Ravenna Army Ammunition Plant Restoration Program

Public Notification and Public Meeting Summary Packet
for:

Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-43 Load Line 10
(final version dated August 18, 2016)

Proposed Plan for Soil, Sediment, and Surface Water at CC RVAAP-68
Electric Substations (East, West, No. 3)
(final version dated September 30, 2016)

Proposed Plan for Soil, Sediment, and Surface Water for RVAAP-51 Dump Along Paris-Windham Road
(final version dated September 29, 2016)

Public Comment Period: November 14, 2016 to December 14, 2016
Public Meeting: November 29, 2016

Contract No. W912QR-15-C-0046

Prepared for:

US Army Corps of Engineers®

U.S. Army Corps of Engineers
Louisville District

Prepared by:

leidos

Leidos
8866 Commons Boulevard, Suite 201
Twinsburg, Ohio 44087

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PUBLIC NOTIFICATION

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Public Notice

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News Release

For Immediate Release
Contact: Camp Ravenna
Environmental Office

Camp Ravenna Joint Military Training Center
Camp Ravenna Environmental Office — 1438 State Route 534 SW — Newton Falls, OH 44444
614-336-6136.

Public meeting to be held Tuesday November 29, 2016 for Army National Guard Release of Proposed Plans for Soil, Sediment, and Surface Water at Load Line 10, Electric Substations (East, West, and No. 3), and Dump Along Paris-Windham Road

Ravenna – The Army National Guard, in consultation with the Ohio Environmental Protection Agency, submits for public review and comment three proposed plans for soil, sediment, and surface water associated with former national defense program activities at the former Ravenna Army Ammunition Plant (RVAAP) in Portage and Trumbull counties, Ohio.

On Tuesday November 29, 2016, a public meeting will be held at the Shearer Community Center (Paris Township Hall) at 9355 Newton Falls Road, Ravenna, Ohio 44266 beginning at 6:00 p.m., with an informal open house when technical staff will be available to answer questions. At 6:30 p.m. the Army National Guard will briefly describe the areas of concern (AOCs) assessment, present the recommendations, and then request verbal comments from the public. Written comments regarding this recommendation may be submitted to the Army National Guard during the 30-day comment period from November 14, 2016 to December 14, 2016. All written comments should be addressed to Camp Ravenna Environmental Office; 1438 State Route 534 SW, Newton Falls, OH 44444.

The Load Line 10, Electric Substations (East, West, and No. 3), and Dump along Paris-Windham Road AOCs are at the former RVAAP in Ravenna, Ohio. These AOCs are being addressed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The proposed plans present the current status and information regarding the AOCs. The proposed plans detail the recommendation for no further action at Load Line 10 and Electric Substations and provide the rationale for these recommendations. The proposed plan for the Dump along Paris-Windham Road presents the preferred alternative (Land Use Controls) considered protective of human health and the environment.

In accordance with CERCLA, the preferred alternatives presented in the proposed plans are also presented in earlier remedial investigation (RI), site characterization (SC), feasibility study (FS) reports, as applicable. All reports are now available for public review at the RVAAP Information Repository at the Reed Memorial Library (167 East Main Street, Ravenna) and the Newton Falls Public Library (204 South Canal Street, Newton Falls). Copies of the reports are also available online at www.rvaap.org.

The final remedy for each AOC will be selected based, in part, on public comments. In coordination with Ohio Environmental Protection Agency, the Army National Guard will select a final remedy after reviewing and considering all public comments submitted during the 30-day public comment period from November 14, 2016 to December 14, 2016. 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 website (www.rvaap.org) or call Katie Tait at 614-336-6136.

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Affidavits

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Notice of Document Availability

Proposed Plans for Load Line 10, Electric Substations (East, West, and No. 3), and Dump Along Paris-Windham Road, Ravenna Army Ammunition Plant (RVAAP)

The Proposed Plans for Load Line 10 and Electric Substations present the recommendations for no further action and provide the rationale for these recommendations. The Proposed Plan for the Dump Along Paris-Windham Road presents the preferred alternative (Land Use Controls) considered protective of human health and the environment.

Copies of the Proposed Plans are available at:

Newton Falls Public Library Reed
204 South Canal Street
Newton Falls,Ohio
44444
Reed Memorial Library
167 East Main Street
Ravenna, Ohio
442666

These documents are also posted at:
www.rvaap.org

Please join us for an OPEN HOUSE and PUBLIC MEETING.

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Tuesday
November 29,2016
6:00 pm Open House
6:30 pm Public Meeting
at:
Shearer Community Center (Paris Township Hall)
9355 Newton Falls Road Ravenna, OH 44266

For more information or if you need special accommodations to attend, please contact Becky Shreffler at 330-872-8010.
NOV 14

THE STATE OF OHIO, SUMMIT COUNTY, ss. } I, Ann Hartman clerk of THE BEACON JOURNAL PUBLISHING COMPANY, publishers of THE AKRON BEACON JOURNAL, on oath, say that the notice above referenced has been published ONE TIME on the 14th day of NOV, 2016, OR once a week for ____ consecutive WEEKS on the same day of each week, OR _____ TIMES, commencing on the _____ day of _____, 20__ in said paper printed and published in the City of Akron, County of Summit, State of Ohio, and of general circulation therein, That said newspaper had a bona-fide circulation of more then twenty-five thousand (25,000) at the time of the advertisment was published, and that the price charged in the attached bill for same does not exceed the rates charged for like amount of space to other advertisers who advertise in its display advertising columns.

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Notary Public, Summit County, Ohio

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Elizabeth McDaniel

Elizabeth McDaniel
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Notice of Document Availability

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Newton Falls Public Library	Reed Memorial Library
204 South Canal Street	167 East Main Street
Newton Falls, Ohio 44444	Ravenna, Ohio 44266

These documents are also posted at: www.rvaap.org

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6:00 pm Open House	9355 Newton Falls Road.
6:30 pm Public Meeting	Ravenna, OH 44266

For more information or if you need special accommodations to attend, please contact Becky Shreffler at 330-872-8010.

RLS/V001

THE STATE OF OHIO }
Mahoning County

Proof of Publication

Personally appeared before the undersigned authority, Julia Richardson of THE VINDICATOR PRINTING COMPANY, publishers of THE VINDICATOR, a newspaper printed and of general circulation in Mahoning, Trumbull and Columbiana Counties in Ohio and Lawrence and Mercer Counties in Pennsylvania, and being duly sworn, on h.. oath deposes and says that the notice hereto attached was published 1 times and that insertions were as follows:

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Kelley I. Kurtz

KELLEY I. KURTZ
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STATE OF OHIO
My Comm. Expires June 4, 2017

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NIKOS FRAZIER | THE VINDICATOR

Ella Bevan of Austintown watches as Mahoning County Sheriff's Deputy Matt Ruse ladles some spaghetti onto her plate during a spaghetti dinner fundraiser for Mahoning County Deputy Sheriff Lenny Burke on Sunday at Western Reserve United Methodist Church in Canfield Township. Burke is battling stage-4 non-small cell cancer in his lungs and abdomen.

SPAGHETTI

Continued from A3

cancer in my family. This diagnosis came out of the blue," he said.

Since then, he has undergone chemotherapy at the Cleveland Clinic and Johns Hopkins Hospital in Baltimore, and is now participating in a clinical trial at The Ohio State University Medical Center to develop a drug for immunotherapy which helps the body learn to that its own cancer but doesn't cause the immune system to over-react.

"It takes a toll on the body and it is hard on the family. I've been going through this all year with my wife, Marta," who is also a Mahoning County sheriff's deputy.

