Final

Record of Decision
for RVAAP-03
Open Demolition Area #1
Ravenna Army Ammunition Plant Restoration Program
Portage and Trumbull Counties, Ohio

Contract No. W912QR-12-D-0002
Delivery Order: 0003

Prepared for:

U.S. Army Corps of Engineers
Louisville District

Prepared by:

PARSONS

401 Diamond Drive NW
Huntsville, AL 35806
256-837-5200

April 19, 2021

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Heyse, Edward
Hinger, Jessica

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Parsons Government Services Inc.
401 Diamond Drive NW
Huntsville, Alabama 35806

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U.S. Army Corps of Engineers--Louisville District
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Louisville, Kentucky 40202-0059

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13. SUPPLEMENTARY NOTES
None.

14. ABSTRACT
This Record of Decision (ROD) recommends No Further Action (NFA) for soil, surface water, and sediment within RVAAP-03 Open Demolition Area #1 at the Former Ravenna Army Ammunition Plant (now Camp James A. Garfield Joint Military Training Center). There were no Chemicals of Concern (COCs) identified, and the Area of Concern (AOC) was categorized as "Low Probability" of encountering Munitions and Explosives of Concern (MEC). Therefore, AOC meets the criteria for Unlimited Use and Unrestricted Exposure (UU/UE).

15. SUBJECT TERMS
ROD = Record of Decision, NFA = No Further Action, RVAAP-03 Open Demolition Area #1, AOC=Area of Concern, COCs = Chemicals of Concern, MEC = Munitions and Explosives of Concern, UU/UE = Unlimited Use and Unrestricted Exposure

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U	U	U	N/A	50	19b. TELEPHONE NUMBER *(Include area code)* (256) 217-2573

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Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

May 21, 2021

TRANSMITTED ELECTRONICALLY

Mr. Kevin M. Sedlak
Army National Guard
Installations & Environment
Cleanup Branch IPA Designation
1438 State Route 534 SW
Newton Falls, OH 44444

RE: US Army Ravenna Ammunition Plt RVAAP
Remediation Response
Project Records
Remedial Response
Portage County
ID # 267000859021

Subject: Final Record of Decision for RVAAP-03 Open Demolition Area #1 Dated April 20, 2021

Dear Mr. Sedlak:

The Ohio Environmental Protection Agency (Ohio EPA), Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR) has received and reviewed the "Final Record of Decision for RVAAP-03 Open Demolition Area #1 dated April 20, 2021." It was prepared by Parsons.

Ohio EPA has no comments on the Final Record of Decision (Final ROD). Based on the information contained in the Final ROD document, other investigation documents and reports, and Ohio EPA's oversight participation during the investigation, Ohio EPA concurs with the Final ROD for RVAAP-03 Open Demolition Area #1 recommending no further action.

As a precautionary response to COVID-19, Ohio EPA is currently operating with most staff working remotely. During this time, we will not be issuing hard-copy mail. This letter is an official response from Ohio EPA that will be maintained as a public record.

If you have any questions concerning this letter, please contact Edward D'Amato at (330) 963-1170, or via email at ed.damato@epa.ohio.gov.

Sincerely,

Melisa Witherspoon

Melisa Witherspoon
Chief
Division of Environmental Response and Revitalization

MW/sc

ec: Katie Tait, OHARNG RTLS
Nat Peters, USACE
Steven Kvaal, USACE
Mark Leeper, ARNG
Rebecca Shreffler, Chenega
Natalie Oryshkewych, Ohio EPA, NEDO, DERR
Megan Oravec, Ohio EPA, NEDO, DERR
Bob Princic, Ohio EPA, NEDO, DERR
Tom Schneider, Ohio EPA, SWDO, DERR
William Damschroder, Ohio EPA, Legal

CONTRACTOR STATEMENT OF INDEPENDENT TECHNICAL REVIEW

Parsons has completed the Final Record of Decision for Ravenna Army Ammunition Plant RVAAP-03 Open Demolition Area #1 at the Former Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio. Notice is hereby given that an independent technical review has been conducted that is appropriate to the level of risk and complexity inherent in the project. During the independent technical review, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of data quality objectives; technical assumptions; methods, procedures, and materials to be used; the appropriateness of data used and level of data obtained; and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing U.S. Army Corps of Engineers policy.

02/17/2021

Dan Griffiths, CPG
Independent Technical Reviewer

Date

04/19/2021

Edward Heyse, Ph.D., P.E.
Plan Preparer/Reviewer

Date

Final

Record of Decision
for RVAAP-03 Open Demolition Area #1

Ravenna Army Ammunition Plant Restoration Program
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DOCUMENT DISTRIBUTION
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Final
Record of Decision
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Ravenna Army Ammunition Plant Restoration Program
Portage and Trumbull Counties, Ohio

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Steven Kvaal, USACE–Louisville District	Email transmittal letter only	
Kevin Mieczkowski, USACE–Louisville District	2	1
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Tom Schneider, Ohio EPA SWDO	Email transmittal letter only	
Bob Princic, Ohio EPA DERR-NEDO	Email transmittal letter only	
Natalie Oryshkewych, Ohio EPA DERR-NEDO	Email transmittal letter only	
Megan Oravec, Ohio EPA DERR-NEDO	Email transmittal letter only	

ARNG = Army National Guard
DERR = Division of Environmental Response and Revitalization
NEDO = North East District Office
OHARNG = Ohio Army National Guard
Ohio EPA=Ohio Environmental Protection Agency
RVAAP=Ravenna Army Ammunition Plant
REIMS = Ravenna Environmental Information Management System
SWDO = Southwest District Office
USACE = U.S. Army Corps of Engineers

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ACRONYMS/ABBREVIATIONS

amsl	above mean sea level
AOC	area of concern
ARNG	Army National Guard
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CJAG	Camp James A. Garfield Joint Military Training Center
CMCOPCs	Contaminant migration chemicals of potential concern
COCs	chemicals of concern
COPCs	chemicals of potential concern
COPECs	chemicals of potential ecological concern
ft	feet
FWCUGs	Facility-Wide Cleanup Goals
HQ	hazard quotient
HHRA	Human Health Risk Assessment
IRP	Installation Restoration Program
ISM	incremental sampling method
km	kilometer(s)
MEC	munitions and explosives of concern
MKM	MKM Engineers, Inc.
NACA	National Advisory Committee for Aeronautics
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NGT	National Guard Trainee
NTA	NACA Test Area
OB/OD	open burn/open demolition
ODA1	Open Demolition Area #1
OE	Ordnance and Explosives
OESS	Ordnance and Explosive Safety Section
OHARNG	Ohio Army National Guard
Ohio EPA	Ohio Environmental Protection Agency
PCB	polychlorinated biphenyls
REIMS	Ravenna Environmental Information Management System
RI	Remedial Investigation
ROD	Record of Decision
RSL	regional screening level
RVAAP	Ravenna Army Ammunition Plant
SAIC	Science Applications International Corporation
SEMS	Superfund Enterprise Management System
Shaw	Shaw Environmental & Infrastructure, Inc.
SLERA	screening level risk assessment
SRCs	site-related compounds
SVOCs	semi-volatile organic compounds

ACRONYMS/ABBREVIATIONS (CONTINUED)

TAL	target analyte list
TNT	trinitrotoluene
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USP&FO	U.S. Property and Fiscal Officer
UU/UE	Unlimited Use/Unlimited Exposure
UXO	unexploded ordnance
VOC	volatile organic compounds

PART I THE DECLARATION

A SITE NAME AND LOCATION

This Record of Decision (ROD) addresses environmental media within RVAAP-03 Open Demolition Area #1 (ODA1) Area of Concern (AOC) at the former Ravenna Army Ammunition Plant (RVAAP), Portage and Trumbull Counties, Ohio (Figure 1). The former RVAAP, now known as Camp James A. Garfield Joint Military Training Center (CJAG), is located in northeastern Ohio within Portage and Trumbull counties. CJAG is approximately 4.8 kilometers (km) (3 miles) east/northeast of the city of Ravenna and approximately 1.6 km (1 mile) northwest of the Village of Newton Falls (Figure 1). As of September 2013, administrative accountability for the entire acreage of the facility has been transferred to the U.S. Property and Fiscal Officer (USP&FO) for Ohio and subsequently licensed to the Ohio Army National Guard (OHARNG) for use as a military training site.

