

FINAL

**SAMPLING AND ANALYSIS PLAN
ADDENDUM NO. 1**

FOR THE

**PHASE I REMEDIAL INVESTIGATION OF
THE NACA TEST AREA AT THE
RAVENNA ARMY AMMUNITION PLANT,
RAVENNA, OHIO**

Prepared for



**US Army Corps
of Engineers^â**

**Louisville District
Contract No. DACA62-94-D-0029
Delivery Order No. 0077**

October 1999



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Part I

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ABBREVIATIONS

AOC	area of concern
ARAR	applicable or relevant and appropriate requirement
AWQC	ambient water quality criteria
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CHF	Contaminant Hazard Factor
COPC	contaminant of potential concern
CQC	chemical quality control
DQO	Data Quality Objective
EPA	U.S. Environmental Protection Agency
HQ	hazard quotient
IDW	investigation-derived waste
IOC	Industrial Operations Command
NACA	National Advisory Committee on Aeronautics
Ohio EPA	Ohio Environmental Protection Agency
OE	ordnance and explosives
OVA	organic vapor analyzer
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
PRG	preliminary remediation goal
QAPP	Quality Assurance Project Plan
QA	quality assurance
QC	quality control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RI	Remedial Investigation
RRSE	Relative Risk Site Evaluation
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SAP	Sampling and Analysis Plan
SVOC	semivolatile organic compound
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
TOC	total organic carbon
USACE	U.S. Army Corps of Engineers
USCS	Unified Soil Classification System
VOC	volatile organic compound

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