The Burkes have three children: Lenny Jr. of Struthers, and Austin and Bria, both at home, and a grandchild, Mason Burke. His mother, Cherrill Stankorb and brother, Larry Stankorb, both of Struthers; a brother, Anthony Slocum of Columbus, and a sister, Nadine Stankorb of Hamilton.

"I've never been alone through all of this. My family and the Lodge 141 brotherhood have helped me through the ups and downs. The letters and cards have made a big difference," Burke said.

Burke, 47, grew up on Youngstown's West Side, lived in Struthers for 20 years and has lived in Beaver Township for two years.

"We bought our dream home out there. It's beautiful. If I'm one of the lucky ones, maybe I'll beat this thing," he said.

People who want to donate to the Burkes can do so by mailing a check or money order, with Lenny Burke on the memo line, to Fraternal Order of Police Lodge 141, 110 Fifth Ave., attention FOP, Youngstown, OH 44503.

Prosecutors ask agencies to recreate shooting scenes

Associated Press

COLUMBUS A prosecutor has asked two outside criminal investigation agencies to recreate the scene in which two plainclothes officers fatally shot a man they say opened fire on them.

Columbus police say Henry Green, who was black, ignored commands to drop his gun during the June 6 shooting.

Green's family and a friend walking with him say police didn't identify themselves when they began yelling at Green.

Earlier this week, the state Bureau of Criminal Investigation created a 3-D scan of the scene where Green was shot, Franklin County Prosecutor Ron O'Brien said.

O'Brien says he also asked the state Ohio Organized Crime Investigating Commission to use the scan to recreate the scene in 3-D animation.

The decision was made after reviewing the case and consulting with Columbus police, who are investigating the shooting, O'Brien said.

The organized crime commission "has employees that enhance photographic or video evidence and in particular a forensic audio-video graphics expert that analyzes crime scene information and 3-D scans of crime scenes to recreate them," O'Brien said in a letter sent to attorneys representing Green's family.

The analysis is a welcome step that will help the investigation but shouldn't be confused with an independent inquiry, said Green family attorney Sean Walton.

"It doesn't change the fact that the crux of what will be presented to a grand jury is an investigation led for the past four or five months by the Columbus police department," he said.

The officers were members of Mayor Andrew Ginther's Community Safety Initiative, a $750,000 summer program meant to reduce violence, take illegal guns of the streets and build trust between residents and police.

Police critics want changes to the program, while the police department says statistics show it makes Columbus safer.

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TRUMBULL COUNTY SS PAMELA EAZOR

BEING DULY SWORN, UPON OATH STATES THAT SHE IS AN AUTHORIZED REPRESENTATIVE OF THE TRIBUNE CHRONICLE, (A DIVISION OF EASTERN OHIO NEWSPAPERS INC) A DAILY NEWSPAPER PRINTED IN THE CITY OF WARREN, COUNTY OF TRUMBULL, STATE OF OHIO AND OF GENERAL CIRCULATION IN THE CITY OF WARREN, TRUMBULL COUNTY, OHIO AND IS INDEPENDENT IN POLITICS.

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Pamela Eazor

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PUBLIC MEETING

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Sign-in Sheet

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US Army Corps of Engineers
Louisville District

SIGN-IN SHEET

Camp Ravenna Public Meeting – Proposed Plans for Load Line 10, Electric Substations (East, West, and No. 3), and Dump Along Paris-Windham Road, Ravenna Army Ammunition Plant (RVAAP)

PLEASE PRINT

LOCATION: Shearer Community Center; Ravenna, OH **DATE: November 29, 2016** **TIME: 6:30 p.m.**

Name	Address/City/State/Zip	Phone	Email
Jud Thomas	[redacted]		
Sharon Robers			
Amanda Sprinzl			
George Tompkins			
Greg Moon			
Craig Coombs			
Angela Schmidt			
Ed D'Amato			
VICKI DEPPISCH			

CAMP RAVENNA PUBLIC MEETING SIGN-IN SHEET

Proposed Plans for Load Line 10, Electric Substations (East, West, and No. 3), and Dump Along Paris-Windham Road, Ravenna Army Ammunition Plant (RVAAP)			
PLEASE PRINT			
LOCATION: Shearer Community Center; Ravenna, OH	**DATE: November 29, 2016**	**TIME: 6:30 p.m.**	
Name	**Address/City/State/Zip**	**Phone**	**Email**
Megan Oravec	[redacted]		
Kevin Palombo			
Anita Stone			
Mike Stone			
Nathaniel Peters			
Katie Tait			
Mark Leeper			
Matthew Merchant			
HEATHER ADAMS			

CAMP RAVENNA PUBLIC MEETING SIGN-IN SHEET

Proposed Plans for Load Line 10, Electric Substations (East, West, and No. 3), and Dump Along Paris-Windham Road, Ravenna Army Ammunition Plant (RVAAP)			
PLEASE PRINT			
LOCATION: Shearer Community Center; Ravenna, OH	**DATE: November 29, 2016**	**TIME: 6:30 p.m.**	
Name	**Address/City/State/Zip**	**Phone**	**Email**
Bob Princic	[redacted]		
Rick Wargo			
Kevin Sedlak			

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Presentation

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Proposed Plans for Soil, Sediment, and Surface Water at

Load Line 10, **Electric Substations (East, West, and No. 3)**, and Dump Along Paris-Windham Road

Former Ravenna Army Ammunition Plant
Ravenna, Ohio

Presented by:
Heather Adams, P.G. - Leidos

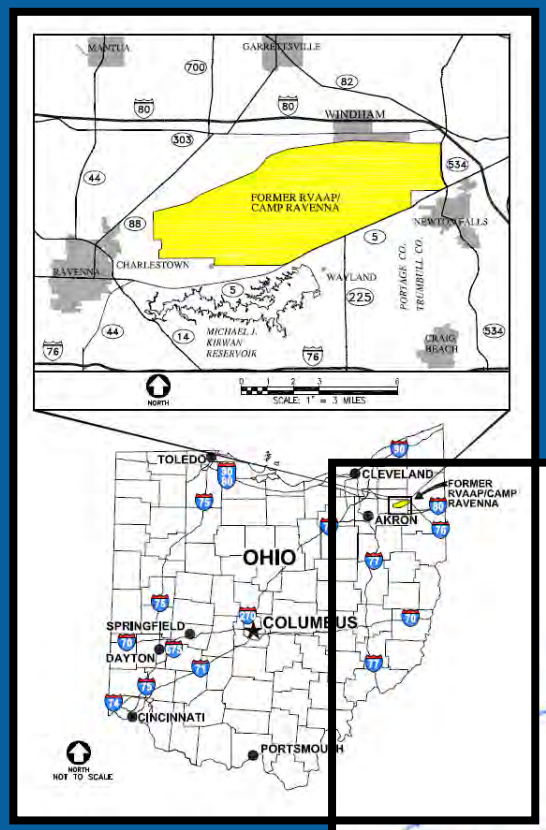
November 29, 2016

Welcome!

