

**Ravenna Army Ammunition Plant Restoration Program**

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

Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-06 C Block Quarry  
(final version dated March 25, 2020)

Proposed Plan for Soil, Sediment, and Surface Water at RVAAP-50 Atlas Scrap Yard  
(final version dated June 4, 2020)

**Public Comment Period:** August 17, 2020 to September 16, 2020

**Public Meeting:** August 26, 2020

**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**

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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

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## 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 Wednesday, August 26, 2020 for Army National Guard Release of the Proposed Plans for Atlas Scrap Yard and C Block Quarry**

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

Atlas Scrap Yard and C Block Quarry 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 Plans present the current status and information regarding the AOCs. The Proposed Plan for Atlas Scrap Yard presents two recommendations: 1) Excavation, Stabilization, and Off-site disposal of lead-contaminated soil; and 2) Ex-situ Thermal Treatment of PAH-contaminated soil. The Proposed Plan for C-Block Quarry presents a recommendation of Surficial Asbestos-Containing Material (ACM) Removal and Land Use Controls (LUCs).

On Wednesday, August 26, 2020, a public meeting will be held at the Camp James A. Garfield at 8451 State Route 5, Ravenna, Ohio 44266 beginning at 5:00 p.m., with an informal open house. Technical staff will be available to answer questions. At 5:30 p.m., the Army National Guard will briefly describe the assessment of the AOCs, present the preferred recommendations, and then request verbal or written comments from the public. Written comments regarding the recommendations may also be submitted to the Army National Guard during the 30-day comment period from August 17, 2020 to September 16, 2020. 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 September 16, 2020.

In accordance with CERCLA, the recommendations presented in the Proposed Plans are 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](http://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 August 17, 2020 to September 16, 2020. 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](http://www.rvaap.org)) or call Katie Tait at 614-336-6136.

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## **Affidavits**

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Affidavit of Publication, Tribune Chronicle, August 16, 2020 and August 23, 2020

PROOF OF PUBLICATION

STATE OF OHIO  
TRUMBULL COUNTY

SS: CONNIE PACEK

BEING DULY SWORN, UPON OATH STATES THAT SHE IS AN AUTHORIZED REPRESENTATIVE OF EASTERN OHIO NEWSPAPERS INC., PUBLISHERS OF THE TRIBUNE CHRONICLE AND THE VINDICATOR (an edition of the Tribune Chronicle), NEWSPAPERS PRINTED AND IN THE GENERAL CIRCULATION OF TRUMBULL, MAHONING, COLUMBIANA COUNTIES IN OHIO AND IN MERCER COUNTY IN PENNSYLVANIA.

THE ATTACHED ADVERTISEMENT WAS PUBLISHED IN

THE TRIBUNE CHRONICLE  
 THE VINDICATOR

EVERY: SUNDAY  
FOR TWO CONSECUTIVE WEEKS AND

THAT THE FIRST INSERTION WAS ON SUNDAY  
THE 16th DAY OF AUGUST 2020

SWORN TO BEFORE ME AND SUBSCRIBED IN MY PRESENCE ON THIS  
26TH DAY OF AUGUST 2020

*[Signature]*  
NOTARY PUBLIC



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

ADVERTISING COST \$ 724.84

**PUBLIC NOTICE**  
**Proposed Plans for Atlas Scrap Yard and C Block Quarry at the Former Ravenna Army Ammunition Plant (RYAAP) Available for Public Comment**

The Proposed Plans for the Atlas Scrap Yard and Proposed Plan presents two recommendations: 1) Excavation, Stabilization, and On-site disposal of lead-contaminated soil; and 2) Ex-situ Thermal Treatment of PAH-contaminated soil. The Proposed Plan for C-Block Quarry presents a recommendation of Surface Assesses-for Relining Material (ACM) Removal and Land Use Controls (LUCs). Each Proposed Plan provides the rationale for these recommendations.

