

Ravenna Army Ammunition Plant Restoration Program

**Public Notification and Public Meeting Summary Packet
for:**

**Proposed Plan for Soil, Sediment, and Surface Water at
RVAAP Load Lines 1, 2, 3, 4, and 12
(final version dated October 26, 2018)**

Public Comment Period: June 10, 2019 to July 10, 2019
Public Meeting: June 20, 2019

Contract No. W912QR-15-C-0046

Prepared for:



**US Army Corps
of Engineers®**

**U.S. Army Corps of Engineers
Louisville District**

Prepared by:



**Leidos
8866 Commons Boulevard, Suite 201
Twinsburg, Ohio 44087**

Ravenna Army Ammunition Plant Restoration Program

**Public Notification and Public Meeting Summary Packet
for:**

**Proposed Plan for Soil, Sediment, and Surface Water at
RVAAP Load Lines 1, 2, 3, 4, and 12**
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PUBLIC NOTIFICATION

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Public Notice

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Public Notice

For Immediate Release
Camp James A. Garfield
Environmental Office

Camp James A. Garfield Joint Military Training Center

Camp James A. Garfield Environmental Office — 1438 State Route 534 SW — Newton Falls, OH 44444
614-336-6136

Public meeting to be held Thursday, June 20, 2019 for Army National Guard Release of the Proposed Plan for Load Line 1, Load Line 2, Load Line 3, Load Line 4, and Load Line 12

Ravenna – The Army National Guard, in consultation with the Ohio Environmental Protection Agency, submits for public review and comments the Proposed Plan associated with former ammunition plant activities at the former Ravenna Army Ammunition Plant (RVAAP) in Portage and Trumbull counties, Ohio.

Load Lines 1 through 4, and Load Line 12 are areas of concern (AOCs) within the former RVAAP in Portage and Trumbull Counties, Ohio. These AOCs are being addressed under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The Proposed Plan presents the current status and information regarding the AOCs. The Proposed Plan presents the preferred alternative, Ex-situ Thermal Treatment and Administrative Land Use Controls (LUCs), to address contaminated soil at Load Lines 1 through 4, and Load Line 12.

On Thursday, June 20, 2019, 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. Technical staff will be available to answer questions. At 6:30 p.m., the Army National Guard will briefly describe the assessment of the AOCs, present the Ex-situ Thermal Treatment and Administrative LUCs recommendation, 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 June 10, 2019 to July 10, 2019. All written comments should be addressed to Camp James A. Garfield Environmental Office; 1438 State Route 534 SW, Newton Falls, OH 44444 and must be postmarked no later than July 10, 2019.

In accordance with CERCLA, the Ex-situ Thermal Treatment and Administrative LUCs recommendation presented in the Proposed Plan is also presented in earlier remedial investigation (RI) and Feasibility Study (FS) reports. 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). The reports are also available online at the RVAAP Restoration Program public website, 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 June 10, 2019 to July 10, 2019. The Army National Guard encourages the public to review and comment on the recommendations presented in these documents.

For more information or to participate in the review, please visit the RVAAP Restoration Program 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 Plan for Load Line 1, Load Line 2, Load Line 3, Load Line 4 at the Former Ravenna Army Ammunition Plant (RVAAP)
 The Proposed Plan for Load Line 1, Load Line 2, Load Line 3, Load Line 4 and Load Line 12 presents a recommendation of Ex-situ Thermal Treatment of Soil and Administrative Land Use Controls (LUCs) and provides the rationale for this recommendation. The Proposed Plan is now available for public review from June 10, 2019 to July 10, 2019.

The Proposed Plans are available at:
 Newton Falls Public Library Reed Memorial Library
 204 South Canal Street 167 East Main Street
 Newton Falls, Ohio 44444 Ravenna, Ohio 44266

The Proposed Plans are also available at www.rvaap.org
 Please join us for an OPEN HOUSE and PUBLIC MEETING.
 The Army National Guard will host an informational open house and a public meeting to explain the recommendation in the Proposed Plan. Oral and written comments will be accepted at the meeting. Written comments may also be mailed to the Camp James A. Garfield Environmental Office, 1438 State Route 534 SW, Newton Falls, OH 44444. Comments will be accepted during the public comment period from June 10, 2019 to July 10, 2019.

The public meeting is scheduled for:
 Thursday, June 20, 2019
 6:00 pm Open House
 6:30 pm Public Meeting

at:
 Sheerer Community Center
 (Paris Township Hall)
 8365 Newton Falls Road
 Ravenna, OH 44266

For more information or if you need special accommodations to attend, please contact Kettle Tail at 614-336-8138.
 #161-1T-June 10, 2019 #4142

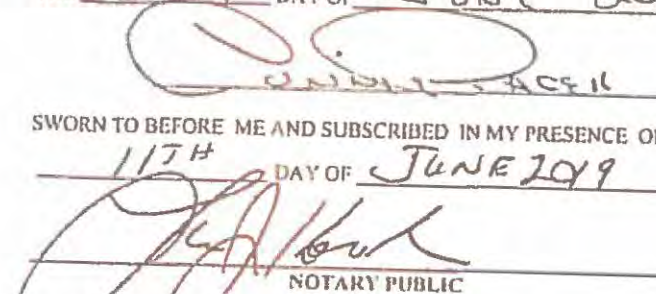
PROOF OF PUBLICATION

STATE OF OHIO
 TRUMBULL COUNTY

SS CONNIE PACEK

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

THAT THE ATTACHED ADVERTISEMENT WAS PUBLISHED IN THE TRIBUNE CHRONICLE EVERY MONDAY FOR ONE CONSECUTIVE WEEKS AND THAT THE FIRST INSERTION WAS ON MONDAY THE 10th DAY OF JUNE 2019


 NOTARY PUBLIC

SWORN TO BEFORE ME AND SUBSCRIBED IN MY PRESENCE ON THIS 11th DAY OF JUNE 2019

LAWRENCE J. KOVACH, Notary Public
 STATE OF OHIO
 MY COMMISSION EXPIRES SEPTEMBER 23, 2022

SEAL

ADVERTISING COST \$ 274.18

Affidavit of Publication, Tribune Chronicle, June 10, 2019

Affidavit of Publication, Record Courier, June 10, 2019

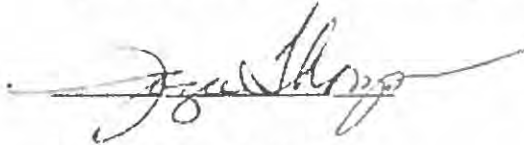
31193993

Proof of Publication

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

I, Hompson being first duly sworn depose and say that I am Advertising Clerk of
Record Publishing Company

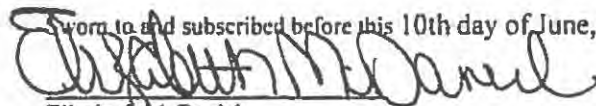
30 Record-Courier a newspaper printed and published in the city of Kent, and of General circulation in the County of Portage, State of Ohio, and personal knowledge of the facts herein stated and that the notice hereto annexed was Published in said newspapers for 1 insertions on the same day of the week from and after the 10th day of June, 2019 and that the fees charged are legal.



Name of Account: Leidos
Ad Number: 12566890
No. of Lines: 28

Day(s) Published: 06/10.
Printers Fee: \$115.20

Sworn to and subscribed before this 10th day of June, 2019.



