

**FINAL  
OPERATIONAL RANGE ASSESSMENT PROGRAM  
PHASE I QUALITATIVE ASSESSMENT REPORT  
RAYTOWN TRAINING SITE  
KANSAS CITY, MISSOURI**

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Prepared for:

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## 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 Raytown Training Site (TS) 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.

Raytown TS is located in Jackson County, Missouri; it lies within Kansas City (10 miles southeast of downtown) and is approximately 70 miles east of Topeka, Kansas. The site is near Raytown, which is an incorporated city surrounded by Kansas City. The site's address is 12000 East 87<sup>th</sup> Street (or 12000 Military Club Road), Kansas City, Missouri. The land is close to Highway 350 and Interstate 470. The Missouri Army National Guard (MOARNG) has used the site since 1927. Currently, the installation supports a motor pool that is used for vehicle maintenance; occasionally, the site is used for weekend bivouac exercises (MOARNG Automotive Service and Maintenance Repairman, pers. comm.).

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. The ARID-GEO (2006) identified one light training and maneuver area encompassing the entire installation area of 51.08 acres. Historically, a .22-caliber range and a .30-caliber range existed within the property now identified as training and maneuver area. The .22-caliber range was used from approximately 1927 to 1941, and the .30-caliber range was used from approximately 1927 to the mid-1960s. Evidence of projectiles is still present at the impact area of the .30-caliber historical range (USACHPPM, 2004). Potential MCOC associated with small caliber munitions types historically used at Raytown TS are metals, including lead, antimony, copper, and zinc. Nitroglycerine (NG) is not considered a potential MCOC at Raytown because there has been sufficient time for degradation of any deposited NG since small arms were fired. No pathways were identified by which MCOC could migrate off-site. Therefore, human and ecological receptors were not evaluated.

The one operational range at Raytown TS is categorized as Unlikely.

### **Unlikely – Five-Year Review**

One range at Raytown TS is categorized as Unlikely, totaling 51.08 acres. This range is a light training and maneuver area with historical small arms use. 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.

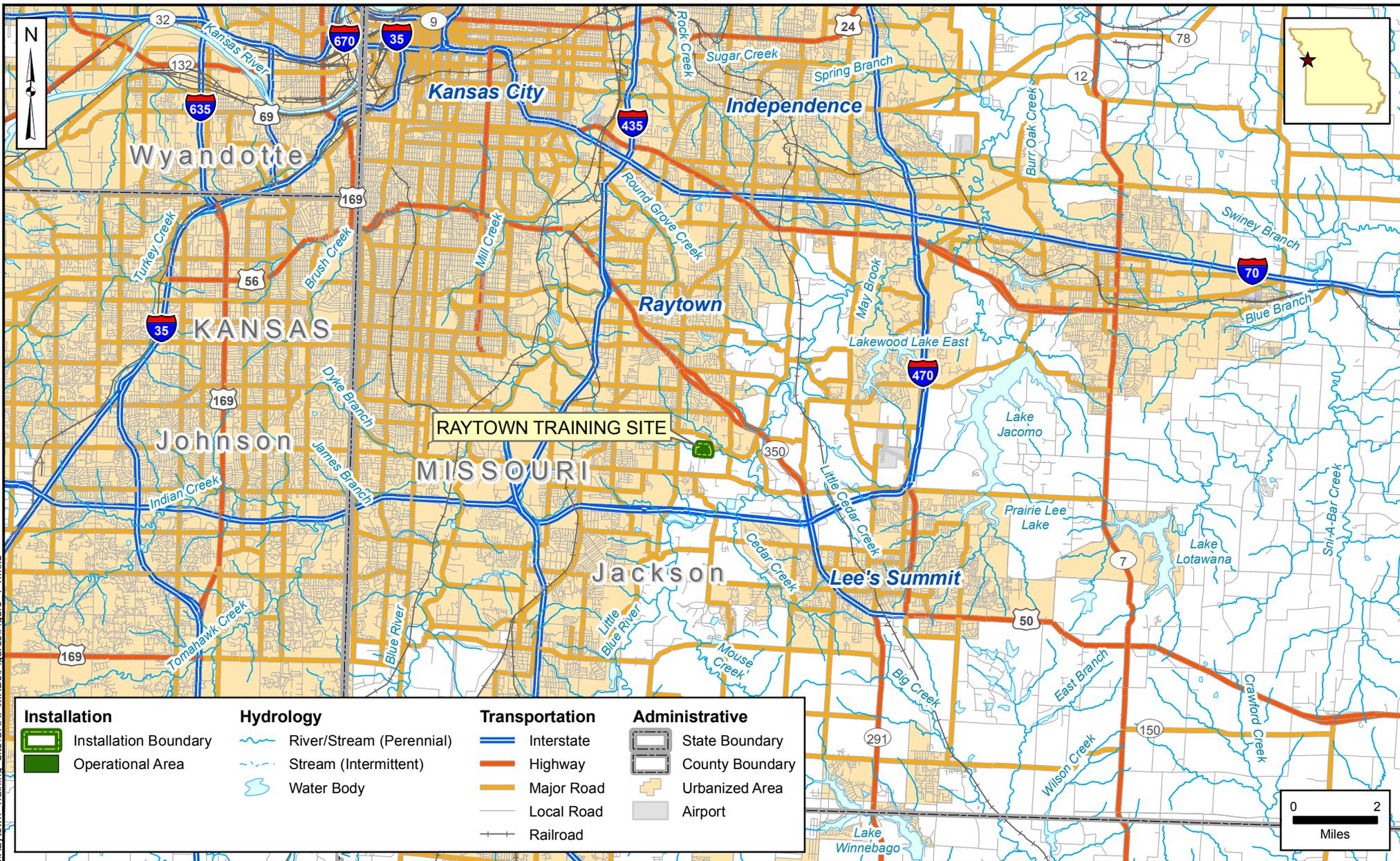
**Table ES-1** summarizes the Phase I Assessment findings.

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

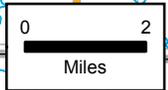
Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	One operational range; 51.08 acres	Impact areas at historical small arms ranges	None	Not evaluated (no pathway identified)		Re-evaluate during the five-year review. No pathways were identified.

## ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
bgs	Below Ground Surface
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
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.)
LS	Limited Source
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
MOARNG	Missouri Army National Guard
MoDNR	Missouri Department of Natural Resources
NG	Nitroglycerin
NGB	National Guard Bureau
ORAP	Operational Range Assessment Program
PU	Pathway unlikely or incomplete. (This refers to range grouping; M designation always precedes PU designation.)
RCA	Range Condition Assessment
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



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



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

**Figure 1-1  
General Raytown Training Site Location**

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

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