RVAAP-03 ODA1 is located in the southwestern portion of CJAG, north of Hinkley Creek, within the southern portion of the RVAAP-38 National Advisory Committee for Aeronautics (NACA) Test AOC. The former RVAAP is not on the U.S. Environmental Protection Agency (USEPA) National Priorities List, although it is in the USEPA Superfund Enterprise Management System (SEMS) database. The SEMS USEPA identifier for RVAAP is OH5210020736. The Ohio Environmental Protection Agency (Ohio EPA) ID Number for the AOC is 267-000859-021.

B STATEMENT OF BASIS AND PURPOSE

This ROD presents No Further Action as the selected remedy for RVAAP-03 ODA1, which was chosen by the Army National Guard (ARNG), the lead agency, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). This decision is based on information contained in the Administrative Record file for the AOC.

The Ohio EPA, the support agency, reviewed and concurred with selected remedy presented in the *Remedial Investigation Study for Soil, Surface Water, and Sediment for RVAAP-03 Open Demolition Area #1* (U.S. Army Corps of Engineers [USACE], 2017) and *Proposed Plan for RVAAP-03 Open Demolition Area #1, Revision 2.0* (Parsons, 2020). The ARNG's preferred alternative at RVAAP-03 ODA 1 is No Further Action for soil, sediment, and surface water. (USACE, 2017 and Parsons, 2020). Groundwater will be addressed as part of a separate ROD for RVAAP-66 Facility-Wide Groundwater. The RVAAP-03 ODA1 AOC meets the requirements for No Further Action under CERCLA and is compliant with the requirements of the Ohio EPA *Director's Final Findings and Orders*, dated June 10, 2004 (Ohio EPA, 2004).

C DESCRIPTION OF THE SELECTED REMEDY

No further action is necessary at RVAAP-03 ODA1 for soil, sediment, or surface water to meet Unrestricted (Residential) Land Use. No Munitions and Explosives of Concern (MEC) or evidence of MEC was found at the AOC. Groundwater is addressed under the Facility-Wide Groundwater Monitoring Program RVAAP-66 Facility-Wide Groundwater. The ARNG will not be required to

implement land use controls as part of this decision, as no Chemicals of Concern (COCs) were identified in soil, sediment, or surface water for the Resident Receptor. The AOC meets criteria for Unrestricted (Residential) Land Use and Unrestricted Use/Unrestricted Exposure (UU/UE).

The selected remedy for the RVAAP-03 ODA1 meets the requirements of CERCLA and the NCP in that it is protective of human health and the environment, complies with Federal and State requirements that are applicable or relevant and appropriate to the remedial action, is cost-effective, and utilizes permanent solutions to the maximum extent possible. Although the selected remedy does not achieve the statutory preference for treatment as a principal element of the remedy (i.e., reduces toxicity, mobility, and volume through treatment), interim remedial actions reduced the volume of contaminants previously detected in soil and the AOC meets the criteria for UU/UE without further treatment.

D STATUTORY DETERMINATIONS

The recommendation of No Further Action for soil, sediment and surface water is protective of human health and the environment. Because this remedy will not result in hazardous substances, pollutants or contaminants remaining on-site above levels that allow for unlimited use and unrestricted exposure, a five-year review will not be required.

E AUTHORIZING SIGNATURE

Approved

HAMMETT.ANTHONY.SCOTT.1116575562 Digitally signed by HAMMETT.ANTHONY.SCOTT.1116575562 Date: 2021.10.06 09:06:59 -04'00'

06 Oct 2021

Anthony Hammett
Colonel, U.S. Army
Chief, G-9 Army National Guard

Date

PART II DECISION SUMMARY

A SITE NAME, LOCATION, AND DESCRIPTION

When the RVAAP Installation Restoration Program (IRP) began in 1989, RVAAP (SEMS Identification Number OH5210020736) was identified as a 21,419-acre installation. In 2002 and 2003, OHARNG surveyed the property, and the total acreage of the property was found to be 21,683 acres. The RVAAP IRP encompasses investigation and cleanup of past activities over the entire 21,683-acre former RVAAP.

As of September 2013, administrative accountability for the entire acreage of the facility has been transferred to the USP&FO for Ohio and subsequently licensed to OHARNG for use as a military training site (CJAG). The Army is the lead agency for any remediation, decisions, and applicable cleanup at RVAAP-03 ODA1. These activities are being funded and conducted under the IRP. Ohio EPA is the support agency.

CJAG is in northeastern Ohio within Portage and Trumbull counties, approximately 4.8 km (3 miles) east-northeast of the City of Ravenna and approximately 1.6 km (1 mile) northwest of the Village of Newton Falls (Figure 1). References in this document to the former RVAAP relate to the previous activities involving former munitions production or to activities being conducted under the restoration/cleanup program.

CJAG is a parcel of property approximately 17.7 km (11 miles) long and 5.6 km (3.5 miles) wide, bounded by State Route 5 and the CSX System Railroad on the south; Garret, McCormick, and Berry roads on the west; the Norfolk Southern Railroad on the north; and State Route 534 on the east (Figures 1 and 2). CJAG is surrounded by several communities: Windham 11.2 km (7 miles) to the north, Garrettsville 9.6 km (6 miles) to the north, Newton Falls 1.6 km (1 mile) to the southeast, Charlestown 3.6 km (5.7 miles) to the southwest, and Wayland 4.8 km (3 miles) to the south (Figure 1).

The RVAAP-03 ODA1 is located in the southwestern portion of the former RVAAP, north of Hinkley Creek, within the southern portion of RVAAP-38 NACA Test Area (NTA) AOC (Figure 2). RVAAP-03 ODA1 was used from 1941 to 1949 primarily for the thermal destruction of munitions, explosives, and associated materials through the operation of open burn/open demolition (OB/OD) practices. The OB/OD area within RVAAP-03 ODA1 was surrounded by an oval shaped earthen berm (Figure 3). The berms around the OB/OD area have since been removed.

In addition to RVAAP-03 ODA1 being used for OB/OD operations, the surrounding area adjacent to RVAAP-03 ODA1 was used to stage aircraft for NTA operations. The NTA was constructed and used between 1947 and 1953. The NTA crash airstrip is located on the north side of the former bermed OB/OD area. Aircraft have been observed to be parked atop the earthen berm and areas east of the berm in historical aerial photographs from 1952 (Science Applications International Corporation [SAIC], 2001).

During the 2001 Phase I Remedial Investigation (RI, SAIC, 2001), areas outside of the berm contained shrapnel, fuzes, booster cups, and other debris on the soil surface. The occurrence of these materials on the ground surface outside the OB/OD area suggested that kickouts and shrapnel were generated during thermal destruction of ammunition. Historical operations also indicated that, when congested with debris, burning areas were cleared using heavy equipment by pushing the debris to the periphery of the area (SAIC, 2001).

The AOC (former bermed area and surrounding land south of the NTA airstrip) covers approximately 6 acres and the approximate surface elevation is 1,085 feet above mean sea level (amsl). Figure 3 shows the site features of and near RVAAP-03 ODA1. The AOC is bounded to the west, south and east by wooded areas, and the closest surface water body is Hinkley Creek located 400 feet to the south. Surface drainage is to the south toward Hinkley Creek.

B SITE HISTORY AND ENFORCEMENT ACTIVITIES

The former RVAAP was constructed in 1940 and 1941 for depot storage and ammunition assembly/loading and placed on standby status in 1950. The primary purpose of the former RVAAP was to load medium and major caliber artillery ammunition (i.e., bombs, mines, fuze and boosters, primers, and percussion elements) and store finished components. Load Lines 5 through 11 produced fuzes, boosters, primers, detonators, and percussion elements.

RVAAP-03 ODA1 was used from 1941 to 1949 primarily for the thermal destruction of munitions, explosives, and associated materials through the operation of OB/OD practices. The AOC is not currently used for military training.

C COMMUNITY PARTICIPATION

Using the RVAAP community relations program, the Army and Ohio EPA have interacted with the public via news releases, public meetings, reading materials, direct mailings, an internet website, and receiving and responding to public comments. Specific items in the community relations program include the following:

Restoration Advisory Board: The Army established a Restoration Advisory Board in 1996 at RVAAP to promote community involvement in U.S. Department of Defense environmental cleanup activities and allow the public to review and discuss the progress with decision makers. Board meetings are generally held every two or three months and are open to the public.

Community Relations Plan: The *Community Relations Plan* (Chenega Tri-Services, LLC, 2020) was prepared to establish processes to keep the public informed of activities at RVAAP. The plan is available in the administrative record at CJAG.

Internet Website: The Army established an internet website in 2004 for RVAAP. It is accessible to the public at www.rvaap.org.