Elizabeth McDaniel
Notary Public
Commission Expires June 19, 2021

Notice of Document Availability



Proposed Plan for Load Line 1, Load Line 2, Load Line 3, Load Line 4, and Load Line 12 at the Former Ravenna Army Ammunition Plant (RVAAP)

The Proposed Plan for Load Line 1, Load Line 2, Load Line 3, Load Line 4, and Load Line 12 presents a recommendation of Ex-situ Thermal Treatment of Soil and Administrative Land Use Controls (LUCs) and provides the rationale for this recommendation. The Proposed Plan is now available for public review from June 10, 2019 to July 10, 2019.

The Proposed Plans are available at:

Newton Falls Public Library	Reed Memorial Library
204 South Canal Street	187 East Main Street
Newton Falls, Ohio 44444	Ravenna, Ohio 44286

The Proposed Plan is also available at: www.rvaap.org

Please join us for an OPEN HOUSE and PUBLIC MEETING.

The Army National Guard will host an informational open house and a public meeting to explain the recommendation in the Proposed Plan. Oral and written comments will be accepted at the meeting. Written comments may also be mailed to the Camp James A. Garfield Environmental Office; 1438 State Route 534 SW, Newton Falls, OH 44444. Comments will be accepted during the public comment period from June 10, 2019 to July 10, 2019.

The public meeting is scheduled for:

Thursday June 20, 2019
6:00 pm Open House
6:30 pm Public Meeting

at:

Shearer Community Center (Paris Township Hall)
9355 Newton Falls Road
Ravenna, OH 44268

For more information or if you need special accommodations to attend, please contact Katie Tait at 614-336-6136.

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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 James A. Garfield Public Meeting – Proposed Plan for Load Line 1 through 4, and Load Line 12 at the Former Ravenna Army Ammunition Plant (RVAAP)

PLEASE PRINT

LOCATION: Shearer Community Center; Ravenna, OH

DATE: June 20, 2019

TIME: 6:30 p.m.

Name	Address/City/State/Zip	Phone	Email
Jed Thomas			
Sue Netelych			
Bob Princic			
Bo Ross/Bob Tuckek			
HEATHER ADAMS			
Sharon Roberts			
Mike Yano			
Stephen Yanovich			
JOSEPH BRATHER			



US Army Corps
of Engineers
Louisville District

SIGN-IN SHEET

Camp James A. Garfield Public Meeting – Proposed Plan for Load Line 1 through 4, and Load Line 12 at the Former Ravenna Army Ammunition Plant (RVAAP)

PLEASE PRINT			
LOCATION: Shearer Community Center; Ravenna, OH		DATE: June 20, 2019	TIME: 6:30 p.m.
Name	Address/City/State/Zip	Phone	Email
Katie Tait	[REDACTED]		
Jerri Wheat			
Nat Peters			
Tina Lemky			
Vasu Peterson			
Jacob Shreffler			
Susan Shreffler			

Presentation

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Proposed Plan for Load Lines 1, 2, 3, 4, and 12

Former Ravenna Army Ammunition Plant
Portage and Trumbull Counties, Ohio

Presented by:
Rupa Price, Leidos

June 20, 2019



Presentation Agenda

- Introduction of the Areas of Concern
- Description of CERCLA
- Site Features
- Historical Operations
- Remedial Investigations
- Interim Records of Decision (RODs) and Remedial Actions
- Post ROD Investigations and Removal Actions
- Feasibility Study Addendum and Preferred Remedial Alternative
- Public Participation
- Questions

Welcome!



Areas of Concern

- Five Areas of Concern addressing soil, sediment, and surface water:
 - Load Line 1
 - Load Line 2
 - Load Line 3
 - Load Line 4
 - Load Line 12 (soil only, sediment and surface water addressed under separate investigation)

[Note: Groundwater at these sites is being evaluated and addressed under the Facility-wide Groundwater Monitoring Program (FWGWMP)]



Areas of Concern Location

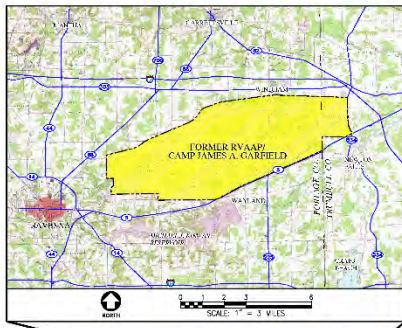


Figure 1. General Location and Orientation of Camp James A. Garfield

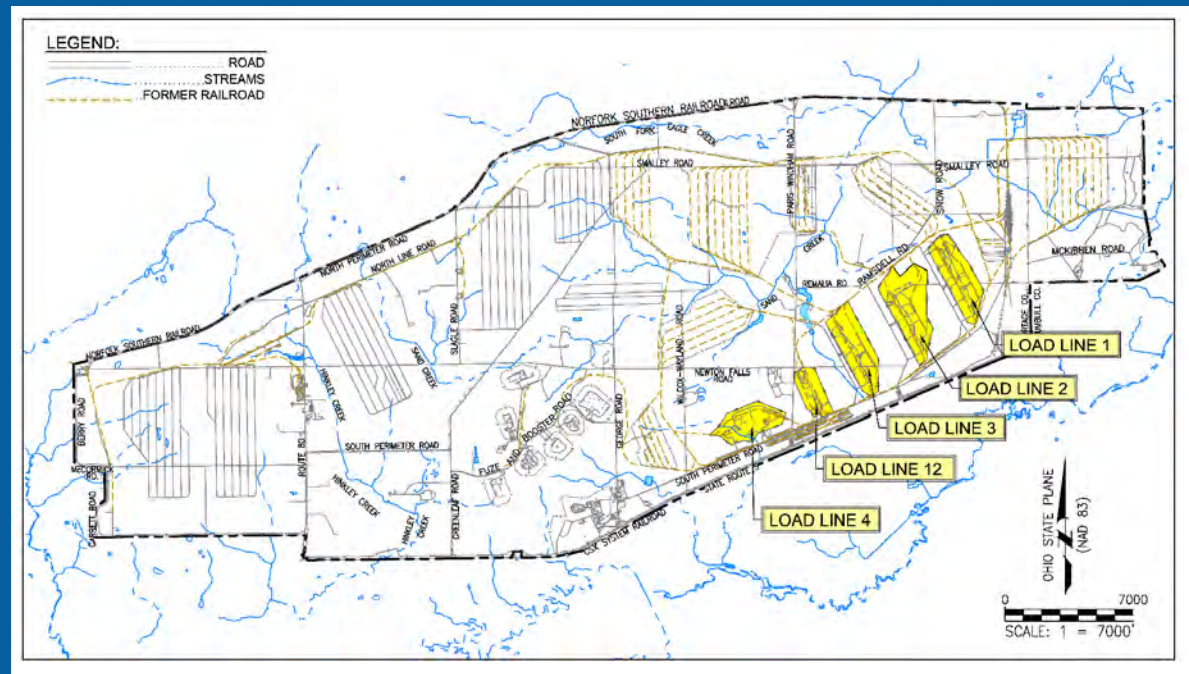
Load Line 1 is RVAAP-08

Load Line 2 is RVAAP-09

Load Line 3 is RVAAP-10

Load Line 4 is RVAAP-11

Load Line 12 is RVAAP-12



What is CERCLA?



- The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) was passed in December 1980 in response to the discovery of a large number of abandoned, leaking hazardous waste sites that posed a serious threat to both human health and the environment.
- CERCLA was designed to impose clean up and reporting requirements on the private sector, as well as federal facilities, by:
 - Identifying those sites where releases of hazardous substances had occurred or might occur, and pose a serious threat to human health and the environment;
 - Taking appropriate action to remedy those releases; and
 - Seeking those parties responsible for the environmental hazards to pay for the clean up activities.



