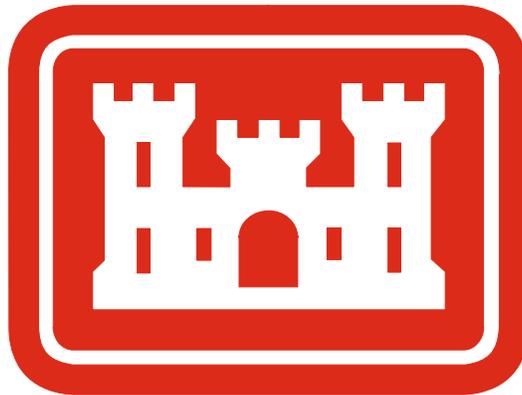


FINAL

**REMEDIAL INVESTIGATION
REPORT – VOLUME 1
FORMER SCHENECTADY ARMY DEPOT-
VOORHEESVILLE AREA
GUILDERLAND, NEW YORK**

VOLUME 1 – MAIN REPORT: SECTIONS 1 THROUGH 6

PREPARED FOR:



U.S. ARMY CORPS OF ENGINEERS

Contract No. DACA87 - 02 - D - 0005

Delivery Order No. 0018

PREPARED BY:

PARSONS

SEPTEMBER 2007

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Final:

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FOR THE
FORMER SCHENECTADY ARMY DEPOT –
VOORHEESVILLE AREA
GUILDERLAND, NEW YORK**

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SEPTEMBER 2007

PREFACE

The United States Army Corps of Engineers (USACE) would like to express its appreciation for the assistance that the Restoration Advisory Board (RAB) members provided during the course of this remedial investigation (RI) at the Former Schenectady Army Depot—Voorheesville Area (FSADVA).

Dr. Peter Buttner, Mr. Charles Rielly and Mr. Thaddeus Ausfeld are commended for volunteering to act as the Community Co-Chair and Acting Community Co-Chair of the RAB, and for contributing their time and effort in reviewing and providing comments on this and other supporting documents, as well as for their coordination efforts with other RAB members. The FSADVA RAB consists of local residents, interested parties, elected officials, regulatory representatives and others who have volunteered their time to attend meetings, review documents, and provide guidance and advice in the planning and execution of the RI. USACE will continue to solicit participation from the RAB during subsequent phases of work at FSADVA. The following is a listing of FSADVA RAB members:

Mr. and Mrs. Ted Ausfeld	Mr. Jeffrey McCullough
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LIST OF ABBREVIATIONS AND ACRONYMS

ACDH	Albany County Department of Health
ACEMC	Albany County Environmental Management Council
AMSL	Above Mean Sea Level
AOC	Area of Concern
AOI	Area of Interest
BEHP	bis(2-Ethylhexyl)phthalate
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
C&D	Construction and Demolition
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COPC	Chemical of Potential Concern
CPAH	Carcinogenic Polynuclear Aromatic Hydrocarbon
DCE	Dichloroethene
DERP	Defense Environmental Restoration Program
DLA	Defense Logistics Agency
DNSC	Defense National Stockpile Center
DNAPL	Dense Nonaqueous Phase Liquid
DOA	Department of the Army
DoD	Department of Defense
ECSM	Ecological Conceptual Site Model
EECA	Engineering Evaluation and Cost Analysis
EAEST	EA Engineering, Science and Technology
EIS	Environmental Impact Statement
EM	Electromagnetic
EPC	Exposure Point Concentrations
ESS	Engineering Supply Section
FIT	Field Investigation Team
FFS	Focused Feasibility Study

LIST OF ABBREVIATIONS AND ACRONYMS (CONTINUED)

FS	Feasibility Study
FSADVA	Former Schenectady Army Depot – Voorheesville Area
FUDS	Formerly Utilized Defense Site
GSA	General Services Administration
GURA	Guilderland Urban Renewal Agency
HDPE	High-density Polyethylene
HHRA	Human Health Risk Assessment
HP	Hydropunch
HRS	Hazard Ranking System
IA	Ichthyological Associates, Inc.
IAP	Interim Action Plan
ICP	Inductively Coupled Argon Plasma
IRM	Interim Remedial Action
LRI	Limited Remedial Investigation
MPI	Malcom Pirnie Inc.
MCL	Maximum Contaminant Level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MS/MSD	Matrix Spike and Matrix Spike Duplicate
MSSL	Medium-specific Screening Levels
MW	Monitoring Well
ND	Not Detected
NEIP	Northeast Industrial Park
NOAA	National Oceanic and Atmospheric Administration
NPAH	Noncarcinogenic Polynuclear Aromatic Hydrocarbon
NRC	Nuclear Regulatory Commission
NYSDEC	New York State Department of Conservation
NYSDOH	New York State Department of Health

LIST OF ABBREVIATIONS AND ACRONYMS (CONTINUED)

PA	Preliminary Assessment
PAH	Polynuclear Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyls
PCL	Protective Concentration Levels
PID	Photoionization Detector
PRG	Preliminary Remediation Goals
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
QMS	Quartermaster Supply Section
RA	Remedial Action
RAB	Restoration Advisory Board
RAO	Remedial Action Objectives
RD	Remedial Design
RI	Remedial Investigation
ROD	Record of Decision
SADVA	Schenectady Army Depot Voorheesville Area
SARA	Superfund Amendments and Reauthorization Act
SB	Soil Boring
SCG	Standards, Criteria, and Guidelines
SD	Sediment
SLERA	Screening-level Ecological Risk Assessment
SPDES	State Pollutant Discharge Elimination system
SS	Soil Sample
STARS	Spill Technology and Remediation Series
SVOC	Semivolatile Organic Compound
SW	Surface Water
TAGM	Technical and Administrative Guidance Memorandum
TAL	Target Analyte List
TCE	Trichloroethene

LIST OF ABBREVIATIONS AND ACRONYMS
(CONTINUED)

TCEQ	Texas Commission on Environmental Quality
TCL	Target Compound List
TEQ	Toxicity Equivalents
TIC	Tentatively Identified Compounds
TOC	Total Organic Carbon
TOGS	Technical and Operating Guidance Series
TP	Test Pit
TPH	Total Petroleum Hydrocarbon
UCL	Upper Confidence Limit
URS	URS Consultants, Inc.
USACE	United States Army Corps of Engineers
USATHAMA	United States Army Toxic and Hazardous Materials Agency
US	United States
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound
WWII	World War II
WWTP	Waste Water Treatment Plant