In accordance with CERCLA Section 117(a) and NCP Section 300.430(f)(2), the Army released the *Proposed Plan for RVAAP-03 ODA1* (Parsons, 2020) to the public on January 1, 2021. The Proposed Plan and other project-related documents are available to the public in the Administrative Record maintained at CJAG and in the Information Repositories at Reed Memorial Library in Ravenna, Ohio, and Newton Falls Public Library in Newton Falls, Ohio. A notice of availability for the Proposed Plan was sent to local newspapers *Record-Courier* and *Tribute-Chronicle* (Attachments 1 through 3), as specified in the *Community Relations Plan* (Chenega Tri-Services, LLC, 2020). The notice of availability initiated the 30-day public comment period beginning January 1, 2021 and ending January 31, 2021.

The ARNG held a virtual public meeting on January 19, 2021 to present the Proposed Plan. At this meeting, representatives of the ARNG provided information and were available to answer any questions. A transcript of the public meeting is available to the public and has been included in the Administrative Record. Responses to any verbal comments received at this meeting and written comments received during the public notification period are included in the Responsiveness Summary, which is Part III of this ROD. The ARNG considered public input from the public meeting on the Proposed Plan when selecting the remedy.

D SCOPE AND ROLE OF RESPONSE ACTIONS

The overall program goal of the IRP at the former RVAAP is to address contamination from past activities and restore ARNG land to usable conditions. The future Land Use for RVAAP-03 ODA1 is for military training. Unrestricted (Residential) use was evaluated using the Residential Receptor exposure scenario to assess baseline conditions. The Resident Receptor is the Representative Receptor for Unrestricted (Residential) Land Use, and the National Guard Trainee (NGT) is the Representative Receptor for Military Training Land Use. Military Training Land Use is the most likely future use. The achievement of Unrestricted (Residential) Land Use allows for full use without restrictions such as Land Use Controls. As a result of the Human Health Risk Assessment (HHRA), no COCs were identified for the Resident Receptor and NGT, and no further action is required for protection of human health. No ecological risks were identified in the Screening Level Ecological Risk Assessment (SLERA) for the AOC. A Munitions and Explosives of Concern (MEC) verification study determined that no MEC or evidence of MEC was found at the AOC.

E SUMMARY OF SITE CHARACTERISTICS

Site characteristics, nature and extent of contamination, and the conceptual site model for RVAAP-03 ODA1 are summarized in the *Remedial Investigation Study for Soil, Surface Water, and Sediment for RVAAP-03 Open Demolition Area #1* (USACE, 2017).

E.1 Physical Characteristics

This section describes the topography/physiology, geology, hydrogeology, and surface water features of CJAG and RVAAP-03 ODA1 that were key factors in identifying the potential contaminant transport pathways, receptor populations, and exposure scenarios to evaluate human health and ecological risks.

RVAAP-03 ODA1 (former bermed area and surrounding land) covers approximately 6 acres and consisted of an oval OB/OD area which was surrounded by a 25-foot-wide by 1.5 foot tall earthen berm, and a plane storage area previously located on the south side of the site (Figure 3). The berms around the OB/OD area have been removed, and a low area immediately south and east of the former berm collects runoff during rainfall events (USACE, 2017).

E.1.1 Topography

Currently, the AOC occupies an open parcel of land that is bounded to the south, east, and west by woodlands. Topography across RVAAP-03 ODA1 is relatively flat with little change in elevation. The elevation at RVAAP-03 ODA1 is approximately 1,085 feet amsl. The AOC is slightly elevated as compared to its immediate surroundings, and surface drainage outside the former berm is to the

east, west, and south. Drainage from within the former bermed OB/OD area is south via a culvert towards a shallow ditch, which ultimately discharges at ground surface within the Hinkley Creek drainage area to the south.

E.1.2 Geology

Soil at RVAAP-03 ODA1 consist of the Fitchville silt loam series. This series exhibit 2 to 6% slopes, is somewhat poorly drained, and has low permeability. The surficial geology at RVAAP-03 ODA1 consists of the Lavery Till, which is a mix of approximately 28% sand and 30% clay, but percentages can vary. RVAAP-03 ODA1 overlies the Sharon Sandstone Conglomerate. However, bedrock was not encountered in any of the Phase II RI borings; therefore, depth to bedrock is unknown in the AOC (USACE, 2017).

E.1.3 Hydrogeology

No monitoring wells were installed as part of the 2017 (Phase II) RI. However, there are monitoring wells screened in the unconsolidated aquifer in the NTA AOC, located adjacent to RVAAP-03 ODA1, and groundwater flow in this area is southerly (Leidos, 2020). One groundwater grab sample (DA1-27-GW) was collected under the Phase I RI as a direct-push boring, and the depth to the water table was measured at approximately 16 feet below ground surface (bgs). Groundwater was encountered in most of the Phase II RI direct-push soil borings at RVAAP-03 ODA1. The depth to groundwater at these borings ranged from 4 to 11 feet bgs, with an average groundwater depth of approximately 6 feet bgs.

After the Phase II RI, temporary monitoring well DA1tw-001 was installed south of the AOC boundary as part of the Facility-wide Groundwater Monitoring Program (Leidos, 2019). The well was installed on October 24, 2018 sampled on November 1, 2018, and abandoned on June 12, 2019. The total depth of the well was 18 feet bgs was screened from 7 to 17 feet bgs. The well was installed to confirm that no groundwater contamination from RVAAP-03 ODA1 was traveling to the south. The groundwater sample contained no detectable concentrations of explosives.

E.1.4 Surface Water

Surface water runoff discharges to the south towards the Hinkley Creek drainage basin. Hinkley Creek is located 400 feet south of the AOC. Data collected during the Phase I RI (SAIC, 2001) indicated that sediment and surface water in Hinkley Creek had not been contaminated as a result of former operations at RVAAP-03 ODA1.

E.2 Site Investigations

Environmental investigations that have been completed for RVAAP-03 ODA1 are documented in the following reports:

- *Ravenna Army Ammunition Plant Water Quality Surveillance Program* (U.S. Army Toxic and Hazardous Materials Agency, 1980–1992).
- *Final Preliminary Assessment for Ravenna Army Ammunition Plant, Ravenna, Ohio* (U.S. Army Center for Health Promotion and Preventive Maintenance, 1996).
- *Phase I Remedial Investigation Report for Demolition Area #1 at the Ravenna Army Ammunition Plant, Ohio* (SAIC, 2001).
- *Final Ordnance and Explosives (OE)/Unexploded Ordnance (UXO) Removal and Interim Removal Action Report for the Open Demolition Area #1* (MKM Engineers, Inc. [MKM],

2004).
- *Final Facility-Wide Biological and Water Quality Study 2003 (*USACE, 2005b).
- *Final Digital Geophysical Mapping Report for the RVAAP-34 Sand Creek Disposal Road Landfill, RVAAP-03 Open Demolition Area #1, and RVAAP-28 Mustard Agent Burial Site Version 1.0* (Shaw Environmental & Infrastructure, Inc.[Shaw], 2011)
- *Remedial Investigation Study for Soil, Surface Water, and Sediment at RVAAP-03 Open Demolition Area #1* (USACE, 2017).
- *Final MEC Verification Study After Action Report for the RVAAP-03 Open Demolition Area #1* (USACE, 2020).

E.2.1 Remedial Investigations

The goal of the RI was to define the nature and extent of contamination in environmental media and assess the potential risks to human health and the environment resulting from the presence of environmental contamination. The RI only addressed and made recommendations for chemicals in environmental media, including munitions constituents such as metals and explosive compounds. MEC was addressed separately outside of the RI process (see Section E.2.2 of this ROD).

The RI was conducted in two phases. Phase I (SAIC, 2001) sampling was conducted in 1999 and Phase II (USACE, 2017) sampling was conducted in 2010. An Interim Removal Action (MKM, 2004) was conducted between the two RI field efforts.

The Interim Removal Action (MKM, 2004) was conducted in 2000 and 2001 to remove potential MEC and munitions debris as well as remove contaminated soil that was determined to represent unacceptable risk to human health in the Phase I RI (i.e., soil where metals were detected at concentrations above background, or where explosive compounds were detected). Soil was excavated from selected portions of RVAAP-03 ODA1 to depth of 4 feet bgs. Excavated soil was sifted to separate and remove any debris. Approximately 81,800 lbs. of munitions debris/scrap was recovered from the sifted soil. Soil confirmation samples were collected from the bottom of the excavations. Excavated soil was staged and sampled. Excavated soil was used as backfill if metals concentrations were within the background range, and explosive compounds were not detected. Excavated soil that contained metals concentrations above background or detectable levels of explosive compounds was disposed off-site and replaced with clean backfill.