The Proposed Plans are available at [www.rvaap.org](http://www.rvaap.org) and the information repositories listed below:

Newton Falls Public Library  
204 South Canal Street  
Newton Falls, Ohio 44444

Feed Memorial Library  
167 East Main Street  
Ravenna, Ohio 44266

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 recommendations in the Proposed Plans. Oral and written comments will be accepted at the meeting. Written comments may also be mailed to the Camp James A. Garfield Environmental Office: 1436 State Route 534 SW, Newton Falls, OH 44444. Comments will be accepted during the public comment period from August 17, 2020 to September 16, 2020.

Due to COVID-19 safety precautions, face coverings are mandatory and social distancing will be observed. The public meeting will be held at an outdoor pavilion (weather permitting) or alternate location within Camp James A. Garfield. Once you arrive at Camp James A. Garfield, the guard will provide directions to the meeting venue.

The public meeting is scheduled for:  
**Wednesday August 26, 2020**  
at:  
Camp James A. Garfield (Main Entrance)  
8451 State Route 5  
Ravenna, OH 44266  
5:30 pm Open House  
5:00 pm Public Meeting

For more information or if you need special accommodations to attend, please contact Katie Tait at 614-336-6136. #5294

Affidavit of Publication, Record-Courier, August 16 , 2020 and August 23, 2020

31193993

**Proof of Publication**

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

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

30 Record-Courier a newspaper printed and published in the city of Kent, and of General circulation in the County of Portage, State of Ohio, and personal knowledge of the facts herein stated and that the notice hereto annexed was Published in said newspapers for 2 insertions on the same day of the week from and after the 16th day of August, 2020 and that the fees charged are legal.

Teresa Smilam

Name of Account: Leidos  
Ad Number: 12665977  
No. of Lines: 28

Day(s) Published: 08/16, 08/23.  
Printers Fee: \$240.40

Sworn to and subscribed before this 25th day of August, 2020.

Elizabeth McDaniel

Elizabeth McDaniel  
Notary Public  
Commission Expires June 19, 2021

# Public Notice



## Proposed Plans for Atlas Scrap Yard and C Block Quarry at the Former Ravenna Army Ammunition Plant (RVAAP) Available for Public Comment

The Proposed Plans for two Areas of Concern at the former RVAAP are available for public comment. The Atlas Scrap Yard Proposed Plan presents two recommendations: 1) Excavation, Stabilization, and Off-site disposal of lead-contaminated soil; and 2) Ex-situ Thermal Treatment of PAH-contaminated soil. The Proposed Plan for C-Block Quarry presents a recommendation of Surficial Asbestos-Containing Material (ACM) Removal and Land Use Controls (LUCs). Each Proposed Plan provides the rationale for these recommendations.

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<b>Wednesday August 26, 2020</b>	at:
5:00 pm Open House	<b>Camp James A. Garfield (Main Entrance)</b>
5:30 pm Public Meeting	8451 State Route 5
	Ravenna, OH 44266

RC, Aug 16, 23, 2020, 12665977

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 C Block Quarry and Atlas Scrap Yard at the Former Ravenna Army Ammunition Plant

**PLEASE PRINT**

LOCATION: Camp James A. Garfield; Ravenna, OH

DATE: August 26, 2020

TIME: 5:30 p.m.

Name	Address/City/State/Zip	Phone	Email
Katie Tait			
Jed Thomas			
Kevin Seolok			
Walter Adams			
Samantha Caldwell			
Ryan Larkin			
Barbara Jones			
Jon Jones			
Sarah Lock			

