



FINAL

# Operational Range Assessment Program Phase I Qualitative Assessment Report Camp Johnson, Vermont

U.S. Army Operational Range Assessment Program  
Qualitative Operational Range Assessments

Prepared for:

U.S. Army Environmental Command and  
U.S. Army Corps of Engineers Baltimore District



Printed on  
recycled  
paper



April 2008

Final Operational Range Assessment Program Phase I Qualitative Assessment Range Assessment Reports will be released beginning in March 2008 per the Direction of Army Headquarters. The cover page of this Report reflects the official finalization date. The date on subsequent pages/figures reflects the date upon which this document's conclusions are based.



---

## 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 Camp Johnson 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.

Camp Johnson is located on Vermont State Highway Route 15, along the eastern edge of the town of Colchester, where it adjoins the town of Essex, approximately one mile east of the city of Winooski. The 660-acre installation contains 11 ranges, including one small arms range and 10 maneuver and training areas, which are used for training by the Vermont Army National Guard.

The 11 operational ranges at Camp Johnson are categorized as Unlikely.

### **Unlikely – Five-Year Review**

Eleven ranges at Camp Johnson are categorized as Unlikely, totaling 642 acres. These ranges consist of one small arms range and 10 maneuver and training 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 on ranges 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 Camp Johnson**

Category	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Conclusions and Rationale
Unlikely	10 operational ranges; 640 acres	No source – limited or no military munitions use	Not evaluated (no source was identified)			Re-evaluate during the five-year review. No source was identified.
	1 operational range; 2 acres	Small arms impact berm	Shallow groundwater discharge to wetlands/pond complex. Off-range migration pathway unlikely due to natural ecological processes occurring in onsite wetland.	Not evaluated (no pathway was identified)		Re-evaluate during the five-year review. Pathway to off-range unlikely.

## ABBREVIATIONS/ACRONYMS

ARID-GEO	Army Range Inventory Database-Geodatabase
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	Conceptual Site Model
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.)
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
LS	Limited Source.
M	Munitions used. (This refers to range grouping; M designation always precedes applicable pathway.)
MCOC	Munitions Constituents of Concern
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.)
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
USEPA	United States Environmental Protection Agency
VTARNG	Vermont Army National Guard

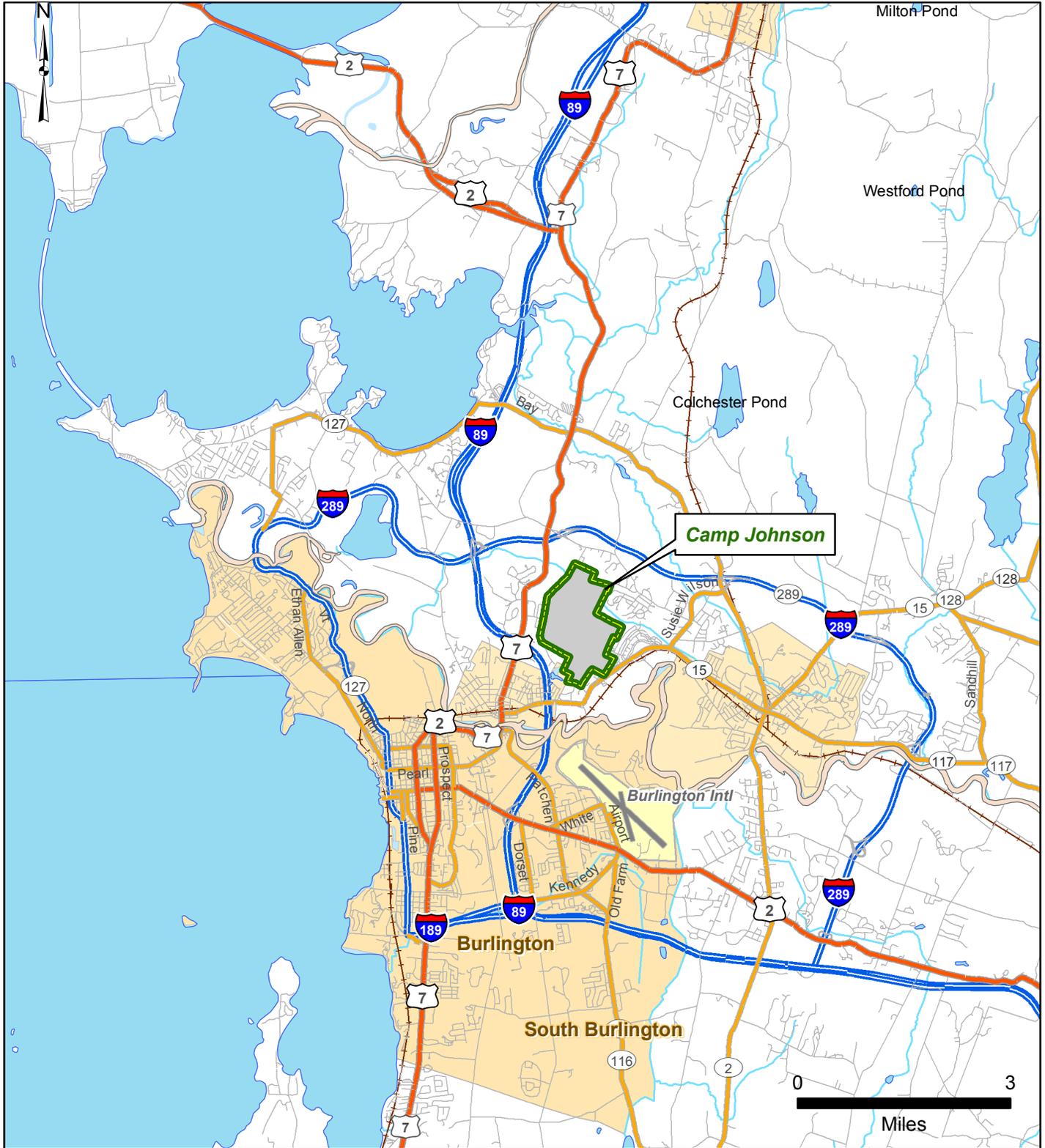


EA Engineering, Science, and Technology, Inc.

# Operational Range Assessment Program Phase I Qualitative Assessment Camp Johnson, Vermont



## Figure 1-1 General Camp Johnson Location



### Legend



Installation Boundary

Data Sources:  
ARID-GEO, 2006; ESRI, 2005; National Hydrology Dataset, 2006

Date:.....March 2007  
Prepared By: EA Engineering, Science, & Technology  
Prepared For:..... U.S. Army  
Contract Number:..... W912DR-05-D-0008