Soil samples collected during the Phase I and Phase II RI sampling efforts (less those Phase I samples for areas removed during the Interim Removal Action) and confirmation samples from the Interim Removal Action were evaluated in the Phase II RI Report (USACE, 2017) to provide a comprehensive data set for evaluating current conditions in RVAAP-03 ODA1 soil. Sediment and surface water samples were collected and evaluated in the Phase I RI report (SAIC, 2001). The combined RI efforts evaluated the following number of samples of environmental media:

- Surface Soil: 22 samples
- Subsurface Soil: 146 samples
- Sediment: 4 samples
- Surface Water: 3 samples
- Groundwater: 1 grab sample and one temporary well sample

Soil sample locations evaluated in the Phase II RI are illustrated in Figure 4. Most soil samples were analyzed for target analyte list (TAL) metals and explosives. A fraction of the soil samples were also analyzed for additional chemicals including volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), cyanide and propellants. RI sampling adequately characterized contaminants in soil. All four sediment samples were analyzed for explosives, propellants, TAL metals, cyanide, VOCs, SVOCs, PCBs, grain size distribution, and total organic carbon content. All surface water samples were analyzed for explosives, propellants, TAL metals, cyanide, VOCs, SVOCs, and PCBs. The groundwater sample was analyzed for VOCs, SVOCs, explosives, propellants, TAL metals, PCBs, and cyanide.

Data collected during the Phase I RI (SAIC, 2001) indicated that sediment and surface water in Hinkley Creek had not been contaminated as a result of former operations at RVAAP-03 ODA1.

A single groundwater sample was collected during the Phase I RI using direct-push boring techniques. Results from this sample did not indicate any impact to groundwater from RVAAP-03 ODA1 activities. Groundwater is addressed under the Facility-Wide Groundwater Monitoring Program RVAAP-66 Facility-Wide Groundwater. A temporary well (DA1tw-001) was installed in 2018 south of the AOC boundary as part of the Facility-Wide Groundwater Monitoring Program (Leidos, 2019). Explosive contaminants were not detected in groundwater, indicating that contaminants are not migrating from RVAAP-03 ODA1. Investigations for Munitions and Explosives of Concern

The potential for MEC at RVAAP-03 ODA1 was not directly addressed in the RI reports but was assessed in related efforts, including MEC clearance activities associated with RI environmental sampling efforts, the Interim Removal Action, and a post-RI MEC verification study.

An Interim Removal Action (MKM, 2004) was conducted in 2000 and 2001 to excavate selected portions of RVAAP-03 ODA1 to depth of 4 feet bgs, including portions known to contain munitions debris and possible MEC. Excavated soil was sifted to separate and remove any debris. Approximately 81,800 lbs. of munitions debris/scrap was recovered from the sifted soil. One MEC item was recovered: an unfuzed, unfired 75 mm Shrapnel with an intact pusher plate (potentially containing a black powder charge that propels the lead balls). Although only about 20 percent of the total area of RVAAP-03 ODA1 was excavated during the Interim Removal Action, the excavated grids targeted areas where surface or subsurface debris was indicated, and grids were located both within and outside of the former bermed area and therefore represent a comprehensive sample of surface and subsurface debris from the AOC.

MEC avoidance procedures were conducted prior to the 2010 Phase II RI field work at RVAAP-03 ODA1. A UXO technician performed initial ground clearance of potential MEC with a Schoenstatt Model GA-52Cx magnetometer. During subsurface sampling activities, the UXO technician screened the boreholes using the Schoenstatt as a downhole sensor until the field geologist determined that the boring had reached undisturbed soil. No MEC was encountered during the Phase II RI investigation.

The USACE Baltimore District Ordnance and Explosive Safety Section conducted a MEC Verification Study at RVAAP-03 ODA1 (USACE, 2020) between 6 January 2020 and 29 February 2020. The field team swept the entire 8.16-acre area (included acreage beyond the 6 acre AOC to account for potential kickout) and excavated several exploratory trenches having dimensions 20 feet long by 2 feet deep. Only minor munitions debris were recovered during the study. No MEC or evidence of MEC was recovered or observed.

E.3 Nature and Extent of Contamination

The site-related chemicals (SRCs) were identified in the soil evaluated at RVAAP-03 ODA1 during the Phase II RI (USACE, 2017). Inorganic SRCs were identified by comparing analytical data to the background screening values (BSVs). If organic compounds were detected, they were retained as SRCs because BSVs have not been established. The SRCs identified in soil included metals, explosives, propellants, pesticides, and SVOCs. All SRCs were retained to evaluate the risk to groundwater receptors as well as human and ecological receptors.

A total of 23 SRCs were identified in surface soil (0-1-foot bgs) (USACE, 2017): 13 inorganics, 4 explosives, 1 propellant, 4 pesticides, and 1 SVOC. A total of 33 SRCs were identified in subsurface soil (greater than 1-foot bgs) (USACE, 2017): 18 inorganics, 2 explosives, 8 pesticides, 4 SVOCs, and 1 VOC. In general, the majority of the SRCs identified in the environmental media evaluated for nature and extent of contamination (surface soil and subsurface soil) occurred along the western, northern, and southern perimeters, and in the central portion of the AOC.

Data collected during the Phase I RI (SAIC, 2001) indicated that sediment and surface water in Hinkley Creek had not been contaminated as a result of former operations at RVAAP-03 ODA1. Groundwater is addressed under the Facility-Wide Groundwater Monitoring Program RVAAP-66 Facility-Wide Groundwater.

E.4 Conceptual Site Model

Conceptual site model elements are discussed in this section, including primary and secondary sources and release mechanisms, contaminant migration pathways and discharge or exit points, and potential human and ecological receptors.

E.4.1 Primary and Secondary Contaminant Sources and Release Mechanisms

No primary (continuing) contaminant sources are located in RVAAP-03 ODA1 because OB/OD activities were discontinued after 1949. Secondary contaminant sources (contaminated media, particularly soil) were characterized in the RI.

E.4.2 Contaminant Migration Pathways and Exit Points

Receptors could be directly exposed to contaminants in surface soil and subsurface soil on site, and off-site receptors could also be exposed to contaminants if contaminants migrate off-site.

The potential for soil contaminants to impact groundwater was evaluated in a fate and transport evaluation presented in the RI Report (USACE, 2017). The fate and transport evaluation included modeling and comparing the model results to background concentrations and maximum contaminant levels/USEPA regional screening levels (RSLs). The model prediction identified the maximum concentrations of the SRCs expected in groundwater under RVAAP-03 ODA1. Modeling evaluated the potential for contaminants to leach from soil to groundwater beneath the AOC and eventually impact Hinckley Creek.

The conclusions of the fate and transport leaching analysis and modeling are that some of the SRCs in soil may leach to groundwater beneath the AOC. The final list of Contaminant Migration Chemicals of Potential Concern (CMCOPCs) for RVAAP-03 ODA1 are presented below:

- Two explosives and propellants (2,4,6-trinitrotoluene (TNT) and 2-amino-4,6-dinitrotoluene),
- One SVOC (isophorone), and
- Ten metals (antimony, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, and thallium).

Although modeling indicated a potential for soil contaminants to leach into groundwater, a single groundwater sample was collected during the Phase I RI using direct-push boring techniques. Results from this sample did not indicate any impact to groundwater from RVAAP-03 ODA1 activities. Groundwater is addressed under the Facility-Wide Groundwater Monitoring Program RVAAP-66 Facility-Wide Groundwater. A temporary well (DA1tw-001) was installed in 2018 south of the AOC boundary as part of the Facility-Wide Groundwater Monitoring Program (Leidos, 2019). Explosive contaminants were not detected in groundwater, indicating that contaminants are not migrating from RVAAP-03 ODA1.

Contaminants in soil could also potentially be transported to Hinkley Creek, either by dissolution in groundwater or surface water runoff, or transported in sediment in surface water runoff. However, data collected during the Phase I RI (SAIC, 2001) indicated that sediment and surface water in Hinkley Creek had not been contaminated as a result of former operations at RVAAP-03 ODA1. Therefore, migration to Hinkley Creek appears to be an incomplete migration pathway.

