

**FINAL
OPERATIONAL RANGE ASSESSMENT PROGRAM
PHASE I QUALITATIVE ASSESSMENT REPORT
MARSEILLES TRAINING CENTER
MARSEILLES, ILLINOIS**

APRIL 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.
630 Freedom Business Center
Suite 203
King of Prussia, Pennsylvania 19406



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 Marseilles Training Center (MTC) 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.

MTC occupies approximately 2,854 acres in LaSalle County, Illinois. The installation lies just south of the city of Marseilles and the Illinois River. The Illinois Army National Guard uses MTC to conduct weapons qualification and field training exercises. The current mission of MTC is “to provide military organizations through battalion size with the absolute best environment for conducting individual and collective training” (Illinois ARNG, 2001).

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 January 2006. ARID-GEO (2006) identified 24 operational ranges encompassing a total of approximately 2,740 acres. The operational area consists of one target practice grenade range, three non-dudded impact areas, one practice hand grenade range, five small arms ranges, and 14 training and maneuver areas. The 114-acre other than operational area consists of an armory, a vehicle maintenance facility, a vehicle wash rack, parking lots, and support facilities (Illinois ARNG, 2001).

The 24 operational ranges at MTC are categorized as Unlikely.

Unlikely – Five-Year Review

All 24 ranges at MTC are categorized as Unlikely. These ranges consist of one target practice grenade range, three non-dudded impact areas, one practice hand grenade range, five small arms ranges, and 14 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 MTC

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	Six operational ranges; 67 acres	Target practice grenade range target areas and small arms range firing points, target areas, and berms	None	Not evaluated (no potentially complete pathways identified)		Re-evaluate during the five-year review. No potentially complete pathways were identified.
	18 operational ranges; 2,673 acres	Limited or no source—limited or no military munitions use	Not evaluated (limited or no source identified)		Re-evaluate during the five-year review. Limited or no source was identified.	