- The Army has previous Interim Records of Decision at these sites limiting use to Military Training to no deeper than 4 feet bgs.
- The Army National Guard (ARNG) is implementing the CERCLA Process to:
 - Address residual contamination at Load Lines 1-4 and 12.
 - Optimize future use of the sites.
 - Ensure future users of the sites are not at risk of chemical exposure.
- The Proposed Plan presents:
 - The feasibility of changing and optimizing the current land use (Military Training) to more expansive land use (Commercial/Industrial for occupational use, which includes the National Guard Trainee).
 - A new preferred alternative to remediate the sites to attain a Commercial/Industrial Land Use.
- This phase of the CERCLA process is to seek input from the public on the Preferred Alternative.

CERCLA Site Evaluation

Load Lines 1-4 and 12



- For Load Lines 1-4 and 12, we will summarize previous investigations, decisions, and removal actions.
- We will also summarize the following evaluations provided in the current Feasibility Study Addendum:
 - **Human health risk assessment (HHRA)** - determined if chemicals in soil, sediment, or surface water pose unacceptable risk to potential human receptors.
 - **Ecological risk assessment (ERA)** – evaluated the following:
 - if there are important or significant ecological resources at a site (e.g., wetlands, protected species), and
 - if chemical contamination requires an action to protect those resources.
 - **Fate and transport assessment** - determined if chemicals at the site may adversely impact groundwater.
 - **Remedial Alternative Development and Selection** – determined the most feasible way to address unacceptable risk to achieve the Army National Guard's desired future land use.

Load Line 1 Site Features



- Approximately 159 acres.
- No structures remain at the site.
- Rail beds of two main tracks traverse site from north to south.
- Intermittent surface water can exist in ditches and channels, exiting the site to the east.
- Surface water can discharge to Charlie's and Criggy's ponds, which are approximately 2,000 ft east of the AOC.
- Wetlands are present within the AOC boundary.

Load Line 2 Site Features



- Approximately 214 acres.
- No structures remain at the site.
- The main process area is heavily vegetated.
- Areas surrounding the former main process area has scrub vegetation and immature hardwoods.
- Perennial surface water is present in streams and a pond.
- Intermittent surface water in ditches ultimately discharges to 2-acre unlined Kelly's Pond (south of the AOC).
- Wetlands are present within the AOC boundary.

Load Line 3

Site Features



- Approximately 167 acres.
- No structures remain at the site.
- Main process area is heavily vegetated.
- Scrub vegetation and immature hardwoods in non-production areas; moderately mature hardwoods along the western border of the AOC.
- Perennial surface water in channelized ditches/streams, and wetlands are present within the AOC boundary.
- Surface water occurs intermittently as storm water runoff in ditches, ultimately flowing towards Upper and Lower Cobbs Ponds.

Load Line 4 Site Features



- Approximately 214 acres.
- No structures remain at the site.
- The main process area is heavily vegetated.
- Scrub vegetation and immature hardwoods in the non-production areas; moderately mature hardwoods along the northern portion of the load line.
- Perennial surface water in streams and a settling pond, and wetlands are present within the AOC boundary.
- Surface water occurs intermittently as storm water runoff in ditches that drain into the main stream or settling pond.

Load Lines 1-4

Historical Operations



- 1941-1945 and 1951-1957: Load Lines operated to melt and load TNT and Composition B explosives into large-caliber shells and/or bombs.
- 1947-1971: Demilitarization projects occurred intermittently.
- 1950-1952: Reclaimed cartridges for reuse at Load Lines 1 and 2.
- 1951-1957: Load Line 4 produced antitank mines.
- 1961-1967: Load Line 1 was modified for munitions rehabilitation activities and demilitarization of 90mm projectiles.
- 1971: Load Lines were deactivated permanently.
- All buildings, foundations, and slabs were removed by 2009.

Load Line 12

Site Features



- Approximately 76 acres.
- No structures remain at the site.
- Asphalt and gravel access roads, railroad beds, and a perimeter fence currently exist.
- Currently overgrown with grass, trees, and scrub vegetation.
- Surface water is present in a settling pond, main drainage channel, and wetlands.
- Soil is the media of concern at Load Line 12 addressed in this proposed plan.

Load Line 12

Historical Operations



- 1941-1943: Operated at full capacity as an ammonium nitrate production facility for melt pour operations at other lines.
- 1946-1950: Leased to Silas Mason Company to produce 518,246 tons of fertilizer-grade ammonium nitrate.
- 1965-1967: Hercules Alcor, Inc. leased Building FF-19 to produce aluminum chloride.
- 1969-1971: Activated in support of the Vietnam War. Load Line 12 produced 80,000,000 M54 primers during this time.
- 1981: The Pink Water Treatment Plant was built immediately east of Building 904 to treat the demilitarization effluent prior to discharge.
- From 1949-1993: Munitions were periodically demilitarized.
- All buildings, foundations, and slabs were removed by 2000.

Load Lines 1-4 and 12

Previous Investigations



- 1978 Installation Assessment
- 1989 RCRA Facility Assessment
- 1996 Preliminary Assessment
- 1996 Phase I Remedial Investigation - Assessed surface soil and sediment from ditches in and around areas of historical operations. Collected and assessed groundwater.
- 1999 – 2004 (*Site-specific*) Phase II Remedial Investigations - Assessed surface and subsurface soil, sediment, surface water, and groundwater to determine the potential risk to human health and the environment from former operations.
- 2003 Facility-wide Biological and Water Quality Study – Analytical samples collected and fish/macroinvertebrates assessed for Kelly's Pond and Load Line 4 settling pond.
- During the Remedial Investigations, the following potential contaminants were assessed: metals, explosives, propellants, SVOCs, VOCs, PCBs, and pesticides.



Load Lines 1-4

Interim Record of Decision



- A Focused Feasibility Study (FFS) was developed for Load Lines 1 through 4.
- Recommended **excavation with off-site disposal** as an interim remedy to address chemicals of concern (COCs) in soil that exceeded human health Facility-wide Cleanup Goals (FWCUGs) established for the National Guard Trainee.
- The Interim Record of Decision was approved in January 2007.
- Removal of approximately 1,800 tons of hazardous and 9,500 tons of non-hazardous contaminated soil occurred at Load Lines 1 through 4 from August to November 2007.
- After this removal action, these 4 AOCs were considered protective for use by the **National Guard Trainee for Mounted Training, No Digging.**



Load Line 12

Interim Record of Decision



- A Feasibility Study (FS) was developed for Load Line 12 that recommended **excavation with off-site disposal** to address arsenic in the Main Ditch that exceeded human health Facility-wide Cleanup Goals (FWCUGs) established for the National Guard Trainee.
- The Record of Decision was finalized in March 2009.
- Removal of approximately 1,100 tons of non-hazardous contaminated sediment took place in 2010.
- After this removal action, Load Line 12 was considered protective for use by the **National Guard Trainee for Mounted Training, Digging only to 4 ft below ground surface.**



Post Interim Record of Decision

Future Use Evaluation



- Between 2007-2009, remaining buildings and slabs were removed from Load Lines 1-4.
- At this time, the Army National Guard wants to assess if future use of Load Lines 1-4 and 12 can be optimized.
 - The Army performed additional Remedial Investigations, Removal Actions, and developed a Feasibility Study Addendum to assess optimizing future use and protectiveness of the sites.
 - These activities are discussed in the following slides.