Presentation Agenda

- Three Areas of Concern –
  - Load Line 10
  - Electric Substations (East, West, and No. 3) (ESS)
  - Dump Along Paris-Windham Road (PWD)
- Site Features
- Historical Operations
- Remedial Investigations
- Preferred Alternatives
- Public Participation
- Questions

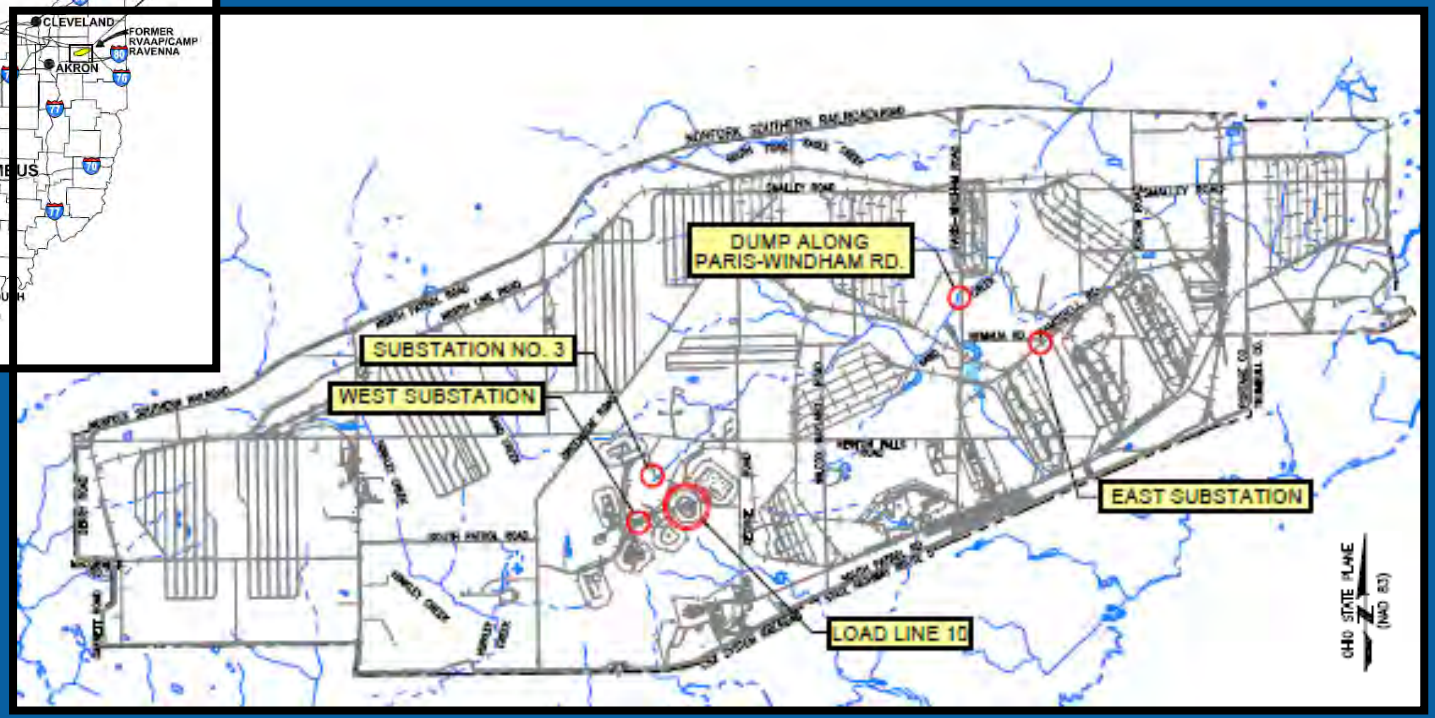
Areas of Concern Location



Load Line 10 AOC is RVAAP-43

Electric Substations (East, West, and No. 3) AOC is RVAAP-68

Dump Along Paris-Windham Road AOC is RVAAP-51



Load Line 10
Site Features

- Approximately 36 acres
- All buildings, including slabs and foundations, were removed in 2007
- Access road and perimeter fence currently exist
- Overgrown with trees and shrubs
- No perennial surface water on site

Load Line 10
Historical Operations

- 1941–1945, produced 226,387,306 M36 percussion elements used during World War II.
- 1951–1957, produced 49,286,628 percussion elements and 135,262,465 primers.
- 1969–1971, unknown quantities of primers were produced.
- Load Line 10 was deactivated permanently in 1971, and production equipment was removed.
- No historical data or information exists to indicate Load Line 10 was used for any process other than percussion element/primer manufacturing.
- No fuel storage tanks or fuel materials were present, and no burning was conducted.

Load Line 10
Previous Investigations

- Installation Assessment (USATHAMA 1978);
- RCRA Facility Assessment (Jacobs 1989);
- Preliminary Assessment (USACE 1996);
- Relative Risk Site Evaluation (USACHPPM 1998);
- Lead Azide Screening (MKM 2007);
- 2004 Characterization of 14 AOCs (MKM 2007);
- 2007 Investigation of Under Slab Surface Soils (USACE 2009); and
- 2008 Performance-based Acquisition RI, as summarized in the *RI for Soil, Sediment, and Surface Water at the RVAAP 43 Load Line 10* (USACE 2015).

Load Line 10
Remedial Investigations

- 2004 Characterization of 14 Areas of Concern
  - Collected 37 surface soil samples using incremental sampling method (ISM) around former production buildings and from ditches targeting areas were contamination was expected.
  - Excavated 4 test trenches to 12-14 ft bgs.
  - Collected 19 water and 6 sediment samples from sumps, sanitary sewers, and basements.
  - Installed 6 monitoring wells.
  - Conducted geotechnical evaluations and slug tests.
  - Performed initial assessment of nature and extent of contamination.
  - Conducted initial human health and ecological risk screening.

  Conclusions:

  - Recommended full risk assessments be performed to assist in overall management decision for the AOC.

Load Line 10
Remedial Investigations (continued)

- 2007 Investigation of Under Slab Surface Soil
  - Performed investigation after the buildings and structures were demolished and removed to identify remaining contaminants.
  - Collected 12 ISM surface soil samples from the footprints of 21 former production buildings.
  - Collected surface soil and subsurface soil samples.

  Conclusions:
  - Identified potentially contaminated surface soil:
    - Building PE-15 footprint [benz(a)anthracene, benzo(b)fluoranthene, and benzo(a)pyrene];
    - Building PE-19 footprint [benz(a)anthracene and benzo(b)fluoranthene]; and
    - Building PE-22 footprint [benzo(b)fluoranthene].
  - Recommended additional evaluation of semi-volatile organic compounds (SVOCs)

Load Line 10
Remedial Investigations (continued)

- 2010 PBA08 Remedial Investigation
  - Collected additional samples to supplement findings of previous investigations.
    - **Source Area Sampling Rationale-** Collected 3 ISM samples to determine extent of initial screening criteria exceedances and 3 discrete samples to evaluate total chromium characteristics.
    - **Large ISM Sampling Rationale-** Collected 11 large grid ISM samples to completely characterize the AOC.
    - **Subsurface Sampling Rationale-** Collected 21 subsurface soil samples from areas where surface soil exceeded initial screening criteria or from areas not previously sampled.
  - Confirmed the lack of perennial surface water within the AOC.
  - Collected 2 co-located sediment and surface water samples downgradient of Load Line 10 to assess potential contaminant migration.

Load Line 10
Remedial Investigations (continued)

- In summary, multiple evaluations or investigations were performed to assess Load Line 10. The total number of samples collected include:
  - 119 surface soil samples,
  - 21 subsurface soil samples,
  - 2 sediment samples,
  - 2 surface water samples,
  - 85 groundwater samples, and
  - Other: 21 sewer/sump water, 6 sump/sewer sediment.
- The following chemical groups were looked for during the investigation:
  - Metals, explosives, propellants, SVOCs, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and pesticides.

Load Line 10
Remedial Investigations Conclusions

- Nature and extent of contamination is defined - no further sampling is required to characterize soil at Load Line 10.
- No further action is required to protect human health.
  - The HHRA did not identify chemicals of concern (COCs) from previous Army activities requiring remediation under CERCLA to be protective of the Resident Receptor.
- No further action is required to protect ecological resources.
  - The ERA did not identify important or significant ecological places or resources.
- No further action for soil is required to protect groundwater.
  - The fate and transport assessment determined chemicals in soil are not impacting groundwater.
  - Groundwater will continue to be evaluated under the Facility-wide Groundwater Monitoring Program.