E.4.3 Potential Human Receptors and Ecological Resources

Human Receptors

In February 2014, the Army and Ohio EPA amended the risk assessment process to address changes in the IRP. The *Final Technical Memorandum: Land Uses and Revised Risk Assessment Process for the RVAAP Installation Restoration Program* (ARNG, 2014) identified the following three Categorical Land Uses and Representative Receptors to be considered during the RI phase of the CERCLA process:

1. Unrestricted (Residential) Land Use – Resident Receptor (Adult and Child) (formerly called Resident Farmer).
2. Military Training Land Use – NGT.
3. Commercial/Industrial Land Use – Industrial Receptor (USEPA Composite Worker).

The OHARNG Land Use for RVAAP-03 ODA1 in the future is Military Training. The representative receptor is the NGT. Unrestricted (Residential) Land Use for the Residential Receptor is also included to evaluate COCs, as required by the CERCLA process. An evaluation using Resident Receptor (Adult and Child) facility wide cleanup goals (FWCUGs, SAIC, 2010) was used to provide an Unrestricted (Residential) Land Use evaluation. Unrestricted (Residential) Land Use is considered protective for all categories of Land Use at CJAG. The receptor is assumed to be exposed to surface soil from 0–1 feet bgs and subsurface soil from 1–13 feet bgs. Exposure to soil contaminants, if identified at the AOC, could occur with active use of the AOC (e.g., training activities).

Groundwater is addressed under the Facility-Wide Groundwater Monitoring Program RVAAP-66 Facility-Wide Groundwater.

Ecological Resources

RVAAP-03 ODA1 is within a dry, upland fields plant community and the dry, Early Successional Herbaceous Field Herbaceous Alliance (AMEC, 2014). The Early Successional Herbaceous Field Herbaceous Alliance is associated with recently disturbed areas lacking sufficient recovery time for further successional (shrub) development. Goldenrod, clasping-leaf dogbane, self-heal, yarrow, strawberry, black-eyed Susan, sheep sorrel, and fescue are the dominant species.

No sensitive habitats were identified on or near RVAAP-03 ODA1 during the natural heritage data searches. No Special Interest Areas have been designated within or include any portion of RVAAP-03 ODA1. Special Interest Areas include communities that host state-listed species, are representative of historic ecosystems, or are otherwise noteworthy. No wetland areas were identified within RVAAP-03 ODA1 (AMEC, 2014).

The following types of ecological receptors are likely to be present at RVAAP-03 ODA1: terrestrial vegetation, terrestrial invertebrates, meadow voles (*Microtus pennsylvanicus*), short-tailed shrews (*Blarina brevicauda*), American robins (*Turdus migratoris*), red foxes (*Vulpes vulpes*), and red-tailed hawks (*Buteo jamaicensis*).

F CURRENT AND POTENTIAL FUTURE LAND AND RESOURCE USES

The area is not currently used by the OHARNG for military training purpose. The future use of RVAAP-03 ODA1 is for military training. In accordance with CERCLA, as well as suggested by the NCP, it is a requirement of the RVAAP Risk Assessment process to include an evaluation of the Unrestricted (Residential) Land Use scenario. This ROD discusses future Land Use and potential soil, sediment, and surface water impacts to human health, the environment, and groundwater.

G SUMMARY OF SITE RISKS

The HHRA and SLERA evaluated potential risks for human health receptors and potential impacts to ecological resources using the risk assessment process; identified exposure pathways; identified COCs and chemicals of ecological concern (COECs), if any; and provided a basis for remedial decisions. This section of the ROD summarizes the results of the HHRA and SLERA, which are presented in detail in the *Final Remedial Investigation Study for Soil, Surface Water, and Sediment for RVAAP-03 Open Demolition Area #1* (USACE, 2017) and *Proposed Plan for RVAAP-03 Open Demolition Area #1, Revision 2.0* (Parsons, 2020) in the Administrative Record and Information Repositories. The conclusions from the *MEC Verification Study After Action Report for the RVAAP-03 Open Demolition Area #1* are also summarized in this section.

G.1 Human Health Risk Assessment

A HHRA was performed during the Phase II RI to identify COCs and provide a risk management evaluation to determine if remediation is required under CERCLA based on potential risks to human receptors. The exposure media and depths evaluated in the HHRA for the Resident Receptor (Adult and Child) were surface soil (0-1-foot bgs) and subsurface soil (1-13 feet bgs). The evaluation of surface water and sediment was not necessary in the HHRA as no SRCs were identified. The Phase I RI (SAIC, 2001) concluded that surface water and sediment were not impacted from RVAAP-03 ODA1 operations.

Phase I and II RI data along with confirmation sample results from the Interim Removal Action were used to determine SRCs, chemicals of potential concern (COPCs), and COCs, if any. The final list of COPCs includes those SRCs where sample results from any depth exceeded the May 2016 EPA Residential or Industrial RSLs for target cancer risk level of 1×10^{-6} or non-carcinogenic target hazard quotient (HQ) of 0.1. Because the FWCUGs were not updated at the time the HHRA was written, the May 2016 Residential RSLs were used for the Resident Receptor. The determination of COPCs and COCs in the risk assessment was conducted in accordance with the RVAAP *Final Position Paper for the Application and Use of Facility-Wide Cleanup Goals* (USACE, 2012) and modified to reflect changes in the Risk Assessment Technical Memo. The Unrestricted (Residential) Land Use is required under CERCLA and is outlined in the *Facility-Wide Human Health Risk Assessor Manual* (USACE, 2005a).

The COPCs were determined for the Residential Receptor for expected depth of exposure; therefore, discrete and incremental sampling method (ISM) samples were considered separately. The COPCs identified for the Resident Receptor in RVAAP-03 ODA1 are presented below:

- Surface soil
  - ISM data - Cobalt and 2,4,6-TNT
  - Discrete data - None
- Subsurface soil
  - Composited discrete (ISM) data - 2,4,6-TNT
  - Discrete data - aluminum, antimony, arsenic, cadmium, copper, lead, silver, and 2,4,6-TNT

A COPC was identified as a COC by screening its Exposure Point Concentration to the USEPA Residential RSL of 10^{-5} cancer risk level for carcinogenic effects and HQ equal to 1 for noncarcinogenic effects. The Sum of Ratios for all carcinogens and all non-carcinogens that may affect the same organ must be less than or equal to 1.0 as well. If the Sum of Ratios for all carcinogens and all non-carcinogens (that may affect the same organ or do not have a specific target organ identified) were greater than 1, then the chemicals contributing at least 10% to the sum were considered COCs.

No COCs were identified in surface or subsurface soil for the Resident Receptor. Therefore, no further action is required for RVAAP-03 ODA1 surface or subsurface soil for protection of human health.

G.2 Screening Level Ecological Risk Assessment

The purpose of the SLERA performed during the Phase II RI was to evaluate the potential for adverse ecological effects posed to ecological receptors from chemical constituents detected in surface soil from RVAAP-03 ODA1. The evaluation of surface water and sediment was not necessary as the Phase I RI (SAIC, 2001) deemed surface water/sediment not to be impacted as a result of historical RVAAP-03 ODA1 operations.

The SLERA included characterizing the ecological communities in the vicinity of the site, determining the contaminants present, identifying pathways for receptor exposure, and estimating the likelihood of potential adverse effects to identified receptors. Data from the ISM samples and discrete samples were analyzed separately, and not combined in the SLERA. Only surface soil (0 to 1-foot bgs sampling interval) samples were used in the SLERA because most ecological exposure occurs within the top 1 foot of soil. HQs less than 10 are considered to represent a low

potential for environmental effects, HQs from 10 up to, but less than 100 are considered to represent a significant potential that effects could result from greater exposure, and HQs greater than 100 represent the highest potential for expected effects.

Chemicals of Potential Ecological Concern (COPECs) are analytes whose concentrations are great enough to pose potential adverse effects to ecological receptors. For the discrete samples, all five identified COPECs (cadmium, cobalt, copper, mercury, and zinc) were detected at relatively low concentrations that, except for mercury, approximated their background screening values, or ecological screening values, or both. Mercury had an elevated HQ value of over 100, which is attributable to its extremely conservative ecological screening value. However, the mean concentration of mercury in discrete samples was lower than its background screening value. Also, when a more realistic ecological screening value was used, the mercury HQ was less than one.

Similarly, although 14 chemicals were identified as COPECs (nine inorganic chemicals, two explosives compounds, three pesticides, and one SVOC) in the ISM surface soil samples, none appear to warrant further investigation for ecological purposes alone. Eight of the nine metal COPECs had HQs that did not exceed 10, which, given the conservative nature of the Level II Screening, suggests that they are not present at sufficiently high concentrations to warrant concern. The HQ for mercury exceeded 100, but this HQ is likely overestimated due to the conservative ecological screening value that was used for this SLERA. Of the six organic chemicals identified as COPECs, only 2,4,6-TNT had an HQ slightly greater than one; the other five chemicals were selected as COPECs either because they lacked an ecological screening value or because they are persistent, bioaccumulative, and toxic compounds that were detected at low concentrations below their ecological screening values. However, given their low concentrations, it is unlikely that these chemicals have the potential to cause adverse ecological effects to populations.