Post Interim Record of Decision

Remedial Investigations



- 2008-2011 – The Army collected over 1,800 soil samples to further characterize Load Lines 1-4 and 12.
- In 2011, sediment and surface water samples were collected at Load Line 12.
 - No risk was identified in sediment and surface water at Load Line 12.
 - Record of Decision for Wet Sediment and Surface Water (dated February 2019) concluded No Further Action was required for sediment and surface water at Load Line 12.
- 2016 – Collected sediment and surface water samples from over 20 locations at Load Lines 1-3 to fill identified data gaps and assess current conditions.
 - Load Lines 4 and 12 did not require additional sediment or surface water samples to address data gaps.

Post Interim Record of Decision Removal Actions



- Since 2007, Interim Removal Actions were conducted at the sites to remove identified contamination. These actions were done in unison with the Remedial Investigations. These are summarized below.
 - Load Line 1: 359 cubic yards were removed from areas of two historic building slabs.
 - Load Line 2:
 - 791 cubic yards of soil from sumps were excavated.
 - 94 cubic yards of soil from bulk TNT areas were excavated.
 - Load Line 3: 1,602 cubic yards were excavated from areas by former sumps and building slabs.
 - Load Line 4: 501 cubic yards of soil and concrete were excavated.

Feasibility Study Addendum

Purpose



- A Feasibility Study Addendum was developed to perform the following using all available data from Load Lines 1-4 and 12:
 - Evaluate residual contaminated soil, sediment, and surface water at Load Lines 1 through 4 and soil at Load Line 12 that pose a potential risk to human health and the environment.
 - Assess if the sites can feasibly achieve “Commercial/Industrial Land Use”.
 - This Commercial/Industrial Land Use will allow for full-time occupational use of the sites, including use by the National Guard Trainee.
 - Determine extent and cost of remediation to allow for potential new future land use of the sites.

Feasibility Study Addendum

Conclusions



- Nature and extent of contamination is defined. No further sampling is required to characterize soil, sediment, or surface water at Load Lines 1-4 and 12.
- No chemicals of concern were identified in sediment or surface water for future Industrial land use.
- The human health risk assessment identified chemicals of concern requiring remediation in soil.
- The ecological risk assessment concluded that no further action is required to protect ecological resources.
- The fate and transport assessment determined the following:
 - RDX in soil at Load Line 1 may impact groundwater.
 - Soil remediation will positively affect groundwater.
 - No further action for sediment is required to protect groundwater.

(Groundwater at these sites will continue to be evaluated under the Facility-wide Groundwater Monitoring Program.)

Feasibility Study Addendum

Conclusions



- The HHRA identified the following chemicals of concern as requiring remediation in soil for the likely future land use (Commercial/Industrial Land Use):

Site	COCs Requiring Remediation
Load Line 1	Lead, antimony, TNT, RDX, and PCB-1254
Load Line 2	TNT
Load Line 3	TNT, PCB-1254, PCB-1260, PAHs
Load Line 4	Lead, PCB-1260, PAHs
Load Line 12	2,6-DNT, TNT, PCB-1260, PAHs

The Army National Guard, in coordination with Ohio EPA, is recommending remediation of remaining contamination at Load Lines 1-4 and 12.

Feasibility Study Addendum

Remedial Alternatives



Remedial Action Objective - Reduce risk from COCs to acceptable levels (RGOs) for the likely future land use (i.e., Commercial/Industrial) that are protective of human health at Load Lines 1 through 4 and 12.

- The following remedial alternatives were developed for consideration:
 - **Alternative 1: No Action (required by CERCLA)**
 - **Alternative 2: Commercial/Industrial Land Use – Excavation and Off-site Disposal of Soil and Administrative LUCs**
 - Removal of contaminated soil from each load line and disposal at an offsite, licensed facility.
 - Site restoration (backfilling, grading, and seeding).
 - Land Use Controls to ensure no residential use.
 - **Alternative 3: Commercial/Industrial Land Use – Ex-situ Thermal Treatment of Soil and Administrative LUCs**
 - Removal of metals-contaminated soil from each load line and disposal at an offsite, licensed facility.
 - Thermal treatment of soil impacted by PAHs, explosives, or PCB contamination.
 - Site restoration (backfilling, grading, and seeding).
 - Land Use Controls to ensure no residential use.

Feasibility Study Addendum

Remedial Alternatives



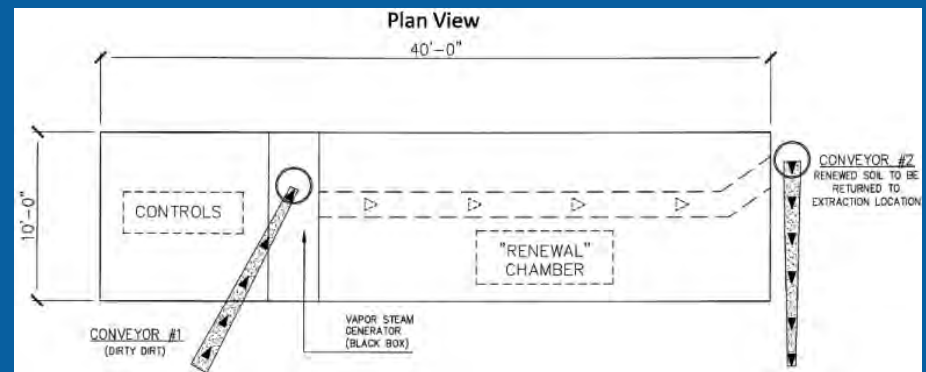
- **Alternative 4: Unrestricted (Residential) Land Use – Excavation and Off-site Disposal of Soil/Sediment**
 - Removal of contaminated soil from each load line and disposal at an offsite, licensed facility.
 - Site restoration (backfilling, grading, and seeding).

- **Alternative 5: Unrestricted (Residential) Land Use – Ex-situ Thermal Treatment of Soil/Sediment**
 - Removal of metals-contaminated soil from each load line and disposal at an offsite, licensed facility.
 - Thermal treatment of soil impacted by PAHs, explosives, or PCB contamination.
 - Site restoration (backfilling, grading, and seeding).



- Soil loaded into treatment system.
- Contaminated soil exposed to high temperatures in “Renewal Chamber”.
- Soil contaminants (e.g. PAHs) are desorbed to form vapors.
- Vapors are then passed through filters for capture and/or treatment.

- Treated soil is stockpiled for confirmation testing.
- If soil is confirmed to be below the Cleanup Goal, soil is placed back in the excavation.



Feasibility Study Addendum

Alternative Evaluation Criteria



The five alternatives were compared against one another using the criteria below.

➤ Threshold Criteria

- Protectiveness of Human Health and the Environment (Alternative 1: No Action will not protect human health and is eliminated from consideration.)
- Compliance with Applicable or Relevant and Appropriate Requirements (ARARs) – Assesses if the alternative complies with federal or local laws and standards.

➤ Balancing Criteria

- Long-term effectiveness – evaluates magnitude of remaining risk/contamination.
- Reduction of toxicity, mobility, or volume through treatment.
- Short-term effectiveness – evaluates protection of workers and the community during implementation of the remedial alternative.
- Implementability – evaluates availability and reliability of the alternative's technology.
- Estimated Cost.

