
amsl	Above Mean Sea Level
ARID-GEO	Army Range Inventory Database-Geodatabase
bgs	Below Ground Surface
CAB	Combat Aviation Brigade
CSM	Conceptual Site Model
DoD	Department of Defense
DODI	Department of Defense Instruction
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
GIS	Geographic Information System
gpm	Gallons Per Minute
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.)
HHC	Headquarters and Headquarters Company
INRMP	Integrated Natural Resources Management Plan
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
MDC	Missouri Department of Conservation
MOARNG	Missouri Army National Guard
MoDNR	Missouri Department of Natural Resources
NG	Nitroglycerin
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RFMSS	Range Facility Management Support System
ROTC	Reserve Officers' Training Corps
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
TS	Training Site
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
USFWS	United States Fish and Wildlife Service
°F	Degrees Fahrenheit



Installation	Hydrology	Transportation	Administrative
Installation Boundary	River/Stream (Perennial)	Highway	County Boundary
Operational Area	Stream (Intermittent)	Major Road	Urbanized Area
	Water Body	Local Road	Airport
		Railroad	



**Operational Range Assessment Program
Phase I Qualitative Assessment
Truman Training Site, MO**

**Figure 1-1
Truman Training Site Location**

Data Sources:
AEC, ARID-GEO, 2006
ESRI, StreetMap USA, 2005

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