Because the terrestrial area evaluated for RVAAP-03 ODA1 is less than one acre in size, and the Phase II Level Screening in the SLERA uses highly conservative assumptions, it is unlikely that exposure to the surface soil COPECs identified in the SLERA would adversely impact populations of ecological receptors at RVAAP-03 ODA1. Therefore, no further investigation (e.g., Level III Baseline Ecological Risk Assessment) or removal action is considered necessary at RVAAP-03 ODA1 for the protection of ecological receptors.

G.3 MEC Verification Study

The USACE Baltimore District Ordnance and Explosive Safety Section (OESS) conducted this MEC Verification Study (USACE, 2020) at RVAAP-03 ODA1 between 6 January 2020 and 29 February 2020. The field team swept the entire 8.16-acre area and excavated several exploratory trenches having dimensions 20 feet (ft) long by 2 ft deep. Only minor munitions debris was recovered during the study. No MEC or evidence of MEC was recovered or observed.

Field observations made by OESS personnel during the MEC Verification Study confirm that significant soil disturbance occurred at the site. Only minor evidence of military munitions was observed, and no MEC was recovered. These results confirm that the Interim Removal Action conducted at RVAAP-03 ODA1 significantly reduced the explosive safety hazard by removing munitions debris and military munitions from the site.

In considering the types of activities that have occurred at this site, the extensive soil disturbance activities, and only one verified report of MEC being encountered during the Interim Removal Action, the *MEC Verification Study After Action Report* (USACE, 2020) recommended that

RVAAP-03 ODA1 be categorized as "Low Probability" for encountering MEC in accordance with DESR 6055.09 Edition 1. The report also recommended that on-call construction support be available during earth-disturbance activities.

G.4 Conclusions and Recommendations

Based on results of the Phase II RI, and in particular the HHRA and the SLERA, no additional remedial actions are required for this AOC. Further investigation is not warranted for the following reasons:

(1) the nature and extent of chemicals detected in the media (soil, surface water, and sediment) at the AOC has been characterized;

(2) no COCs for human health were identified at the AOC; and

(3) the SLERA ended at a Level II assessment and no further investigation or action was recommended.

No MEC or evidence of MEC was recovered or observed at RVAAP-03 ODA1 by the USACE Baltimore District OESS in 2020. RVAAP-03 ODA1 was categorized as "Low Probability" for encountering MEC in accordance with DESR 6055.09 Edition 1.

Therefore, no further action is required for soil, sediment, and surface water at RVAAP-03 ODA1 and Unrestricted (Residential) Land Use is attained for this AOC. Groundwater is addressed under the Facility-Wide Groundwater Monitoring Program RVAAP-66 Facility-Wide Groundwater.

G.5 Basis for No Action Statement

No COCs were identified in the HHRA, and no COECs were identified in the SLERA. Therefore, no further action is necessary to protect public health and welfare (CERCLA §104(a)) or the environment from actual or threatened releases of hazardous substances.

H DOCUMENTATION OF NO SIGNIFICANT CHANGES

The *Proposed Plan for RVAAP-03 ODA1* released for public comment on January 1, 2021. The Proposed Plan recommends no further action for RVAAP-03 ODA1. No significant changes were necessary or appropriate following conclusion of the public comment period.

PART III RESPONSIVENESS SUMMARY FOR PUBLIC COMMENTS ON THE U.S. ARMY PROPOSED PLAN FOR RVAAP-03 OPEN DEMOLITION AREA #1

A OVERVIEW

On January 1, 2021 the Army released the Final Proposed Plan for RVAAP-03 ODA1 (Parsons, 2020) for public comment. A 30-day public comment period was held from January 1, 2021 to January 31, 2021. The Army hosted a public meeting on January 19, 2021 to present the Proposed Plan and take questions and comments from the public for the record.

The Proposed Plan recommended No Further Action for RVAAP-03 ODA1. During the public meeting, Ohio EPA concurred with the recommendation. Oral comments were received at the public meeting and are addressed under Section B.

The community voiced no objections to no further action for RVAAP-03 Open Demolition Area #1 during the public comment period.

B SUMMARY OF STAKEHOLDER ISSUES AND LEAD AGENCY RESPONSES

One comment was received during the January 19, 2021 public meeting.

Public Comment: Ms. Sarah Lock asked if there were any concerns for unrestricted use of the AOC given that investigations only went to four feet below the surface.

Lead Agency Response: The interim removal action excavated soil to a depth of four feet. All excavations were screened for ordnance and explosive scrap items at final depth by an unexploded ordnance technician visually and using a Schoenstatt GA-52CX commercial handheld magnetometer which can detect an item up to 4 feet below ground surface (that is, below the bottom of the excavation). The interim removal action report concluded that excavations identified extent of scrap in the burial areas on the periphery of the AOC and within the former open burn/open demolition area. Soil borings were used to sample soil at depths up to 16 feet below ground surface. Taken as a whole, the interim removal action excavations, Remedial Investigation soil borings and munitions and explosives of concern verification study result in a high level of confidence that there is no significant risk of munitions or explosives of concern at this AOC.

No other comments were received verbally during the public meeting, and no written comments were received during the 30-day public comment period.

C TECHNICAL AND LEGAL ISSUES

There were no technical or legal issues raised during the public comment period.

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PART IV REFERENCES

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U.S. Army Toxic and Hazardous Materials Agency, 1980-1982. Ravenna Army Ammunition Plan Water Quality Surveillance Program.

FIGURES

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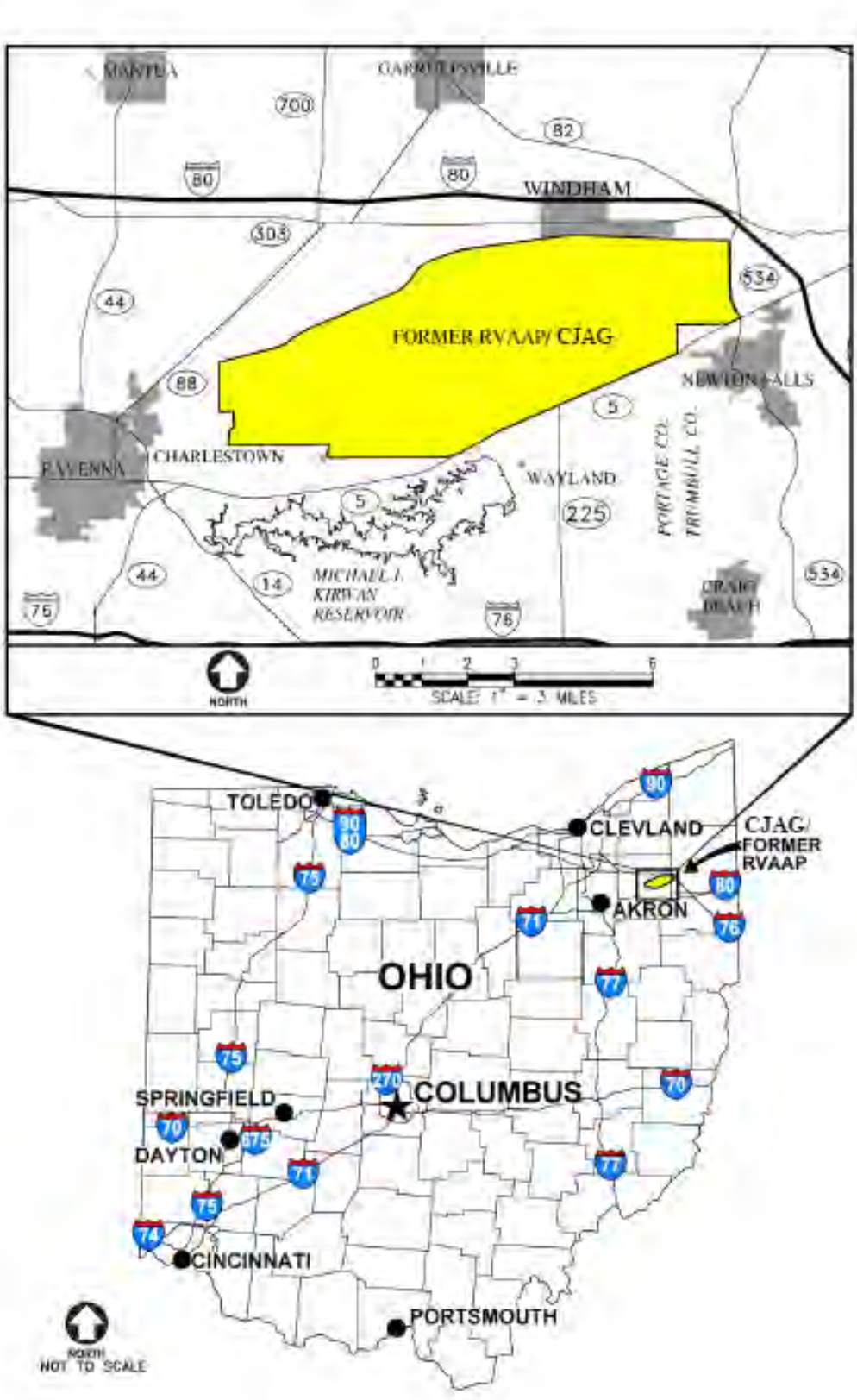