Feasibility Study Addendum

Preferred Alternative for Load Lines 1-4 and 12



Alternative 3: Commercial/Industrial Land Use – Ex-situ Thermal Treatment of Soil and Administrative LUCs

- Implementation of this alternative is protective of the likely future land use (Commercial/Industrial Land Use, which is protective of the National Guard Trainee).
- Implementation will comply with ARARs (federal and local laws/standards).
- Effective in the long-term, as contamination is removed or permanently treated at the site.
- Measures will take place to ensure the workers and community are not impacted during implementation.
- Technology (thermal treatment and excavation with off-site disposal) has been used at Camp James A. Garfield in the past.
- Estimated Cost for Alternative 3 at all five load lines (\$1,649,093) is the most cost effective alternative.
- In the event that a thermal treatment system is not available for use, Excavation and Off-site Disposal of Soil is readily available and considered for implementation by the Army National Guard.

Feasibility Study Addendum

Estimated Remedial Extents



- Load Line 1
 - Reference “Load Line 1 Industrial Remediation Areas” figure
 - Total anticipated soil remediation quantity: 2,236 cubic yards to 5 ft bgs
- Load Line 2
 - Reference “Load Line 2 Industrial Remediation Areas” figure
 - Total anticipated soil remediation quantity: 46 cubic yards to 2 ft bgs
- Load Line 3
 - Reference “Load Line 3 Industrial Remediation Areas” figure
 - Total anticipated soil remediation quantity: 2,474 cubic yards to 6 ft bgs
- Load Line 4
 - Reference “Load Line 4 Industrial Remediation Areas” figure
 - Total anticipated soil remediation quantity: 710 cubic yards to 7 ft bgs
- Load Line 12
 - Reference “Load Line 12 Industrial Remediation Areas” figure
 - Total anticipated soil remediation quantity: 372 cubic yards to 4.5 ft bgs

Public Participation

Your Comments and Inputs are Appreciated!



- Public participation is an important component of remedy selection.
- The Army National Guard 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).
- Public comment period is June 10, 2019 until July 10, 2019.

Public Participation

Your Comments and Inputs are Appreciated!



- Provide written or verbal comments at this public meeting.
- Submit written comments by July 10, 2019 to the following addresses:

Camp James A. Garfield Joint Military Training Center
Environmental Office
Attn: Kathryn Tait
1438 State Route 534 SW
Newton Falls, Ohio 44444

E-mail address: kathryn.s.tait.nfg@mail.mil

Questions?

Court Reporter Transcript

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CAMP JAMES A. GARFIELD PUBLIC MEETING
PROPOSED PLANS
FOR SOIL, SEDIMENT AND SURFACE WATER
FOR LOAD LINE 1, LOAD LINE 2, LOAD
LINE 3, LOAD LINE 4, AND LOAD LINE 12
AT THE FORMER RAVENNA ARMY AMMUNITION PLANT
PORTAGE AND TRUMBULL COUNTIES, OHIO

Presented by:
Rupa Price - Leidos

PUBLIC MEETING
Thursday
June 20, 2019

Shearer Community Center
9355 Newton Falls Road
Ravenna, Ohio 44266

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1 **APPEARANCES :**

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1 **ALSO PRESENT:**

2 Nathaniel Peters, II, USACE

3 Sharon Robers, Leidos

4 Kevin Sedlak, ARNG

5 Katie Tait, Ohio ARNG

6 Susan Netzly-Watkins, Ohio EPA-NEDO

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1 **MS. TITTLE:** Good evening.

2 Welcome. It is nice to see such a nice turnout
3 for the meeting this evening.

4 My name is Barbara Tittle. I am a private
5 citizen from Kent, Ohio. And I am here tonight
6 to serve as the meeting's facilitator.

7 This public meeting serves as one of several
8 opportunities for public comment on the Army's
9 proposed plan. I am responsible to ensure that
10 everyone who wishes to has the chance to comment
11 about the proposed plan, and the opportunity to
12 do so.

13 Before we get started, however, please take
14 a moment to silence all of your electronic
15 devices, especially since there are so many
16 weather warnings coming through tonight.

17 There are three emergency exits present in
18 the front, back and side of this auditorium.
19 Please reference the exit signs in case of an
20 emergency. The ladies' rest room is in the main
21 hallway where you entered, and the men's rest
22 room and handicap accessible rest rooms are
23 present in the small hallway.

24 Certainly help yourselves to the
25 refreshments available.

1 This public meeting will present the Army's
2 proposed plan for five Areas of Concern within
3 the Former Army -- Ravenna Army Ammunition Plant.
4 These five Areas of Concern are Load Lines 1, 2,
5 3, 4 and 12.

6 Comments received from the public on the
7 proposed plan will be considered when determining
8 the final remedy, which will be documented in a
9 Record of Decision. The Record of Decision will
10 include a Responsiveness Summary addressing
11 public opinions and comments.

12 Tonight we have Kevin Sedlak and Katie Tait
13 representing the Army. Also we have Sue
14 Netzly-Watkins representing the Ohio EPA.

15 The Ohio EPA would like to make an opening
16 remark. Sue?

17 MS. NETZLY-WATKINS: Well, thank
18 you for having us. I didn't have any planned
19 comments, so --

20 **MS. TITTLE:** Okay. Going from
21 there --

22 MS. NETZLY-WATKINS: Thank you.

23 **MS. TITTLE:** Thank you for
24 that. And we also have a court reporter here
25 documenting tonight's meeting.

1 Following the presentation, we will open the
2 field for questions and any comments that you may
3 have. So I will turn this over to our presenter
4 tonight, who is Rupa Price. Rupa is an
5 Environmental Engineer from Leidos, which is a
6 contractor for the Army. Rupa will present
7 information regarding the five Areas of Concern,
8 and the Army's proposed plan for these five
9 sites. Rupa?

10 **MS. PRICE:** Thank you,
11 Barbara.

12 Good evening. It is good to see such a
13 great turnout on such a bad weather day. Before
14 we get started, I do notice that a lot of you
15 have handouts. But if you don't, there are
16 handouts out on the table back there that you
17 might find useful for tonight's presentation.

18 There is a copy of this slide presentation,
19 the proposed plan, a list of acronyms in case I
20 use something that you are not familiar with, and
21 a packet of figures for your reference.

22 For tonight's presentation, I will introduce
23 the Areas of Concern, give a very brief overview
24 of what CERCLA is before diving into the site
25 features, historical operations and summarizing

1 the investigations, decisions and remedial --
2 removal actions that have taken place so far at
3 these sites.

4 We then will also talk about the remedial
5 alternatives developed for the Feasibility Study
6 Addendum and present the Army -- Army National
7 Guard's preferred remedial alternative.

8 And then after this presentation, we will
9 open up the floor for any questions that you may
10 have.

11 So our five Areas of Concern are Load Lines
12 1, 2, 3, 4 and 12. We will address soil,
13 sediment and surface water for Load Lines 1, 2, 3
14 and 4. However, we will only address soil for
15 Load Line 12, because surface water and sediment
16 are already -- have already been investigated
17 under a separate investigation.

18 One important note is that groundwater at
19 these sites is being evaluated and addressed
20 under the Facility-Wide Groundwater Monitoring
21 Program. So groundwater is also not going to be
22 addressed tonight.

23 On this slide, you will see the location of
24 the Former Ravenna Army Ammunition Plant within
25 the State of Ohio. And as you probably already

1 know, the facility was recently renamed the Camp
2 James Garfield.

3 And then in this -- in the right graphic,
4 you will see the location of our five Areas of
5 Concern. They are located in a row, kind of,
6 along the southeastern portion of the facility.