CAMP JAMES A. GARFIELD PUBLIC MEETING SIGN-IN SHEET

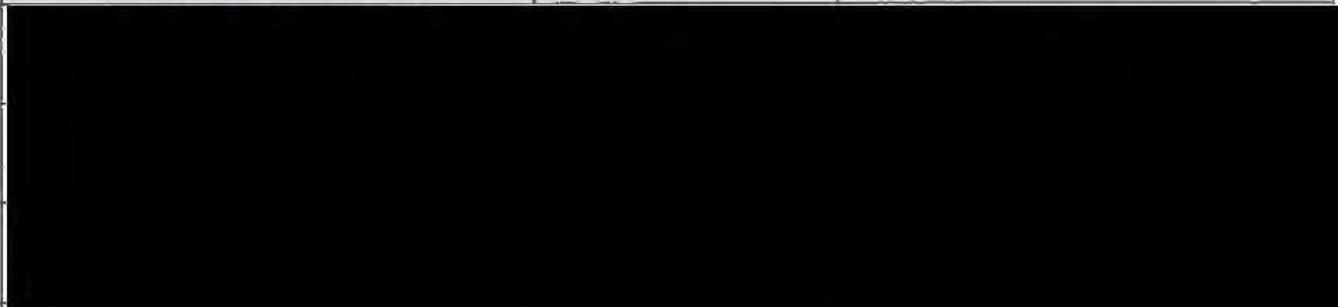
**Proposed Plan for C Block Quarry and Atlas Scrap Yard at the Former Ravenna Army Ammunition Plant**

**PLEASE PRINT**

**LOCATION:** Camp James A. Garfield; Ravenna, OH

**DATE:** August 26, 2019

**TIME:** 5:30 p.m.

Name	Address/City/State/Zip	Phone	Email
Tina Lemley			
Gary Lemley			
Danielle Anderson			

# **Presentation**

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Proposed Plans for:

C Block Quarry  
Atlas Scrap Yard

Former Ravenna Army Ammunition Plant  
Ravenna, Ohio

*Presented by:*

**Heather Adams, P.G. – Leidos**

*August 26, 2020*



US Army Corps of Engineers®

# Welcome!



## Areas of Concern

Two areas of concern (AOCs) addressing soil, sediment, and surface water:

- C Block Quarry
- Atlas Scrap Yard

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



## Presentation Agenda

- Description of CERCLA
- Site evaluation
- Site features
- Historical operations
- Remedial Investigations and conclusions
- Feasibility Study and preferred remedial alternative
- Public participation
- Questions

# 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 cleanup 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 cleanup activities.
- This phase of the CERCLA process is to seek input from the public on the Preferred Alternative.



# CERCLA Site Evaluation



- For each site, we will discuss the investigations conducted and summarize the following evaluations provided in the Remedial Investigation Report:
  - **Human health risk assessment (HHRA)** – Conducted to determine if chemicals in soil, sediment, or surface water pose unacceptable risk.
  - **Ecological risk assessment (ERA)** – Conducted to evaluate 1) if important or significant ecological resources are at a site (e.g., wetlands, protected species); and 2) if chemical contamination requires an action to protect those resources.
  - **Fate and transport assessment** – Conducted to determine if chemicals at the site may adversely impact groundwater.
- These assessments determine if a site can be used for:
  - **Unrestricted (Residential) Land Use** – The Army can use the site with no restrictions.
  - **Commercial (Industrial) Land Use** – The Army can use the site, but restrictions will be placed on the site.



## C Block Quarry is RVAAP-06 Atlas Scrap Yard is RVAAP-50

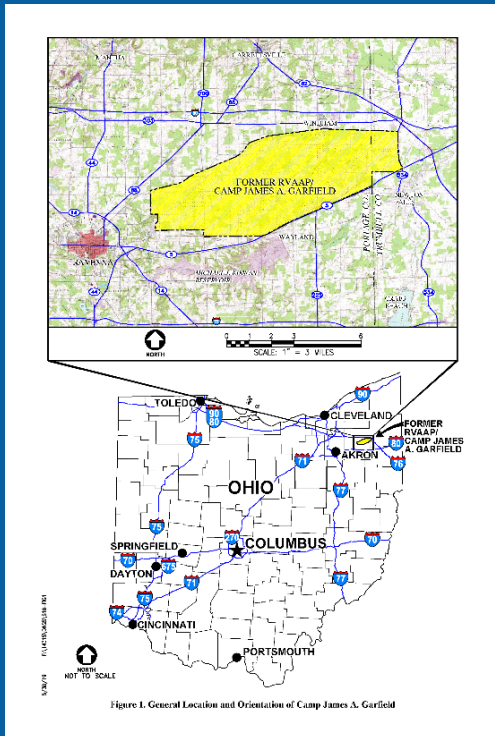


Figure 1, refer to handout.

