# FINAL OPERATIONAL RANGE PHASE I QUALITATIVE ASSESSMENT REPORT JOLIET TRAINING AREA WILL COUNTY, ILLINOIS

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Prepared for:

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## **EXECUTIVE SUMMARY**

### **PURPOSE:**

This qualitative assessment, hereinafter referred to as Phase I Assessment, evaluates Joliet Training Area's operational range area 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. The Phase I Assessment results in the categorization of operational ranges as appropriate, as follows:

- Referred Refer to Appropriate Cleanup Program: ranges with compelling evidence (e.g., sampling data) to indicate the presence of an off-range release that potentially poses an unacceptable risk to human health or the environment;
- Inconclusive Phase II Quantitative Assessment Required: ranges where existing information either is insufficient to make a source-receptor interaction determination or indicates the potential for such interaction to be occurring; or
- Unlikely Five-Year Review<sup>1</sup>: 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 that could present an unacceptable risk to human health or the environment.

### **SUMMARY OF FINDINGS:**

To facilitate the qualitative analysis, MCOC sources, potential migration pathways from a range, and potential off-range human and/or ecological receptors associated with the ranges at Joliet Training Area were evaluated. Each range was then placed into one of two descriptive groups that meet the criteria for the Unlikely category.

The 16 operational ranges at Joliet Training Area included in the Phase I Assessment have been placed into the following category.

• Unlikely – Sixteen ranges consisting of nine training and maneuver areas, two small arms ranges, a medium caliber range, a large caliber range, a demolition area, a common task test area, and a helicopter pad totaling approximately 3,429 acres

These findings are summarized in **Table ES-1**.

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<sup>&</sup>lt;sup>1</sup> All operational ranges must be periodically re-evaluated to determine if there is a release or substantial threat of release of MCOC from an operational range to an off-range area. Range groups categorized as Unlikely are to be re-evaluated at least every five years. Re-evaluation may occur sooner if significant changes (e.g., changes in range operations, site conditions, regulatory changes) occur that affect determinations made during the Phase I Assessment.

Table ES-1: Summary of Findings, Conclusions, and Recommendations for Joliet Training Area

Category	Group Identification	Total Number of Ranges and Acreage	Source(s)	Pathway(s)	Human Receptors	Ecological Receptors	Recommendations (Future Steps)
Unlikely	Munitions used; pathway unlikely	Two operational ranges; approximately eight acres	Small arms firing	None	Not evaluated	Not evaluated	Re-evaluate during the five-year review.
	Limited source	14 operational ranges; approximately 3,421 acres	No source – limited or no military munitions use	Not evaluated	Not evaluated	Not evaluated	Re-evaluate during the five-year review.

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# ABBREVIATIONS/ACRONYMS

ABBREVIATIONS/ACRONYMS						
°F	Degrees Fahrenheit					
amsl	Above Mean Sea Level					
ARID-GEO	Army Range Inventory Geodatabase					
ARNG	Army National Guard					
CSM	Conceptual Site Model					
CTT	Common Task Test					
DoD	Department of Defense					
DODI	Department of Defense Instruction					
DOE	Department of Energy					
DPTMS	Directorate of Plans, Training, Mobilization and Security					
ft.	Feet					
FY	Fiscal Year					
IL	Illinois					
JAAP	Joliet Army Ammunition Plant					
LS	Limited Source					
MC	Munitions Constituents					
MCOC						
	Munitions Constituents of Concern					
MFG	Joliet Army Ammunitions Plant Explosives Manufacturing Area					
MGW	Munitions have been used on the range. A groundwater migration pathway					
MCW (II/E)	was identified, but no receptors have been identified.					
MGW (H/E)	Munitions have been used on the range. The groundwater source-receptor					
	interaction is potentially complete (for human or ecological receptors).					
mm	Millimeter					
MPU	Munitions have been used on the range, but migration pathways are unlikely or incomplete.					
MSW	Munitions have been used on the range. A surface water migration pathway					
	was identified, but no receptors have been identified.					
MSW (H/E)	Munitions have been used on the range. The surface water source-receptor					
, , ,	interaction is potentially complete (for human or ecological receptors).					
MSWGW	Munitions have been used on the range. Groundwater and surface water					
	migration pathways have been identified, but no receptors have been					
	identified.					
MSWGW (H/E)	Munitions have been used on the range. The surface water and groundwater					
	source-receptor interactions are potentially complete (for human or					
	ecological receptors).					
mya	Million Years Ago					
N/A	Not Applicable					
NPL	National Priorities List					
ORAP	Operational Range Assessment Program					
PCB	Polychlorinated Biphenyls					
RFMSS	Range Facilities Management Support System					
TNT	Trinitrotoluene					
U.S.	United States					
USACE	United States Army Corps of Engineers					
USACHPPM	United States Army Corps of Engineers  United States Army Center for Health Promotion and Preventive Medicine					
USAEHA	United States Environmental Hygiene Agency					
U.S.C.	United States Code  United States Code					
0.5.0.	Officer braics code					

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