7 But before we go into site details, let's
8 just do a real brief overview of what is CERCLA.
9 "CERCLA" is the Comprehensive Environmental
10 Response, Compensation and Liability Act. And it
11 was passed in 1980, because of the discovery of
12 abandoned, hazardous waste sites that were
13 thought to be posing a serious threat to human
14 health and the environment.

15 So CERCLA was passed to help impose clean-
16 up and reporting requirements by identifying
17 hazardous waste sites, and where there may have
18 been releases, as well as figuring out what to do
19 about those releases.

20 There is a poster back there that gives you
21 a step-wise version of the CERCLA process. And
22 for us, when we talk about where our five Areas
23 of Concern are in the CERCLA process, the Army
24 has already issued previous Interim Records of
25 Decision at these sites, but it limited the land

1 use to military training, which meant it was
2 protective for a National Guard Trainee.

3 However, the Army National Guard wanted to
4 take a little bit of a step back to address
5 residual contamination at these five Areas of
6 Concern, so that they can optimize the future use
7 of the site.

8 So the proposed plan for tonight addresses
9 the feasibility of changing and optimizing the
10 future land use from military training to the
11 more expansive, broader range of uses to
12 commercial/industrial land use, which would allow
13 for occupational use and still be protective of
14 the National Guard Trainee.

15 So the proposed plan also prevents --
16 presents a new preferred alternative to remediate
17 the sites to attain that commercial/industrial
18 land use.

19 So the phase of the CERCLA process that we
20 are currently in is the proposed plan. And one
21 of the key components of the proposed plan is to
22 get public input on the preferred alternative.
23 So that is what we are doing here tonight.

24 For Load Lines 1-4 and 12, I am going to
25 summarize the previous investigations, decisions

1 and removal actions. And then I will talk about
2 the Feasibility Study Addendum, which also
3 included a Human Health Risk Assessment, an
4 Ecological Risk Assessment, a Fate and Transport
5 Assessment and Remedial Alternative Development
6 and Selection. So we will go through each of
7 those things.

8 The site features for Load Line 1: Load
9 Line 1 is approximately 159 acres. No structures
10 remain at the site, but there are rail beds for
11 two main tracks that run north/south. There is
12 intermittent surface water in ditches and
13 channels that exit the load line to the east, and
14 discharges into Charlie's and Criggy's ponds.
15 And Charlie's and Criggy's ponds are about 2,000
16 feet east of the AOC. And we do have wetlands
17 present within the Load Line 1 boundary.

18 Load Line 2 is approximately 214 acres. And
19 similar to Load Line 1, there are no structures
20 remaining at the site. You have -- you do have a
21 heavily vegetated area within Load Line 2 that is
22 surrounded by scrub vegetation and immature
23 hardwoods. There is perennial surface water
24 present in streams and a pond. And intermittent
25 surface water in ditches, ultimately discharged

1 to Kelly's Pond, which is a 2-acre pond south of
2 Load Line 2. Load Line 2 also has wetlands
3 present within its boundary.

4 Load Line 3 is approximately 167 acres. And
5 similar to Load Lines 1 and 2, no structures
6 remain at the site. And, again, there is a
7 little bit of a pattern here, because there is
8 some heavy vegetation surrounded by scrub
9 vegetation and immature hardwoods. Although,
10 Load Line 3 also does have some more mature
11 hardwoods along the western border.

12 There is perennial surface water in the
13 channelized ditches and streams. And there are
14 wetlands present within Load Line 3's
15 boundaries. Surface water that occurs
16 intermittently as storm water runoff in ditches,
17 flows towards Upper and Lower Cobbs Ponds.

18 Load Line 4 is approximately 214 acres.
19 And, again, no structures remain at the site. It
20 is a heavily -- there is an area of heavy
21 vegetation, with scrub vegetation and immature
22 hardwoods surrounding that area. And then there
23 are some more mature hardwoods in the northern
24 portion of the load line.

25 There is perennial surface water in streams

1 and settling pond. And there are wetlands within
2 the Load Line 4 boundary. Surface water that
3 sometimes occurs as storm water runoff drains
4 into ditches that drain -- discharge into the
5 main stream or settling pond.

6 Load Lines 1 through 4 have very similar
7 operational histories. So we just summarized
8 here for tonight.

9 From 1941 to 1957, the Load Lines operated
10 to melt and load TNT and other explosives into
11 large-caliber shells and/or bombs. There were
12 demilitarization projects that occurred
13 intermittently from 1947 to 1971.

14 At Load Lines 1 and 2, from 1950 to 1952,
15 they reclaimed cartridges for reuse. From 1951
16 to 1957, Load Line 4 produced antitank mines.
17 From 1961 to 1967, Load Line 1 was modified for
18 munitions rehab and demilitarization. And then
19 in 1971, the Load Lines were deactivated
20 permanently. All of the buildings and
21 foundations and slabs were removed by 2009.

22 Load Line 12 is a little bit on its own
23 track. It is approximately 76 acres. There are
24 no structures remaining at the site. Although,
25 asphalt and gravel access roads, railroad beds

1 and a perimeter fence are still there.

2 It is overgrown with grass, trees and scrub
3 vegetation. And there is surface water present
4 in a pond, the main drainage channel, and it does
5 have wetlands. But for tonight, we are really
6 just focused on the soil at Load Line 12.

7 From 1941 to 1943, Load Line 12 operated as
8 an ammonium nitrate production facility for the
9 melt pour operations at the other load lines.

10 From 1946 to 1950, Load Line 12 was leased
11 to the Silas Mason Company to produce fertilizer-
12 grade ammonium nitrate.

13 And then in 1965 to 1967, one of the
14 buildings on Load Line 12 was leased to Hercules
15 Alcor to produce aluminum chloride.

16 And then Load line 12 was also activated to
17 support the Vietnam War by producing M54 primers
18 from 1969 to 1971.

19 In 1981, the Pink Water Treatment Plant was
20 built immediately east of Building 904 to treat
21 the demilitarization effluent prior to
22 discharging.

23 And then munitions were periodically
24 demilitarized from 1949 all the way to 1993. And
25 then all of the buildings, foundations and slabs

1 were removed by 2000.

2 So all five AOC's were on a very similar
3 investigative track. So we have summarized that
4 here. They went through a series of
5 assessments: Starting with 1978, Installation
6 Assessment; followed by a 1989 RCRA Facility
7 Assessment; and a 1996 Preliminary Assessment.

8 And then in 1996, they also conducted a
9 Phase I Remedial Investigation for -- at all of
10 these sites. And that is assessed soil, sediment
11 and groundwater.

12 Based on the results from the Phase I
13 Remedial Investigation, from 1999 to 2004, they
14 conducted a series of Phase II Remedial
15 Investigations at each site. So this was a more
16 comprehensive investigation that looked at soil,
17 sediment, surface water and groundwater, to
18 determine the potential risk to human health and
19 the environment from the historical operations
20 that had taken place at these Load Lines.

21 In 2003, there was a Facility-Wide
22 Biological and Water Quality Study that included
23 Kelly's Pond, which was that pond south of Load
24 Line 2, and the Load Line 4 settling pond.

25 So during the Remedial Investigations, the

1 Army elected to do a more comprehensive analysis
2 than would have been necessary based on site
3 history.

4 So instead of just looking for metals,
5 explosives, propellants; they also analyzed for
6 SVOCs, VOCs PCBs and pesticides.

7 So for Load Lines 1-4, a Focused Feasibility
8 Study was conducted and recommended excavation
9 with off-site disposal for soil in order to be
10 protective of the National Guard Trainee.

