

**FINAL  
OPERATIONAL RANGE ASSESSMENT PROGRAM  
PHASE I QUALITATIVE ASSESSMENT REPORT  
GREEN CREEK TRAINING AREA  
GREEN CREEK, ILLINOIS**

---

FEBRUARY 2009

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:

**EARTH RESOURCES TECHNOLOGY, INC.**  
10810 Guilford Road, Suite 105  
Annapolis Junction, MD 20701



---

## 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 Green Creek Training Area (TA) 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.

Green Creek TA is comprised of 458 acres in Effingham County in south-central Illinois. The training area is located on privately-owned property approximately four miles north of the City of Effingham. According to the Army Range Inventory Database-Geodatabase from 2006, the training area consists of one light maneuver and training range which encompasses the entire 458 acre site.

A review of available records and background data, as well as interviews with Illinois Army National Guard personnel indicate that the range at Green Creek TA has not been used for training involving live-fire military munitions, only small-caliber blanks have been expended. The training site is currently active and training activities conducted at Green Creek TA are limited to infantry tactics and fight maneuvers which include dismounted squad movements, bivouacking, and land navigation (Personal Communication, First Sergeant / Readiness Non Commissioned Officer, 2008). Because training activities do not involve, and historically have not involved, the use of live-fire military munitions, there are no potential sources of MCOC. Therefore, potential off-range migration pathways and potential off-range human and ecological receptors were not evaluated, and the range at Green Creek TA is categorized as Unlikely.

Installations with operational ranges where no munitions or only small caliber blanks have been utilized are categorized as Unlikely. That is, based on a review of available information, there is sufficient evidence to show that due to the lack of munitions use there are no known releases or source-receptor interactions that could present an unacceptable risk to human health or the environment. 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 Green Creek TA**

<b>Category</b>	<b>Total Number of Ranges and Acreage</b>	<b>Source(s)</b>	<b>Pathways(s)</b>	<b>Human and Ecological Receptors</b>	<b>Conclusions</b>
Unlikely	One operational range; 458 acres	No source—no current or historical use of live-fire military munitions	Not evaluated (no source identified)		Re-evaluate during the five-year review. No source was identified.

## ABBREVIATIONS/ACRONYMS

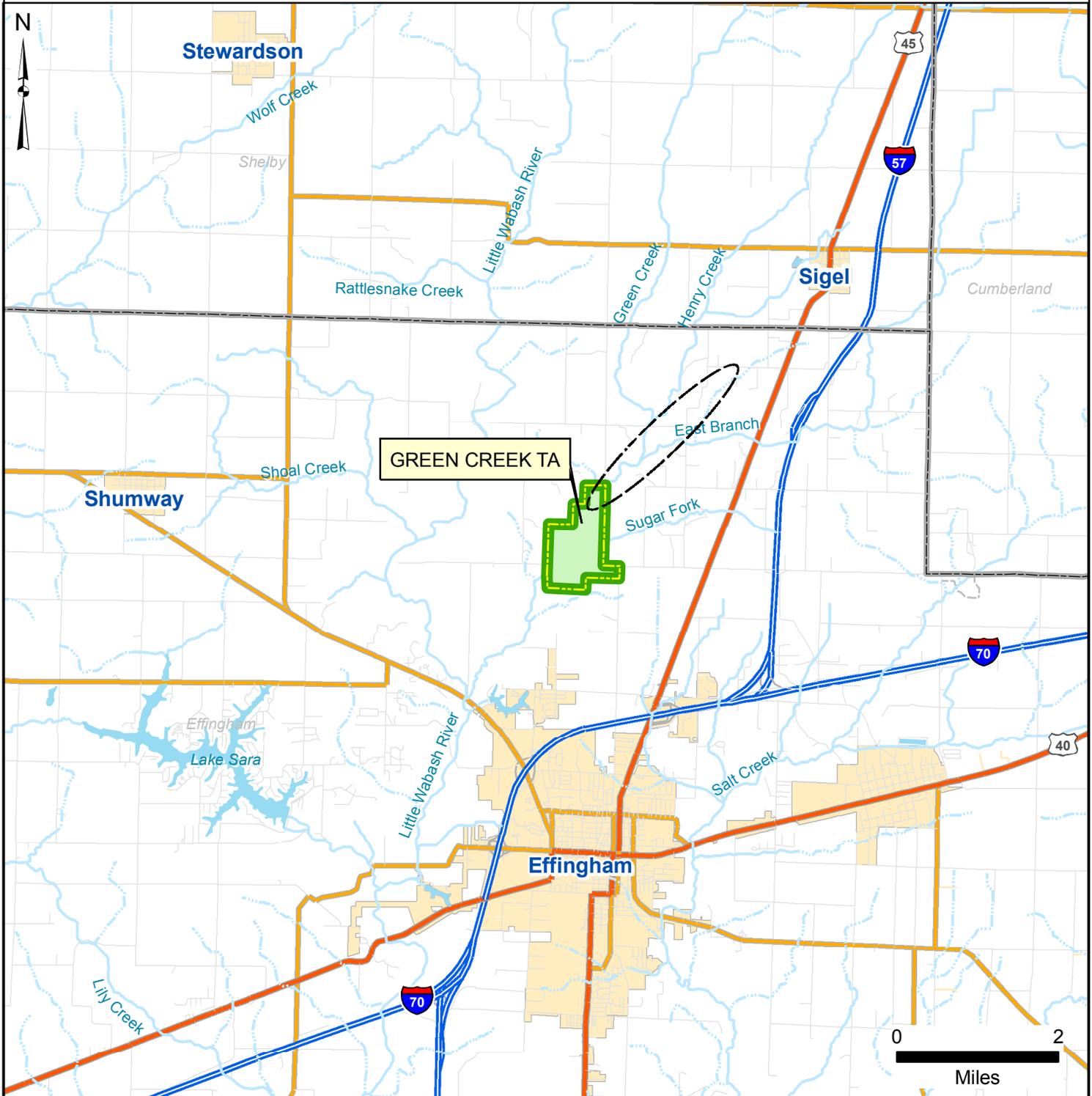
ARID-GEO	Army Range Inventory Database-Geodatabase
CSM	Conceptual Site Model
DMAIL	Department of Military Affairs, Illinois
DoD	Department of Defense
ERT	Earth Resources Technology, Inc.
GIS	Geographic Information Service
ILARNG	Illinois Army National Guard
JFHQ	Joint Force Headquarters
MCOB	Munitions Constituents of Concern
NCO	Non Commissioned Officer
ORAP	Operational Range Assessment Program
REC	Record of Environmental Consideration
RFMSS	Range Facility Management Support System
TA	Training Area
U.S.	United States
USACE	United States Army Corps of Engineers
1SG	First Sergeant



Operational Range Assessment Program  
Phase I Qualitative Assessment  
Green Creek Training Area, IL



Figure 2-1  
General Green Creek Training Area Location



**Installation**

- Installation Boundary
- Operational Area

**Roads**

- Interstate
- Highway
- Major Road
- Local Road

**Administrative**

- Urbanized Area
- County Boundary
- Approximate Location of Green Creek Community

**Hydrology**

- River/Stream
- Waterbody

Data Source:  
ARID-GEO, 2007  
ESRI, StreetMap 2005

Date:.....February 2009  
Prepared By:.....ERT, Inc.  
Prepared For:.....U.S. Army  
Contract Number:.....W912DR-06-D-0002