The Army, in coordination with Ohio EPA, is recommending no further action to attain Unrestricted (Residential) Land Use for soil, sediment, and surface water at Load Line 10.

Electric Substations (East, West, and No. 3)

The three Electrical Substations designated as CC RVAAP-68 were in use from the 1940s through 1993:

- East Substation- Serviced facilities on the eastern side of the facility, including Load Lines 1-4 and 12.
- West Substation- Serviced Fuze and Booster Hill area, including Load Lines 5-11, the Administration Area, and George Road Area.
- Substation No. 3- Serviced western portion of the facility, including the Depot Area.

Electric Substations (East, West, and No. 3)

Background

- Electricity for the facility was purchased from the Ohio Edison Company and was supplied from Newton Falls and Garrettsville, Ohio.
- Distribution of electricity occurred through the substations, each at approximately 24,000 volts.
- Documented use of hazardous and regulated materials, including petroleum products (fuels and oils), polychlorinated biphenyls (PCBs), and lead acid batteries.
- Annual PCB inventory inspections and reporting were conducted on a facility-wide basis to document quantities of PCB oil located throughout the facility. The annual PCB inventory reports listed all PCB-containing items, including transformers, capacitors, contaminated soil from releases, and hydraulic equipment containing contaminated oil.
- Transformers and other oil-containing equipment typically contained PCBs prior to the 1990s when transformer oil was replaced with non-PCB oil. According to the annual PCB inventory reports, samples collected from oil-containing equipment did not contain PCBs greater than 50 parts per million (ppm).

Electric Substations (East, West, and No. 3)

East Substation

- 1,170 ft^2 brick Switch House (Building 25-27) constructed of a 6-inch-thick concrete floor.
- Lead acid batteries storage and transformers were located on adjacent gravel pad.
- Transformers were drained and moved to Building 854 in 1993.
- No wetlands, creeks, streams, or other water bodies are within the East Substation.
- No documented release.

Electric Substations (East, West, and No. 3)

West Substation

- 964 ft^2 brick Switch House (Building 28-28) is currently being used by OHARNG.
- The area around the outside the building was evaluated in the RI.
- In 1997, approximately 1,500 gallons of transformer oil was spilled during salvage operations. The Army removed 449 tons of contaminated soil and confirmed the area to be clean.
- No wetlands, creeks, or streams are within the West Substation. However, a small ditch with intermittent surface water runs parallel to the southwest side of the building.

Electric Substations (East, West, and No. 3)

Substation No. 3

- No buildings currently exist; however, concrete foundations used to support transformers remain onsite.
- Equipment was stored outside within a 10,000 ft ^{2} fenced area.
- No documented release.
- No wetlands, creeks, streams, or other water bodies are within the Substation No. 3 area. A wetland and an unnamed tributary to Sand Creek receive runoff just beyond the southeast site boundary.

Electric Substations (East, West, and No. 3)
2010 Phase I Remedial Investigation

- 2010 Historical Records Review Phase I RI (SAIC 2011)
  - Recommended further investigation at each of the substations based on:
    - The use of petroleum products (fuels and oils), PCBs, and lead acid batteries;
    - Documented release at the West Substation; and
    - Suspected undocumented release.
  - Target chemicals for further investigation were identified as:
    - TAL metals, PCBs, and SVOCs

Electric Substations (East, West, and No. 3)
2012/2013 Remedial Investigation

- Provided a full evaluation of nature and extent of contamination.
  - Collected surface and subsurface soil using ISM and discrete sampling techniques at each substation.
  - Sediment and surface water samples were collected from the downgradient wetland at Substation No. 3.
  - All samples collected for metals, SVOCs, and PCBs. In addition, RVAAP full-suite samples were collected.
- An HHRA was performed to identify COCs and provide a risk management evaluation to determine if remediation is required based on potential risks to human receptors.
- The ERA was conducted to evaluate the potential for chemicals to adversely affect ecological resources.
- The potential for soil and sediment contaminants to impact groundwater was evaluated in a fate and transport evaluation.

Electric Substations (East, West, and No. 3)

2012/2013 Remedial Investigation (continued)

- The summary below provides the total number of samples collected during the investigation of Electrical Substations (East, West, and No. 3):
  - 9 surface soil samples,
  - 41 subsurface soil samples,
  - 5 sediment samples, and
  - 5 surface water samples.
- The following chemical groups were looked for during the investigation:
  - Metals, explosives, propellants, SVOCs, VOCs, PCBs, and pesticides.

Electric Substations (East, West, and No. 3)

2012/2013 Remedial Investigation (continued)

Conclusions:

- Nature and extent of contamination is defined - no further sampling is required to characterize the Electrical Substations. (PCBs were not detected in soil at the three Electrical Substations.)
- No further action is required to protect human health.
  - The HHRA determined that total cancer risk and the total HQ are below the Ohio EPA and USEPA risk limits.
- No further action is required to protect ecological resources.
- No further action is required to be protective of groundwater.
  - The fate and transport assessment determined chemicals in soil and sediment are not impacting groundwater.
  - Groundwater will continue to be evaluated under the Facility-wide Groundwater Monitoring Program.

The Army, in coordination with Ohio EPA, is recommending no further action to attain Unrestricted (Residential) Land Use for soil, sediment, and surface water at the Electrical Substations (East, West and No.3).

Dump Along Paris-Windham Road

Site Features

- Steep embankment of buried debris on the west side of Paris-Windham Road
- Approximately 30 ft wide by 400 ft long and 0.25 acres in size.
- No perennial surface water.
- Surface water occurs only intermittently as storm water runoff in the drainage swale located at the base of the dump slope during and after rainfall events and periods of snow melt.

Dump Along Paris-Windham Road
Historical Operations

- Used as an open dump for a variety of miscellaneous construction and demolition material, including: asbestos-containing material (ACM) of transite roofing and siding, laboratory bottles and drums, concrete, brick, glass, scrap metal, fencing, and wood debris.
- There are no records indicating the quantities of material dumped at the AOC or the dates of operation.

Dump Along Paris-Windham Road
Previous Investigations and Actions

- Relative Risk Site Evaluation (USACHPPM 1998)
- 2003 Removal Action and Confirmation Sampling
- Site Characterization and Focused Feasibility Study (USACE 2015)

Dump Along Paris-Windham Road
Removal Action

- **2003 Decision Document for Removal Action**
  - Identified transite and debris in soil requiring removal.
  - Identified SVOCs as principle contaminants with potential impact to human health.
  - Identified cadmium, PCBs, and SVOCs as principle contaminants with potential impact to ecological resources.
  - Alternative 4 for implementing a removal action under a limited Remedial Design/Remedial Action (RD/RA) was selected.

Dump Along Paris-Windham Road
Removal Action (continued)

- Removal and off-site disposal of debris and visible transite was conducted in April 2003
- 300 tons of material and transite debris was removed and disposed.
- Test pits were excavated to ensure all subsurface transite was located.

- Excavated debris were loaded into trucks and roll-off boxes prior to removal and disposal.

Dump Along Paris-Windham Road
Removal Action (continued)

- Final excavated area at the southern portion of the site.

- Confirmation samples were collected
  - 10 soil ISM samples from within the dump limits.
  - Six sediment and surface water samples from within the neighboring flood plain.