11 And this was recorded in an Interim Record
12 of Decision, which was approved in January of
13 2007, and followed up with the soil removal later
14 in 2007 of approximately 1,800 tons of hazardous
15 and 9,500 tons of non-hazardous contaminated
16 soil.

17 So after this removal action occurred, these
18 four Load Lines, Load Lines 1-4, were considered
19 protective for use by the National Guard Trainee
20 for Mounted Training with no digging.

21 A Feasibility Study was also developed for
22 Load Line 12. And that also recommended
23 excavation with off-site disposal, but of
24 sediment, to be protective of the National Guard
25 Trainee. And that was documented in a Record of

1 Decision that was finalized in 2009. And the
2 removal of 1,100 tons of non-hazardous
3 contaminated sediment took place in 2010.

4 And after that removal action, Load Line 12
5 was considered protective for use by the National
6 Guard Trainee for Mounted Training, with digging
7 only to 4 feet below ground surface.

8 And then as kind of alluded to earlier,
9 between 2007 and 2009, all of the buildings --
10 buildings and slabs were removed from Load Lines
11 1-4.

12 At this time, the Army National Guard wanted
13 to reassess the future land use, to see if they
14 could optimize. And in order to do that, they
15 needed to conduct additional remedial
16 investigations, do some more removal actions and
17 develop a Feasibility Study. So we are going to
18 talk about that next.

19 In terms of Remedial Investigations, from
20 2008 to 2011, the Army collected over 1,800 more
21 soil samples to further characterize Load Lines
22 1-4 and 12.

23 In 2011, sediment and surface water samples
24 were collected at Load Line 12. But when
25 analyzed, no risk was identified in the sediment

1 or surface water.

2 And so it was concluded that no further
3 action was required for sediment or surface water
4 at Load Line 12. And that was documented in a
5 Record of Decision for wet sediment and surface
6 water.

7 The Army then did a data gap analysis. And
8 what that is is they looked at all of the data
9 that had been collected from all of these
10 investigations to make sure that it was
11 comprehensive enough to be able to make
12 decisions.

13 And they did identify some data gaps,
14 primarily in surface water and sediment. So in
15 2016, additional sediment and surface water
16 samples were collected from Load Lines 1-3, to
17 fill those data gaps. Load Lines 4 and 12 didn't
18 require any more sampling.

19 Since 2007, another series of Interim
20 Removal Actions were conducted at Load Lines 1-4,
21 and that is summarized up here. (Indicating.)
22 Essentially they removed another 3,300 cubic
23 yards of contaminated soil from those four Load
24 Lines.

25 Now, the Feasibility Study Addendum was

1 developed for a few reasons. One was to evaluate
2 the residual contamination in soil, sediment and
3 surface water at Load Lines 1-4; and in soil for
4 Load Line 12, to see if there was a risk to human
5 health and the environment.

6 The other -- another goal of the Feasibility
7 Study Addendum was to see if the sites could
8 feasibly achieve commercial and industrial land
9 use, so that it would allow for full-time
10 occupational use of the sites, including the
11 National Guard Trainee. And also to determine
12 the cost of remediation and the extent of the
13 remediation, to allow for this potential new
14 future land use.

15 The Feasibility Study Addendum confirmed
16 that no further sampling would be required. That
17 all of the information and data needed to make
18 decisions was available. And concluded that no
19 chemicals of concern were identified in sediment
20 or surface water for future industrial land use.

21 The Human Health Risk Assessment, however,
22 did identify some chemicals of concern in soil
23 that would require remediation. The Ecological
24 Risk Assessment concluded that no further action
25 is required to protect ecological resources.

1 And the Fate and Transport Assessment
2 determined that RDX, which is an explosive, in
3 soil at Load Line 1 may impact groundwater. It
4 also determined that any soil remediation would
5 positively affect groundwater, and that no
6 further action for sediment was required to
7 protect groundwater.

8 And I will remind, once again, that
9 groundwater at these sites will continue to be
10 evaluated under the Facility-Wide Groundwater
11 Monitoring Program.

12 So the Human Health Risk Assessment
13 identified some metals, explosives, PCBs and PAHs
14 as Chemicals of Concern requiring remediation in
15 soil for the likely future land use of commercial
16 and industrial land use.

17 So the Army National Guard, in coordination
18 with the Ohio EPA, is recommending remediation of
19 the remaining contamination at Load Lines 1-4 and
20 12.

21 So with that decision reached, we needed a
22 Remedial Action Objective. And that would help
23 us develop alternatives to address the
24 contamination at these Areas of Concern.

25 So the Remedial Action Objective is to

1 reduce risks from Chemicals of Concern to
2 acceptable levels for the likely future land use
3 that are protective of human health at Load Lines
4 1-4 and 12.

5 So we developed five Remedial Alternatives.
6 Alternative 1 is the no action alternative, which
7 is required by CERCLA to provide a baseline for
8 comparison.

9 Alternative 2 is an excavation and off-site
10 disposal of soil with administrative land use
11 controls to achieve commercial and industrial
12 land use.

13 So, simply, it removes the contaminated soil
14 from each Load Line and disposes of it at an
15 off-site licensed facility. There is site
16 restoration, and then we would implement land use
17 controls to ensure that the property is not used
18 for residential purposes.

19 Alternative 3 is the Ex-situ Thermal
20 Treatment of soil and administrative land use
21 controls to achieve commercial and industrial
22 land use.

23 So this would require still having some soil
24 that is contaminated with metals, excavated and
25 removed and disposed of at an off-site facility,

1 because the thermal treatment does not -- is not
2 very effective for metals.

3 However, thermal treatment of soil impacted
4 with PAHs, explosives and PCBs would be
5 implemented for Alternative 3. We would restore
6 the site and then implement land use controls to
7 ensure, again, that there is no residential use
8 of the property.

9 The FS Addendum also evaluated alternatives
10 that would achieve unrestricted use, just to do a
11 cost benefit analysis and see, you know, how much
12 more we would need to do to have no restrictions
13 on the site.

14 And so Alternative 4 is very similar to
15 Alternative 2; it is excavation and off-site
16 disposal of soil and sediment to achieve un-
17 restricted residential land use.

18 So this would require removal of
19 contaminated soil or sediment from each Load Line
20 and dispose at an off-site licensed facility with
21 site restoration. Now, the main difference,
22 though, between Alternatives 2 -- or one of the
23 main differences between Alternatives 2 and 4 is
24 that you don't need administrative land use
25 controls, because no restrictions would be

1 required if we achieved unrestricted residential
2 land use.

3 Similarly, Alternative 5 is very similar to
4 Alternative 3, in that it is Ex-situ Thermal
5 Treatment of soil and sediment to achieve
6 unrestricted residential land use.

7 This would still require the removal of
8 metals-contaminated soil to an off-site
9 facility. And thermal treatment of soil impacted
10 by PAHs, explosives or PCB contamination with
11 site restoration.

12 Now, the quantities of soil for both of
13 these alternatives is also a lot larger than it
14 was for Alternatives 2 and 3. That is the other
15 main difference.

16 So the Thermal Treatment System -- here is
17 just a little bit of an example. You would --
18 this is -- it is a picture of a Thermal Treatment
19 System. You would load soil in, and the soil
20 would be exposed to really high temperatures in
21 what is called a "Renewal Chamber."

22 The soil contaminants, like PAHs, would
23 desorb and form vapors, which would then be
24 passed through filters and captured and/or used
25 for treatment.