ABBREVIATIONS/ACRONYMS

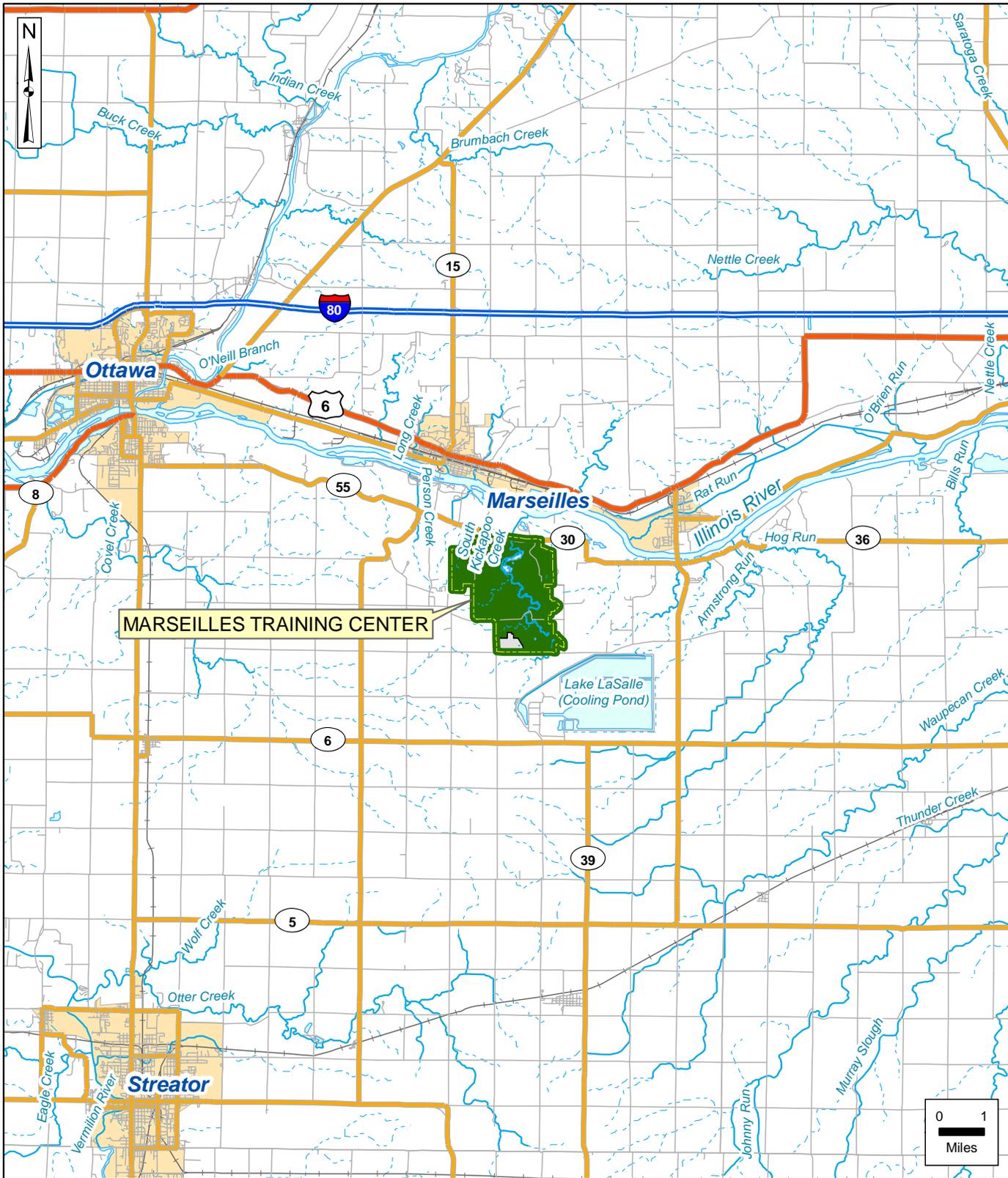
ARID-GEO	Army Range Inventory Database-Geodatabase
ARNG	Army National Guard
bgs	Below Ground Surface
CSM	Conceptual Site Model
DMAIL	Illinois Department of Military Affairs
DNT	Dinitrotoluene
DoD	Department of Defense
DODI	Department of Defense Instruction
E	Ecological receptors identified. (This refers to range grouping; pathway designation always precedes E designation.)
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.)
HMX	Cyclotetramethylenetetranitramine
IDNR	Illinois Department of Natural Resources
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
mg/kg	Milligrams per Kilogram
mm	Millimeter
msl	Mean Sea Level
MTC	Marseilles Training Center
N/A	Not Applicable
NBC	Nuclear, Biological, and Chemical
NC	Nitrocellulose
NCO	Noncommissioned Officer
NG	Nitroglycerin
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RDX	Cyclotrimethylenetrinitramine
RFMSS	Range Facility Management Support System
SW	Surface water pathway identified. (This refers to range grouping; M designation always precedes SW designation.)
T&E	Threatened and Endangered
TNT	Trinitrotoluene
TSC	Training Support Complex
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
XRF	X-ray Fluorescence
°F	Degrees Fahrenheit



**MALCOLM
PIRNE**

**Operational Range Assessment Program
Phase I Qualitative Assessment
Marseilles Training Center, IL
Figure 1-1
General Marseilles Training Center Location**



- Installation**
- Installation Boundary
 - Operational Area
 - Other than Operational Area
 - Urban Areas

- Hydrology**
- River/Stream (Perennial)
 - Stream (Intermittent)
 - Water Body

- Transportation**
- Interstate
 - Highway
 - Major Road
 - Local Road
 - Railroad

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

Date: January 2008
Prepared By: Malcolm Pirnie, Inc.
Prepared For: U.S. Army
Contract: W912DR-05-D-0004

S:\Projects\ARMY\Installations\Marseilles\ORAP\MXDs\Figures\Figure_1-1.mxd