Figure 1. Location of Former RVAAP

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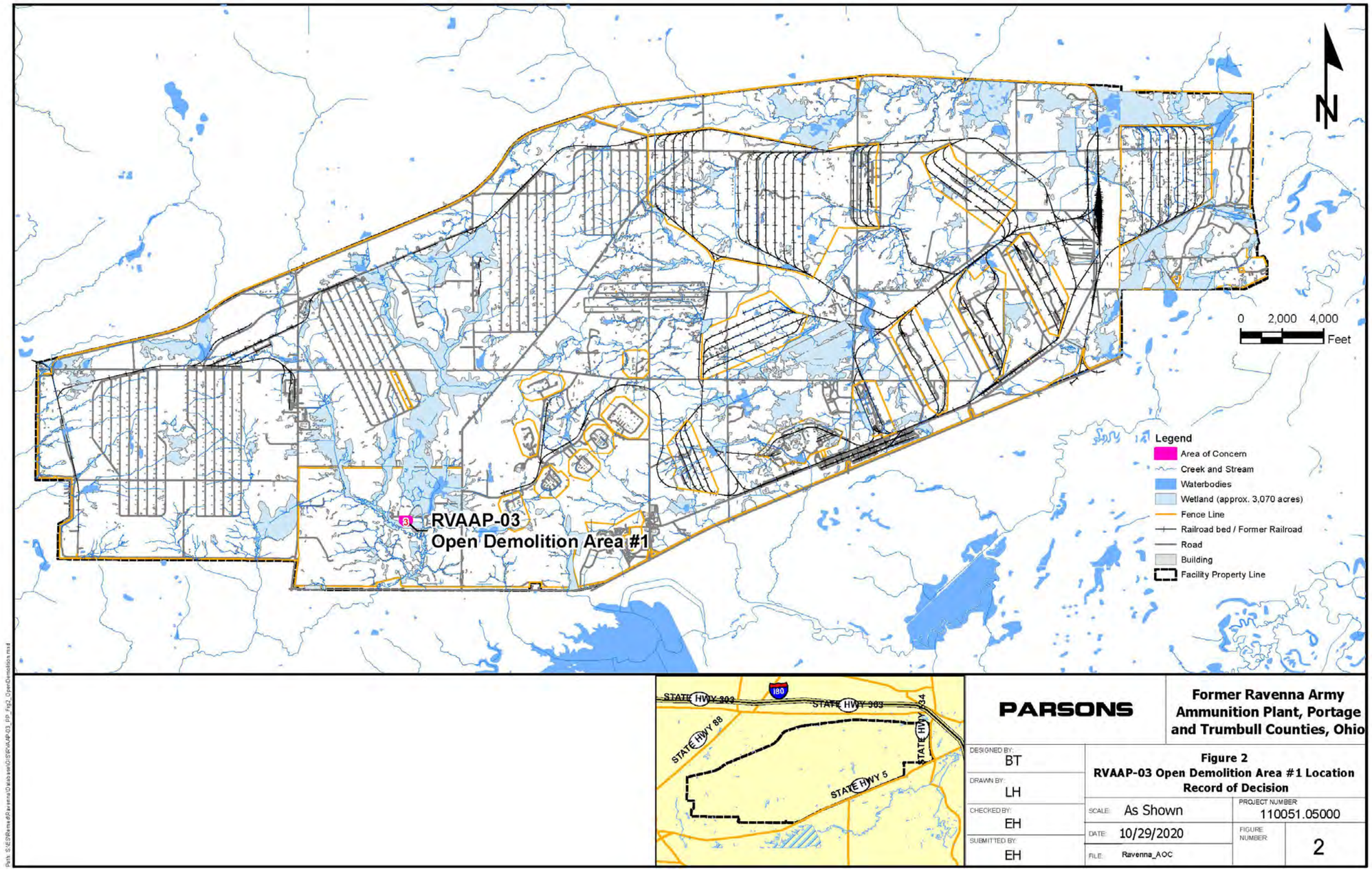

Figure 2. RVAAP-03 Open Demolition Area #1 Location

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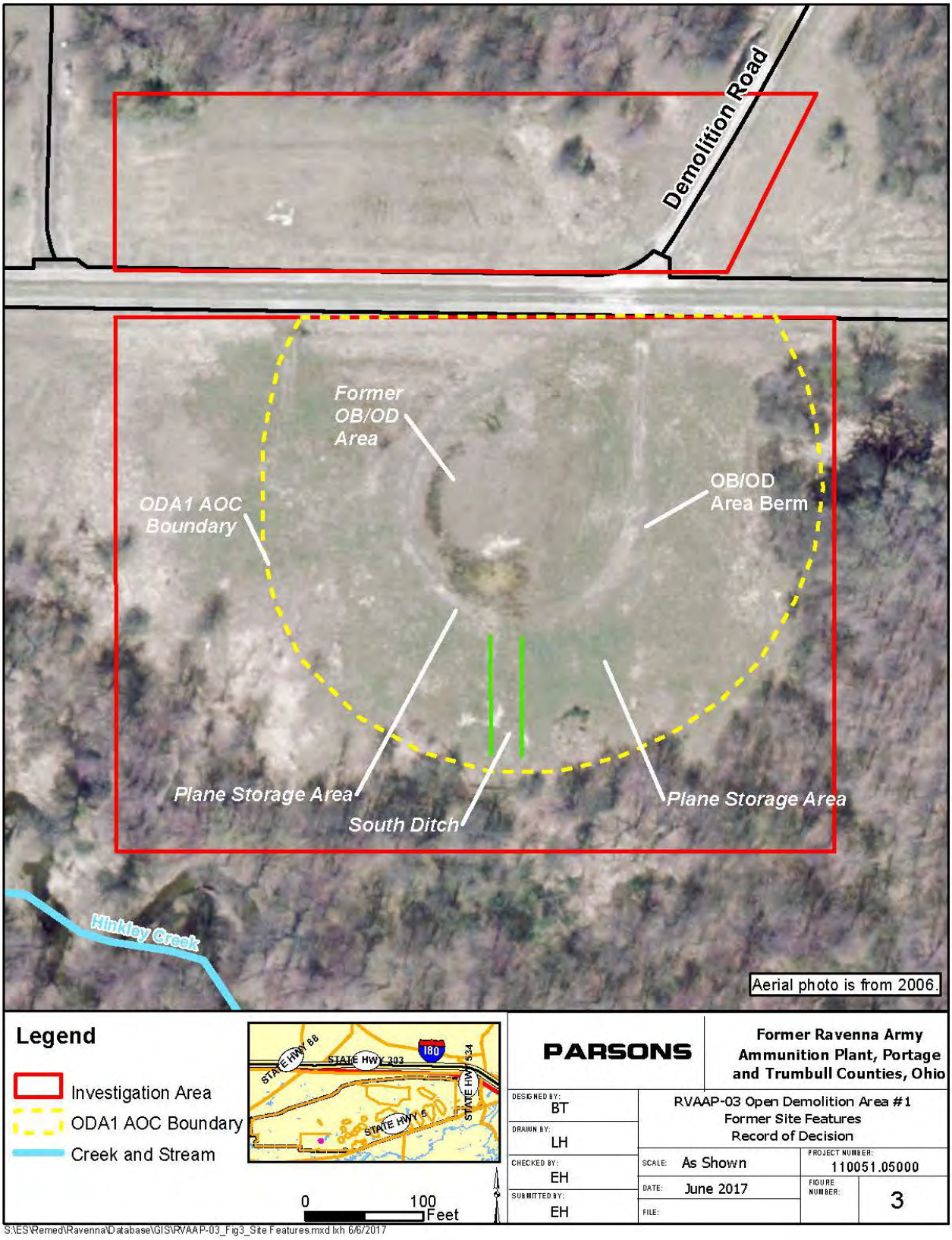

Figure 3. RVAAP-03 Open Demolition Area #1 Former Site Features

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Figure 4. RVAAP-03 Open Demolition Area #1 Sample Locations

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ATTACHMENTS

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Attachment 1. Public Notice

PUBLIC NOTICE

Camp James A. Garfield Joint Military Training Center
Environmental Office
1438 State Route 534 SW-Newton Falls, Ohio 44444
614-336-6136

Virtual Public Meeting to be held January 19, 2021 for Army National Guard Release of a Proposed Plan for Open Demolition Area #1 at the Former Ravenna Army Ammunition Plant

The Army National Guard, in consultation with the Ohio Environmental Protection Agency, submits for public review and comment a Proposed Plan for a site at the former Ravenna Army Ammunition Plant (RVAAP) in Portage and Trumbull counties, Ohio.