1 The treated soil would be stockpiled and
2 undergo confirmatory sampling. So we would pull
3 out samples from that stockpile of soil to make
4 sure that any concentrations of the contaminants
5 are below our cleanup goals -- that we have
6 achieved our cleanup goals. And if we have
7 achieved our cleanup goals, the soil would go
8 back into the excavation.

9 So each of the five alternatives are -- were
10 compared to a number of criteria. The first two
11 are Threshold Criteria: The protectiveness of
12 human health and the environment, and in
13 compliance with Applicable or Relevant and
14 Appropriate Requirements, otherwise known as
15 ARARs.

16 These two criteria are required for any
17 alternative to really be considered. The
18 protective -- so that is why, for Alternative 1,
19 the no action alternative, it is eliminated from
20 consideration because it would not be protective
21 of human health.

22 And then the next five criteria are
23 Balancing Criteria. So each alternative is
24 evaluated for each of these five criteria. And
25 then those are used to compare each of the

1 alternatives against each other to come up
2 with what we would think is the preferred
3 alternative.

4 And so for Load Lines 1 through 4 and 12,
5 the preferred alternative turned out to be
6 Alternative 3; the Ex-situ Thermal Treatment of
7 soil with administrative land use controls to
8 achieve commercial and industrial land use.

9 Now, the reason for that is implementation
10 of this alternative would be protective of the
11 likely future land users, and it would be still
12 protective of the National Guard Trainee. It
13 would comply with Federal and local laws and
14 standards. It is effective in the long-term,
15 because you are either removing contamination
16 from the site, or you are treating it and
17 permanently reducing the concentrations at the
18 site.

19 We would take -- or measures would be put
20 into place to make sure that the workers and the
21 community would not be impacted during
22 implementation of the remedy. And this
23 technology, this thermal treatment technology,
24 has been used before at Camp Garfield.

25 So the estimated cost for Alternative 3 at

1 all five load lines turned out to be the most
2 cost effective, as well. But I will say that
3 that is based on an assumption that the Thermal
4 Treatment System is on site and available for
5 use.

6 In the event that the Thermal Treatment
7 System is not available for use, the Army
8 National Guard would be willing to -- I am
9 sorry -- would consider excavation and off-site
10 disposal of soil, because it is readily available
11 and it is very -- it is very implementable.

12 So this slide is referencing those figures
13 in your packet. There is a Load Line 1
14 Industrial Remediation figure, and that shows you
15 the pockets of areas where remediation of soil
16 would be required. So for Load Line 1, I believe
17 there are five areas, and the total anticipated
18 soil remediation quantity is 2,236 cubic yards.
19 And that was down to a depth of 5 feet.

20 At Load Line 2, there is only one area that
21 would require remediation. And that would affect
22 46 cubic yards, down 2 feet.

23 For Load Line 3, there are 11 small areas.
24 And the total anticipated soil remediation
25 quantity is 2,474 cubic yards, down to 6 feet.

1 For Load Line 4, there are four areas that
2 would affect 710 cubic yards, down to 7 feet.

3 And for Load Line 12, there is another
4 four areas that would -- that would require
5 remediation for 372 cubic yards of soil, down to
6 4.5 feet.

7 As I mentioned earlier, public participation
8 is an extremely important part of remedy
9 selection, so the Army National Guard is
10 soliciting your input. The public comment period
11 did begin June 10th and goes until July 10th.

12 You are welcome to provide written or verbal
13 comments tonight, or if you prefer or if you
14 think of something else, you know, after tonight,
15 you can mail questions to Kathryn Tait at that
16 address, or you can also e-mail her until July
17 10th, which is when the comment period closes.

18 That is all I have for tonight. Thank you.

19 **MS. TITTLE:** Thank you, Rupa,
20 for that excellent presentation.

21 Now it is your turn. If anyone has any
22 questions or comments, feel free to stand up,
23 identify your name and where you live, and we
24 will go from there.

25 If you don't think of something until after

1 tonight, you can contact Ms. Tait at the Camp
2 Garfield office -- environmental office.

3 **MS. ADAMS:** If anyone that
4 would like to make a comment and mail it in, we
5 have cards back here. You can feel free to grab
6 one off the table when you leave, if you would
7 like.

8 **MS. TITTLE:** Thanks, Heather.
9 Yes?

10 **MR. BEATLER:** My name is Joe
11 Beatler from Charlestown. And as I understand
12 it, the property at the James A. Garfield
13 military complex is all straight military? Do I
14 understand that correctly?

15 And the reason why I am asking you that
16 question is it says, "The feasibility of changing
17 and optimizing the current land use (Military
18 Training) to be more expansive land use
19 (Commercial and Industrial)."

20 Is that saying they are going to open this
21 up to industrial complexes?

22 **MS. TAIT:** No. What
23 "commercial and industrial use" actually means
24 is that it allows us to have a full-time worker
25 on that site.

1 And what had occurred is we had an initial
2 remedial action. And in this area, we actually
3 want to use this area for military training for
4 what they call maneuver training, which means
5 tanks. And that involves digging and ground
6 disturbance. And a lot of times, it goes deeper
7 than 4 feet. And so like they had stated, the
8 remedial action only went to and was only
9 protective to a depth of 4 feet.

10 So this commercial and industrial use allows
11 us a deeper depth of disturbance. Plus it also
12 allows us to have a full-time worker at the
13 site.

14 So it is still going to be used for military
15 training, the entire site. "Commercial and
16 industrial" is just really a term that the Ohio
17 EPA uses for that type of risk receptor.

18 **MR. BEATLER:** It was just a
19 little confusing to me when I saw that.

20 **MS. TAIT:** Sure.

21 **MR. BEATLER:** And then you
22 mentioned that -- it was mentioned about
23 residential use, too. And that brought it up
24 to me.

25 **MS. TAIT:** Sure.

1 **MR. BEATLER:** I wasn't really --
2 I didn't know that there was going to be any of
3 that development in the Arsenal.

4 **MS. TAIT:** Yes. It just
5 allows for more flexible use for us. It is not
6 as restricted.

7 **MR. BEATLER:** But it will still
8 be all military?

9 **MS. TAIT:** It will all still
10 be military, yes.

11 **MR. BEATLER:** Okay. Thank you.

12 **MS. TAIT:** A good question.

13 **MS. TITTLE:** If no one has any
14 further questions, thanks a lot. And you can
15 certainly fill out a card or contact Ms. Tait.
16 Thanks so much for coming tonight.

17 MS. NETZLY-WATKINS: I wanted to --

18 **MS. TITTLE:** I am sorry.

19 MS. NETZLY-WATKINS: I wanted to make
20 the remark that we do have -- at the Ohio EPA,
21 that we do concur with the recommended
22 alternative --

23 **MS. TITTLE:** Okay.

24 MS. NETZLY-WATKINS: -- for the clean-
25 up. So I wanted to make sure everyone in the

1 audience could hear what those were, so that it
2 made more sense to you on our concurrence. So
3 Alternative 3 is the recommended, and we are
4 concurring with that recommendation.

5 **MS. TITTLE:** Thanks so much.
6 We can call it a day.

7 (Thereupon, the public meeting
8 was concluded at 7:04 p.m.)

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) 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 26th day of June, 2019.

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

My commission expires April 8, 2023.

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Photographs

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WRITTEN PUBLIC COMMENTS

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No written comments were received during the public notification period.

Oral comments were provided during the public meeting.
The comments and the Army's responses are provided in the public meeting transcript and the site-specific Records of Decision.

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