Dump Along Paris-Windham Road
Limited Remedial Design/Remedial Action Results

- Confirmation sample results and findings
  - Asbestos and metal concentrations in soil were within acceptable limits.
  - Benzo(a)pyrene concentration in one of the 10 samples exceeded Region IX PRG level at the time.
  - A small amount of transite was discovered during confirmation sampling after a heavy rain event eroded the embankment and exposed additional debris.
- Path forward
  - RVAAP stakeholders and the Akron Regional Air Quality Management District agreed to discontinue excavation because further excavation may undermine and compromise the integrity of Paris-Windham Road
  - Cover the transite material during AOC restoration activities.
  - Perform an additional risk evaluation of PAHs (e.g., benzo(a)pyrene) in soil through Site Characterization/Focused Feasibility Study.

Dump Along Paris-Windham Road
Removal Action (continued)

- Clean hard fill and approved soil backfill stabilized excavated areas and Paris-Windham Road.

- Removal area was seeded with OHARNG-approved seed mixture.

Dump Along Paris-Windham Road
Final Site Characterization

- Provided a full evaluation of nature and extent of contamination for soil and surface water. This included information from the previous investigations and confirmation sampling, including:
  - 16 surface soil samples,
  - 8 sediment samples, and
  - 7 surface water samples.

Conclusions:

- No further sampling is required to characterize soil, as nature and extent of contamination was defined.
- Human health risk assessment identified two PAHs, benzo(a)pyrene and dibenzo(a,h)anthracene, as COCs in soil for the Resident Receptor. No COCs in surface water.
- Ecological risk assessment concluded that no further action is required to protect ecological resources.

Dump Along Paris-Windham Road
Focused Feasibility Study

- The proposed remedies address soil contamination.
- Remedies are not needed for sediment and surface water since they do not pose a risk to human health or the environment.
- Groundwater will continue to be evaluated under the Facility-wide Groundwater Monitoring Program.

The Remedial Action Objective for the Dump Along Paris-Windham Road: Prevent exposure of the Resident Receptor to shallow surface soil (0–1 ft bgs) with COC levels exceeding the target risk of 1E-05 and a hazard index of 1.

- General response actions were considered for remediating contaminated soil :
  - Alternative 1- No Action (required by CERCLA)
  - Alternative 2- Land Use Controls
- The alternatives were evaluated with respect to nine comparative analysis criteria, as outlined by CERCLA.

Dump Along Paris-Windham Road
Preferred Alternative

Alternative 2: Land Use Controls

- Utilizes LUCs including posting signs to prevent exposure of the Resident Receptor to COCs in shallow surface soil.
- Prevent exposure to residual asbestos. Disturbance and potential exposure to residual ACM must also be controlled.
- O&M Plan- annual inspections in which the integrity of the soil cover and clean hard fill will be inspected for signs of erosion and disturbance.
- Continued Surveillance through five-year reviews.
- Estimated Cost = $103,300.

Public Participation
Your Comments and Inputs are Appreciated!

- Public participation is an important component of remedy selection.
- The U.S. Army is soliciting input from the community as part of its public participation responsibilities under Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).
- Written comments will be accepted until December 14, 2016.

Questions?

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Court Reporter Transcript

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PROPOSED PLANS

FOR SOIL, SEDIMENT AND SURFACE WATER

AT LOAD LINE 10, ELECTRIC SUBSTATIONS

(EAST, WEST AND NO. 3)

AND

DUMP ALONG PARIS-WINDHAM ROAD

FORMER RAVENNA ARMY AMMUNITION PLANT

RAVENNA, OHIO

Presented by:

Heather Adams, P.G. - Leidos

PUBLIC MEETING

Tuesday

November 29, 2016

Paris Township Hall

9355 Newton Falls Road

Ravenna, Ohio 44266

- - -

APPEARANCES:

Barbara Tittle, Facilitator

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ALSO PRESENT:

Ed D'Amato, Ohio EPA
Vicki Deppisch, Ohio EPA
Kevin Palombo, Ohio EPA
Nathaniel Peters, II, USACE
Sharon Robers, Leidos
Amanda M. Sprinzl, Leidos

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MS. TITTLE: Good evening, everyone. Welcome tonight. We are glad to have all of you here at this evening's public meeting, and this meeting will present the Army's proposed plans for soil, sediment and surface water at these sites within the former Ravenna Army Ammunition Plant: Load Line 10, the Electrical Substations and the dump along Paris-Windham Road.

My name is Barb Tittle. I am from Kent. I am here tonight to serve as the meeting facilitator. I am not associated with anyone. I am just a public citizen like you.

This public meeting serves as one of several opportunities for public comment on the Army's proposed plans. I am responsible for assuring that everyone who wishes to comment or ask questions about the proposed plans has an opportunity to do so.

Comments received from the public on these proposed plans will be considered when determining the final remedy that will be documented in a Record of Decision. The Record of Decision will include a responsiveness summary addressing the public comments.

Before we get started, of course we have to go through the basics. The exits are on either side of the room. The bathroom is back where you came in. And water fountains are off the lobby where you entered, also. And obviously help yourself to the refreshments.

Tonight we have Nat Peters representing the Army, and three people representing the EPA -- the Ohio EPA on the three different sites. For Load Line 10, we have Vicki Deppisch. For the Electrical Substations, Ed D'Amato. And for the Paris-Windham Road Dump, we have Kevin Palombo.

Before we start, the Ohio EPA would like to make an opening remark, so I will turn that over to whoever wishes to do so.

MR. PALOMBO: Okay. Well, we as representatives of Ohio EPA reviewed the proposed plans for these three different sites. And we concur with the recommendations and the findings, and we approve them to go forward with the next steps.

MS. TITTLE: Okay. Thank you. So our presenter tonight will be Heather Adams. She is a professional geologist from Leidos, which is a contractor for the Army. Heather will

present information regarding the three areas of concern and the Army's proposed plans for these three sites.

And we do have a court reporter on hand to record the proceedings for tonight. So we will go from there, and I will leave you with Heather.

MS. ADAMS: Thanks, Barb.

Welcome, everyone. It is nice to see a good turnout this evening. As Barb mentioned, we are going to be discussing three areas of concern at the former Army Ammunition Plant. Load Line 10 is our first AOC. The second AOC is the Electrical Substations, which is made up of three separate sites: The East, West and the Number 3 Substation. And finally I will discuss the dump along Paris-Windham Road.

For each of the sites, I will start off by giving a brief description of the site features and historical operations. And then I will summarize the remedial investigations that have been completed for each of the sites. And then I will present the preferred alternative that we are recommending. And then we will go over the public's participation in this process, and then

open up the discussion for questions on all three of the AOCs at the end.

In case anyone is not aware, which I doubt that out of this room, the Ravenna Army Ammunition Plant is located in Northeastern Ohio here. The AOCs that we are going to discuss this evening are Load Line 10, the Substation Number 3 and the West Substation are located in the southwestern portion of the facility. And the dump along Paris-Windham Road and the East Substation is located along the eastern/central portion of the AOC.

The first AOC we are going to discuss is Load Line 10. By far, this is the largest AOC of the three this evening that we will present. It is approximately 36 acres in size. There are no buildings remaining at the AOC. All slabs and foundations and buildings were removed in 2007.

What remains at the AOC is a perimeter road and a perimeter fence. In general, the AOC is overgrown with small trees and lots of shrubs. There are no perennial surface water features within the AOC. However, during times of significant precipitation or snow melt, surface water has been known to accumulate in low-lying

areas.

The operational history of Load Line 10 is rather significant. It began in 1941 where percussion elements were produced to support World War II. After that, in 1945 through 1951, the AOC was not used. It was used again for six years, until 1957, where additional percussion elements and primers were produced. The AOC was on hiatus again between 1957 and 1969, where it then began ramp-up again for two short years where unknown quantities of primers were produced.