Open Demolition Area #1 is within the former RVAAP (now known as Camp James A. Garfield or CJAG) in Portage and Trumbull Counties, Ohio. This site is being addressed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Proposed Plan presents the current status and information regarding the site. The Proposed Plan details the recommendation for the site and provides the rationale for this recommendation.

On January 19, 2021, a virtual public meeting will be held beginning at 6:00 p.m. at www.webex.com (or by calling 1-833-752-1090); Meeting Number: 1467193028; Password: RVAAP-03Meeting (phone only 78227003). Details on how to attend the meeting can be found at: www.rvaap.org.

At 6:15 p.m., the Army National Guard will briefly describe the site assessment, present the recommendation for the site, and then request verbal comments from the public. Written comments regarding the recommendations may be submitted to the Army National Guard during the 30-day comment period from January 1, 2021 to January 31, 2021. All written comments should be addressed to CJAG Environmental Office; 1438 State Route 534 SW, Newton Falls, Ohio, 44444 or sent via email to kathryn.s.tait.nfg@mail.mil.

The Proposed Plan and earlier remedial investigation reports are available for public review at the RVAAP Restoration Program Information Repository at the Reed Memorial Library (167 East Main Street, Ravenna) and the Newton Falls Public Library (204 South Canal Street, Newton Falls). The reports are also available online at www.rvaap.org.

The final remedy for the site will be selected based, in part, on public comments. In coordination with the Ohio Environmental Protection Agency, the Army National Guard will select a final remedy after reviewing and considering all public comments received during the 30-day public comment period. The Army National Guard encourages the public to review and comment on the recommendation presented in this document.

For more information or to participate in the review, please visit the RVAAP Restoration website (www.rvaap.org) or call Katie Tait at 614-336-6136.

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Attachment 2. Affidavit from Kent Record Courier Newspaper

Proof of Publication
Record Publishing Company
1050 W. Main Street,
Kent, OH 44240
Phone (330) 541-9400
Fax (330) 673-6363

I, Teresa S. Milam being first duly sworn depose and say that I am Advertising Clerk of
Record Publishing Company

30 Record-Courier a newspaper printed and published in the city of Kent, and of General circulation in the County of Portage, State of Ohio, and personal knowledge of the facts herein stated and that the notice hereto annexed was Published in said newspapers for 2 insertions on the same day of the week from and after the 27th day of December, 2020 and that the fees charged are legal.

Teresa S Milam

Name of Account: Parsons/ Ed Heyse
Ad Number: 12689871
No. of Lines: 79

Day(s) Published: 12/27, 01/03.
Printers Fee: $138.15

Sworn to and subscribed before this 4th day of January, 2021.

Kimberly J Anderson

NOTARY PUBLIC STATE OF OHIO

KIMBERLY J ANDERSON
Notary Public
State of Ohio
My Comm. Expires
April 2, 2025

PUBLIC NOTICE
Camp James A. Garfield Joint Military Training Center Environmental Office

1438 State Route 534 SW
Newton Falls, Ohio 44444
614-336-6136

Virtual Public Meeting to be held January 19, 2021 for Army National Guard Release of a Proposed Plan for Open Demolition Area #1 at the Former Ravenna Army Ammunition Plant

The Army National Guard, in consultation with the Ohio Environmental Protection Agency, submits for public review and comment a Proposed Plan for a site at the former Ravenna Army Ammunition Plant (RVAAP) in Portage and Trumbull counties, Ohio. Open Demolition Area #1 is within the former RVAAP (now known as Camp James A. Garfield or CJAG) in Portage and Trumbull Counties, Ohio. This site is being addressed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Proposed Plan presents the current status and information regarding the site. The Proposed Plan details the recommendation for the site and provides the rationale for this recommendation.

On January 19, 2021, a virtual public meeting will be held beginning at 6:00 p.m. at www.webex.com (or by calling 1-833-752-1090); **Meeting Number:** 1467193028; Password: **RVAAP-03**Meeting (phone only 78227003). Details on how to attend the meeting can be found at: www.rvaap.org.

At 6:15 p.m., the Army National Guard will briefly describe the site assessment, present the recommendation for the site, and then request verbal comments from the public. Written comments regarding the recommendations may be submitted to the Army National Guard during the 30-day comment period from January 1, 2021 to January 31, 2021. All written comments should be addressed to CJAG Environmental Office; 1438 State Route 534 SW, Newton Falls, Ohio, 44444 or sent via email to kathryn.s.tait.nfg@mail.mil.

The Proposed Plan and earlier remedial investigation reports are available for public review at the RVAAP Restoration Program Information Repository at the Reed Memorial Library (167 East Main Street, Ravenna) and the Newton Falls Public Library (204 South Canal Street, Newton Falls). The reports are also available online at www.rvaap.org.

The final remedy for the site will be selected based, in part, on public comments. In coordination with the Ohio Environmental Protection Agency, the Army National Guard will select a final remedy after reviewing and considering all public comments received during the 30-day public comment period. The Army National Guard encourages the public to review and comment on the recommendation presented in this document.For more information or to participate in the review, please visit the RVAAP Restoration website (www.rvaap.org) or call Katie Tait at 614-336-6136.
RC 12689871 12/27/20, 1/3/21

Attachment 3. Affidavit from Warren Tribune Newspaper

PUBLIC NOTICE
Camp James A. Garfield Joint Military Training Center
Environmental Office
1438 State Route 534 SW
Newton Falls, Ohio 44444
614-336-6136

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#362-2T-Dec. 27, 2020 & Jan. 3, 2021 #5648

PROOF OF PUBLICATION

STATE OF OHIO
TRUMBULL COUNTY SS: CONNIE PACEK

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✓ THE TRIBUNE CHRONICLE
✓ THE VINDICATOR

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THE 27th DAY OF DEC. 2020

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Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

April 16, 2021

Transmitted Electronically

Kevin M. Sedlak
Army National Guard
Installations & Environment Cleanup
Branch IPA Designation
1438 State Route 534 SW
Newton Falls, OH 44444

Re: **US Army Ravenna Ammunition Plt RVAAP**
Remediation Response
Correspondence
Remedial Response
Portage County
267000859187

Subject: **Review of Draft Record of Decision for RVAAP-03 Open Demolition Area #1, After Action Report**

Dear Mr. Sedlak:

The Ohio Environmental Protection Agency (Ohio EPA) Northeast District Office (NEDO) Division of Environmental Response and Revitalization (DERR) has reviewed the Draft Record of Decision for RVAAP-03 Open Demolition Area #1 dated April 1, 2021. The document was prepared by Parsons.

Ohio EPA has no comments. Please submit the document in final form.

As a precautionary response to COVID-19, Ohio EPA is currently operating with most staff working remotely. During this time, we will not be issuing hard-copy mail. This letter is an official response from Ohio EPA that will be maintained as a public record.

If you have any questions or concerns, please do not hesitate to contact me at (330) 963-1170 or ed.damato@epa.ohio.gov.

Sincerely,
Edward J D'Amato
Edward D'Amato
Site Coordinator
Division of Environmental Response and Revitalization

ED/cs

ec: Nat Peters, USACE
Katie Tait, OHARNG RTLS
Steve Kvaal, USACE
Rebecca Shreffler, Chenega
Mark Leeper, ARNG
Natalie Oryshkewych, Ohio EPA, NEDO DERR
Megan Oravec, Ohio EPA, NEDO DERR
Bob Princic, Ohio EPA, NEDO DERR
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