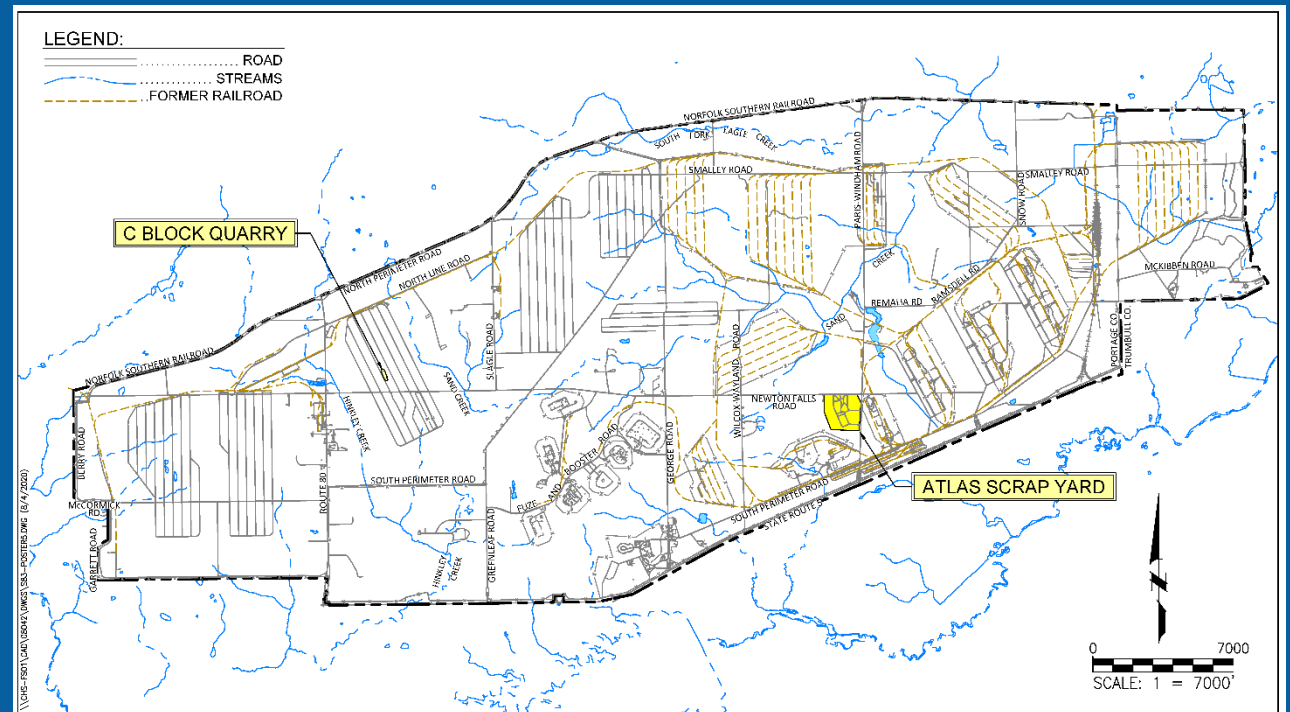
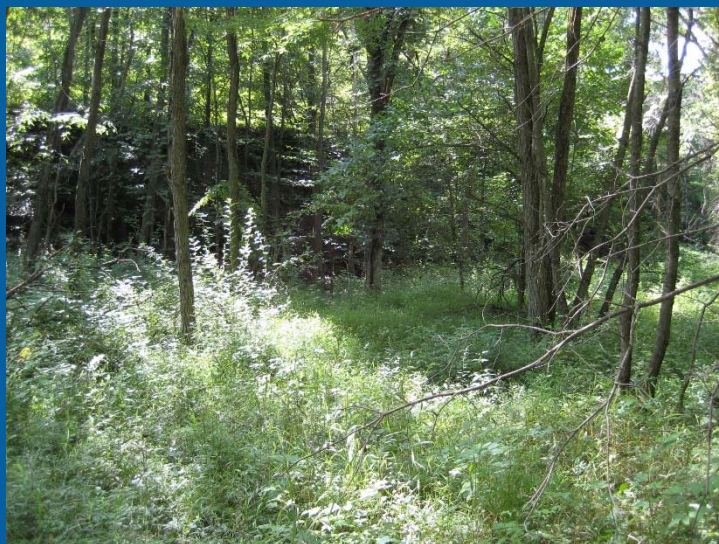


Figure 2, refer to handout.