In 1971, Load Line 10 was ultimately deactivated and permanently removed from production, and all equipment was removed from the AOC. No historical data exists or information exists that indicates that Load Line 10 was ever used for any other process other than percussion elements and primer manufacturing.

With that, there are no records of fuel storage tanks, fuel materials were not present at the AOC, and there are no records of burning activities being conducted at Load Line 10.

As you can see from this slide, eight different investigations have included Load

Line 10. They began in 1978. That was the first investigation that included Load Line 10. The first five that you see here were more facility-wide based investigations. These investigations overall were evaluating various AOCs and determining that Load Line 10 was an AOC that would need additional investigation before closure could be achieved.

The three investigations, which you see highlighted in green, I am going to discuss in additional detail next. The first of those was the characterization of 14 AOCs that was completed in 2004. Load Line 10 was included as one of those 14 AOCs. After that investigation in 2007, the under slab surface soil investigation was completed, followed by the final remedial investigation that was performed under the PBA '08 Remedial Investigation.

The 2004 characterization of 14 AOCs collected 37 surface soil samples using Incremental Sampling Methodology. These samples were focused around former production buildings and ditches, which were the areas within the AOC that contamination was expected to be found.

In addition to these 37 samples, four

trenches were excavated from 12 to 14 feet below ground surface. They also collected 19 water and 6 sediment samples from the various sumps, sanitary sewers and basements of the existing buildings.

They installed six monitoring wells. They conducted geotechnical evaluations and slug tests to get hydrogeological parameters for the investigation. They also performed an initial assessment of nature and extent of contamination. And they conducted an initial human health and ecological risk screening evaluation.

The conclusions of this characterization report were their recommendation of a full risk assessment to be performed at the AOC.

After the 2004 characterization investigation was completed, all of the buildings, slabs and foundations were removed at Load Line 10. Following the removal activities, an investigation was completed in 2007. This investigation evaluated the soil that was located underneath the structures that had been removed.

During this investigation, the Army collected 12 ISM surface soil samples that were from the 21 former building -- production

building foundations. They also collected surface soil and subsurface soil samples.

The conclusion of this investigation was that potential PE contamination was found in surface soil at three of the former production buildings: PE-15, PE-19 and PE-22 were the three buildings. This report recommended additional evaluation of SVOCs.

This led the Army to the final remedial investigation, which was completed in 2010. This investigation collected additional samples to supplement the findings of the previous investigations.

There were three main goals for this 2010 remedial investigation. One was to collect samples to further investigate those three areas where we had initial screening criteria exceedances from the previous documents. We also collected three samples to evaluate total chromium characteristics.

The second goal was to collect 11 large grid ISM samples to ensure complete characterization of the AOC.

Finally, the subsurface soil was evaluated by collecting 21 subsurface soil samples from

areas where surface soil exceedances have been identified and from areas where previous samples were not collected.

The next goal of the 2010 RI was to confirm the lack of perennial surface water within the AOC. As I mentioned earlier, there was documentation of surface water at the AOC. But we determined that to just be intermittent based on surface -- I am sorry -- based on precipitation events.

With that conclusion, we had to collect two co-located sediment and surface water samples that were outside of Load Line 10 to assess potential contaminant migration.

In summary, all of the investigations pulled together collected 119 surface soil samples, 21 subsurface soil samples, 12 -- or, I am sorry, 2 sediment and 2 surface water samples from off-site location, 85 groundwater samples and then 21 sewer and sump water samples and 6 sump and sewer sediment samples.

Each of these investigations were looking for the following chemical groups: Metals -- thanks, Mark. Metals, explosives, propellants, SVOCs, VOCs, PCBs and pesticides.

The conclusion of the Remedial Investigation, which took into consideration all three of the investigations and studies that I just summarized, were that nature and extent of contamination is defined for Load Line 10. And no additional sampling is required to characterize the AOC.

Additionally, no further action is required to protect human health. The Human Health Risk Assessment did not identify chemicals of concern from previous Army activities requiring remediation under CERCLA to be protective of the Resident Receptor.

Also, no further action is required to protect ecological resources. The Ecological Risk Assessment did not identify important or significant ecological places or resources within Load Line 10.

Finally, no further action is required for soil to be protective of groundwater. Two reasons for this. The first is that the fate and transport assessment determined that chemicals in soils are not impacting groundwater. And, finally, groundwater will continue to be evaluated by the Facility-wide Groundwater

Monitoring Program.

The conclusions of this RI are that the Army, in coordination with the Ohio EPA, is recommending no further action to attain Unrestricted Residential Land Use for soil, sediment and surface water at Load Line 10.

The second AOC that I am going to discuss is the Electric Substations. These are three separate electrical substations that were in operation from the 1940's through 1993. The East Substation serviced the eastern portion of the facility, Load Lines 1 through 4 and 12.

The West Substation serviced the western portion of the facility, Fuze and Booster Hill area, including the Administration Area down here, and the George Road area.

Finally, the Substation Number 3 serviced the Depot Area and the other western portion of the facility.

The electricity for the facility was purchased from Ohio Edison Company and was supplied from Newton Falls and Garrettsville, Ohio. In total, 24,000 volts of electricity were distributed throughout the substations.

Documented use of the hazardous and

regulated materials, including petroleum products such as fuels and oils, PCBs from the transformers and lead acid batteries were documented for each of the three substations.

The facility completes an annual PCB inventory inspection and reports at the facility -- I am sorry about that -- which documents the quantities of PCB oil located throughout the facility. This annual PCB inventory report lists all PCB-containing items within the facility, including transformers, capacitors, any contaminated soil from a release and any hydraulic equipment containing contaminated oil.

From these reports, the transformers and oil-containing equipment typically contained PCBs prior to the 1990s. In the 1990s, the transformer oil was replaced to a non-PCB oil. According to the annual PCB inventory reports, samples collected from the oil-containing equipment did not contain PCBs greater than the action level of 50 parts per million within any of the transformers at the facility.

As I mentioned, there are three sites included in this AOC. The first one I am going

to discuss is the East Substation. This is an extremely small AOC compared to the Load Line 10, which I just discussed. It consists of a brick Switch House that is labeled Building 25-27. And it was segmented into rooms. And one of the rooms had a very large lead acid battery storage area. And the transformers were actually stored outside of the building here in this gravel area where you can still see the transformer footers are still present.

All of the transformers were drained and removed and stored in Building 854 in 1993. There are no water bodies within the East Substation. And there are no documented releases at this substation.

The West Substation is pretty much the same as the Eastern Substation. It is a single building made of brick -- a Switch House, which is labeled as Building 28-28. The difference is that this building is currently used by the Ohio Army National Guard.

Therefore, the area around the outside of the building was evaluated in the RI as the building is still currently being used. This site did have a documented release in 1997.

Approximately 1,500 gallons of transformer oil was spilled during the salvage operations of the transformers.

The Army was very proactive and did a cleanup immediately of the spill. And during that operation, they removed 449 tons of contaminated soil and also collected samples to confirm that the area was clean.

This substation does not have any surface water within its boundaries. However, there is a small ditch with intermittent surface water that runs parallel to the southwest side of the building.

The third and final substation that I will present is Substation Number 3. No buildings currently exist at this substation. However, the concrete footers used to support the transformers still remain, which you can kind of see in some of these pictures.

The equipment was stored outside within an area that was approximately 10,000 square feet. And it was a fenced-in area. There are no documented releases for this substation. There are no wetlands or water bodies within the Substation Number 3. However, there is a wetland

and an unnamed tributary to Sand Creek that receives runoff just beyond the southeast side of the site, which you can see in this photograph.

So to address that runoff, the Army did collect surface water and sediment samples within this area during the investigation.

The first investigation for the Electrical Substations was completed in 2010. It was a Historical Records Review and a Phase I RI. The recommendations of this report were that further investigations at each of the substations were required. This was based on the use of the petroleum products, the fuels, the oils, the PCBs that were in the transformers and the lead acid batteries that were in Switch Houses.

Also, we do have the documented release at the West Substation that we wanted to confirm had been properly addressed. And we wanted to address some concerns of suspected undocumented releases.

The 2010 Phase I RI recommended a target chemical list of TAL metals, PCBs and SVOCs for further investigation.

That recommended RI was completed in 2012 and 2013. This Remedial Investigation provided a

full evaluation of the nature and extent of contamination. The Army collected surface and subsurface soil samples using both ISM and discrete sampling techniques.

Sediment and surface water samples were collected from the downgradient wetland at Substation 3, which I pointed out earlier. And all samples were collected for the target chemical list: metals, SVOCs and PCBs. In addition, the RVAAP full-suite analysis was performed on select samples.

The 2012/2013 Remedial Investigation also presented a human health risk assessment to identify COCs and provide a risk management evaluation to determine if remediation would be required based on potential risks to human health receptors.

The report also presented an ecological risk assessment to evaluate the potential for chemicals to adversely affect ecological resources.

Finally, the potential for soil and sediment contaminants to impact groundwater was evaluated in a fate and transport assessment.

In summary, 9 subsurface samples -- or, I am

sorry, 9 surface soil samples, 41 subsurface soil samples, 5 sediment samples and 5 surface water samples were collected at the three substations.

The following chemical groups that were looked for during this investigation: Metals, explosives, propellants, SVOCs, VOCs, PCBs and pesticides.

The conclusions of the 2012/2013 Remedial Investigation were that nature and extent of contamination had been defined and that no further sampling was required to characterize the Electrical Substations. So PCBs, which was the main chemical that most folks would be concerned with at the substation, was actually not detected in any of the soil samples that were collected at the three electrical substations.

In addition, no further action is required to protect human health. The Human Health Risk Assessment determined that the total cancer risk and the total hazard quotient were below the Ohio EPA and the USEPA risk limits.

Additionally, no further action was required to protect the ecological resources.

Similar to Load Line 10, no further action was required to protect groundwater. The fate

and transport assessment determined chemicals in the soil and sediment were not impacting groundwater, and groundwater will be further evaluated under the Facility-wide Groundwater Monitoring Program.

Based on the results of the 2012/2013 Remedial Investigation, the Army, in coordination with the Ohio EPA, is recommending no further action to attain Unrestricted Residential Land Use for soil, sediment and surface water at the Electrical Substations East, West and Number 3.

The final and last AOC that I would like to discuss is the Dump along Paris-Windham Road. This AOC is a steep embankment of buried debris on the west side of Paris-Windham Road. You can't quite see it in this photograph. You will be able to see it later in the presentation, but Paris-Windham Road is just right beyond this tree here.

This AOC, like the Electrical Substations, is extremely small. It is approximately a quarter of an acre in size. And it measures 30 feet wide by 40 feet long. There are no perennial surface water features within the AOC. However, surface water does occur intermittently

as storm water runoff in the drainage swale located at the base of the dump slope during and after rainfall events and periods of heavy snow melt, which you can see --

MR. PETERS: Excuse me, Heather. Is that 400 feet long?

MS. ADAMS: Yes.

MR. PETERS: Okay. I think you said 40, but that --

MS. ADAMS: Oh, I am sorry. 30 feet by 400 feet.

MR. PETERS: Okay. Thank you.

MS. ADAMS: Uh-hum.

We do not have an extensive historical operations history for this particular AOC, but what we do know is that it was used as an open dump for a variety of miscellaneous construction and demolition material, including asbestos-containing materials of transite roofing and siding, laboratory bottles and drums were found, concrete, brick, glass, scrap metal, fencing and various wood debris.

We do not have records indicating the quantities of the materials that were dumped at the AOC or the dates of operation.

The Dump along Paris-Windham Road was included in three previous investigations and one remedial action, which took place in 2003, which I will discuss in depth next.

In 2003, a Decision Document for Removal Action was approved. This report identified that transite and debris in soil required removal. It also identified SVOCs as principle contaminants with potential to impact human health. It identified cadmium, PCBs and SVOCs as principle contaminants with potential impact to ecological resources.

This Decision Document presented Alternative 4 for implementing a removal action under a limited Remedial Design and Remedial Action.

Shortly after the approval of the Decision Document, removal and off-site disposal of debris and visible transite was conducted in April of 2003. 300 tons of material and transite and debris were removed and disposed.

Because of the limited knowledge that we had about the dumping, test pits were installed to excavate the area to ensure that subsurface transite had all been located. The excavated debris were loaded into trucks and roll-off boxes

and removed from the site for disposal.

And here are some pictures of the actual removal action. And in this photograph, you can see some workers removing the transite using the proper health and safety equipment that is needed to deal with those materials.

Up along this edge right here, this is Paris-Windham Road. You see a worker standing on the road. The excavator is actually working from up on the road. So you can see how close debris is to the road. This area here is the final excavation of the southern portion of the site.

Once the removal action was complete, confirmation samples were collected. As you can see this gentleman down here collecting confirmation samples. What the Army did was they segmented the limits of the debris and collected 10 soil ISM samples over that quarter acre area. And they also collected 6 sediment and surface water samples from within the neighboring flood-plain, which you can kind of see in this picture here. This is the intermittent water that sometimes accumulates at the slope.

This removal action basically resulted in two things. It gave us some results for the

effectiveness of the removal action, and it also had a recommended path forward.

Confirmation samples were collected and the results of those samples were that the asbestos and metal concentrations in the soil were now within the acceptable limits, where previously they were not.

It also identified Benzo(a)pyrene at a concentration that exceeded the Region IX PRG level at the time -- so the 2003 level -- in one of the 10 samples that were collected.

A small amount of transite was also discovered during the confirmation sampling after a heavy rain event had eroded the embankment and exposed additional debris. So they had removed all the vegetation, had a rain event and it washed it out.

Because of this, the Army had to make a decision for the AOC. The RVAAP stakeholders and the Akron Regional Air Quality Management District, who were involved because of the ACM removal, discussed and decided to discontinue the excavation because further excavation would undermine and compromise the integrity of Paris-Windham Road. Which you can see in the

previous photograph how close that excavation was to the road.

Based on this decision, the Army and the Akron Regional Air Quality Management District decided to cover the transite material during the restoration activities and leave it in place.

Additionally, they recommended that a Site Characterization and Focused Feasibility Study report be completed to evaluate the risks to the PAHs in the soil.

After those decisions were made -- you can see the photographs here. So they brought in clean hard fill and approved soil backfill to stabilize the slope, which you can see they built out nicely to both stabilize the road and to cover any remaining transite in this area.

And then they seeded -- with the Ohio Army National Guard, approved seed mixture and allow the area to grow back up.

So one of the recommendations after the Remedial Action was to complete a Final Site Characterization. What this report did was it provided a full evaluation of nature and extent of contamination for soil and surface water. This report used a total of 16 surface soil

samples, 8 sediment samples and 7 surface water samples. These samples included the confirmation samples after the Remedial Action.

The conclusions of the Final Site Characterization were that no further sampling was required to characterize the soil, that nature and extent of contamination had been defined.

Also, the Human Health Risk Assessment identified two PAHs, Benzo(a)pyrene and Dibenzo(a,h)anthracene, as COCs in soil for the Resident Receptor. No COCs were identified for surface water.

The Ecological Risk Assessment concluded that no further action was required to protect the ecological resources.

Based on the findings of the report, a Focused Feasibility Study was needed. The proposed remedies included the Focused Feasibility Study to address the soil contamination.

Remedies were not needed for sediment or surface water since they did not pose a risk to human health or the environment.

Groundwater, again, is going to continue to

be evaluated under the Facility-wide Groundwater Monitoring Program.

Therefore, the Remedial Action objective for Paris-Windham Road Dump is to prevent exposure of the Resident Receptor to shallow surface soil with COC levels exceeding the target risk of 1E-05 and a hazard index of 1.

The Focused Feasibility Study presented the general response actions, which included Alternative 1, which is a No Action alternative, which is required by CERCLA to be used as the basis for which all other alternatives are compared to.

The second alternative was Land Use Control. This alternative was evaluated -- both alternatives were evaluated with respect to the nine comparative analysis criteria as outlined by CERCLA.

Based on the conclusions of the Focused Feasibility Study, the preferred alternative for the Dump along Paris-Windham Road is Alternative 2, which is Land Use Controls. This alternative utilizes Land Use Controls including posting signs to prevent exposure of the Resident Receptor to COCs in shallow surface soil.

It also prevents exposure of the residual asbestos. And disturbance and potential exposure to residual ACM must be controlled.

Alternative 2 will also present an O&M Plan, which will include annual inspections in which the integrity of the soil cover and clean hard fill will be inspected for signs of erosion and disturbance to ensure that everything is still intact.

Alternative 2 also includes continued surveillance through five-year reviews. This alternative has an estimated cost of $103,300.

MS. TITTLE: Thank you, Heather. So now it is your turn to participate. And we welcome your comments and questions at this time.

You can also -- if something comes up later, if you think of something else, you can check out -- for more information, you can go to the Newton Falls Public Library on South Canal Street, or the Reed Memorial Library in Ravenna. Or you can check out the site at www.rvaap.org for more information or to make further comments. And comments will be accepted up to December 14th of this year.

We solicit input from you, certainly, because you are the community. You live here. It is important. And like I said, comments through December 14th.

So if you have any questions or comments, please stand up, give us your name, and for the benefit of the reporter, and the record, what community you live in. And we will go from there.

Well, I will have a drink to that, too. Calling for all comments, questions or quotations? Anything you have is welcome. And as I said, there is plenty of time through December 14th to make additional written or e-mail comments.

Well, if we have no more questions, no comments -- anything else?

MR. THOMAS: No.

MS. SPRINZL: If you haven't signed in, please take a moment to sign in before you leave. Thank you.

MS. TITTLE: Yes. Well, thank you all. Enjoy the refreshments.

MS. ADAMS: Thank you all for your time.

(Thereupon, the meeting was concluded at 7:11 p.m.)

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C E R T I F I C A T E

STATE OF OHIO,)
) SS:
SUMMIT COUNTY,)

I, Jerri Lynn Wheat, a Stenographic Reporter and Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that these proceedings were taken by me and reduced to Stenotypy, afterwards prepared and produced by means of Computer-Aided Transcription and that the foregoing is a true and correct transcription of the proceedings so taken as aforesaid.

I do further certify that these proceedings were taken at the time and place in the foregoing caption specified, and were completed without adjournment.

I do further certify that I am not a relative, employee of or attorney for any party or counsel, or otherwise financially interested in this action.

I do further certify that I am not, nor is the court reporting firm with which I am affiliated, under a contract as defined in Civil Rule 28(D).

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Akron, Ohio on this 12th day of December, 2016.

_____
Jerri Lynn Wheat, Stenographic Reporter and Notary Public in and for the State of Ohio.

My commission expires April 9, 2018.

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Photographs

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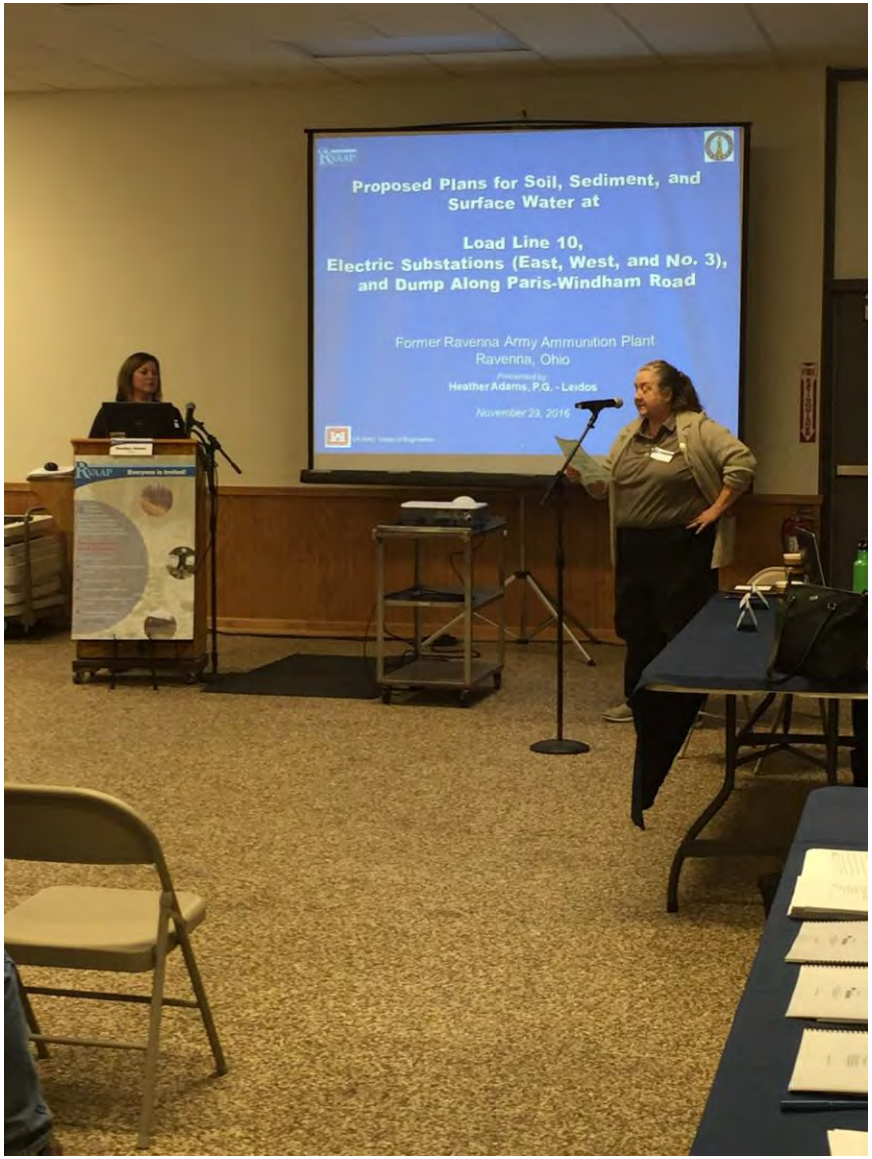
Site Locations


Proposed Plans for Soil, Sediment, and Surface Water at
Load Line 10,
Electric Substations (East, West, and No. 3),
and Dump Along Paris-Windham Road
Former Ravenna Army Ammunition Plant
Ravenna, Ohio
Heather Adams, P.G. - Leidos
November 23, 2016

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WRITTEN PUBLIC COMMENTS

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No written comments were received during the public notification period.

No oral comments were provided during the public meeting.

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