# C Block Quarry Site Features



- Approximately 0.96-acre AOC.
- Located in the northwestern portion of CJAG, at the Block C Storage Area (contains 99 above-ground storage igloos).
- Located between Roads 3C and 4C of the Block C Storage Area (refer to Figure 3, handout).
- C Block Quarry is located on a sandstone bedrock high.
- Surface water occurs intermittently as stormwater runoff flowing radially toward the quarry bottom.

# C Block Quarry

## 1959 Aerial Photograph

- Block C Storage Area.
- Block C Quarry.



Parallel rows of 99 aboveground reinforced concrete igloos (formerly stored munitions).

Figure 3, refer to handout.



## *C Block Quarry* *Historical Operations*



- 1940s and 1950s – The quarry was mined for sandstone.
- March 1950 – A conference was held to determine waste disposal for the former RVAAP.
  - C Block Quarry was chosen for facility waste disposal.
  - Wastes included sulfuric acid, nitric acid, mercury, chromic acid, phosphoric acid plus accelerator, alkali compound stripper, and surfactants commonly used in detergents.
- 1950s and 1960s – Used as a disposal area for annealing process wastes.
- Currently – Unused, heavily forested with brush and trees.



# C Block Quarry

## Previous Investigations



### Historical Assessments and Investigations:

- 1982 Soil and Sediment Analysis
- 1982 Installation Reassessment of RVAAP
- 1986 Soil Contamination Survey
- 1989 RCRA Facility Assessment
- 1996 Preliminary Assessment for the Characterization of Areas of Contamination
- 1996 Relative Risk Site Evaluation

### Remedial Investigations:

- 2004/2005 Characterization of 14 AOCs
  - Assessed surface soil in the C Block Quarry.
- 2010 PBA08 Remedial Investigation
  - Assessed surface and subsurface soil.
  - Completed vertical delineation of contamination where previous surface soil data exceeded screening criteria.
  - Completed an asbestos survey to address suspected asbestos-containing material (ACM) identified during 2008 site walk.
- 2012 PBA08 Remedial Investigation
  - Sampling to characterize chromium in soil.



# *C Block Quarry*

## *Remedial Investigations*



- Remedial Investigation Summary
  - Multiple evaluations and investigations were conducted to assess surface and subsurface soil at the C Block Quarry.
  - The total number of samples collected include:
    - Twenty-one surface soil
    - Ten subsurface soil
    - Seven sediment
    - Five surface water
    - Six building debris
  - The following chemical groups were analyzed during the investigations:
    - Metals, explosives, propellants, SVOCs, VOCs, PCBs, nitrates, herbicides, and pesticides.



# C Block Quarry

## Conclusions of **Remedial Investigations**



- Nature and extent of contamination is defined. No further sampling is required to characterize surface or subsurface soil.
- Fate and transport modeling concluded that contaminant migration chemicals of concern in soil are not adversely impacting groundwater, and future impacts are not predicted.
- No further action for soil is required to protect groundwater.
  - Groundwater will continue to be evaluated under the FWGWMP.
- The ERA concluded that no further action is required to protect ecological resources.
- The HHRA identified the following locations and chemicals as requiring remediation:
  - Soil at and near sample locations CBLss-003M and CBLss-005M – Soil contaminated with hexavalent chromium and friable ACM.



# C Block Quarry Contamination Extent



- CBLss-003M and CBLss-005M
  - Both locations exceeded Residential Cleanup Goal of 3 mg/kg.
  - ACM (transite and black tar paper) mixed with soil at both locations.

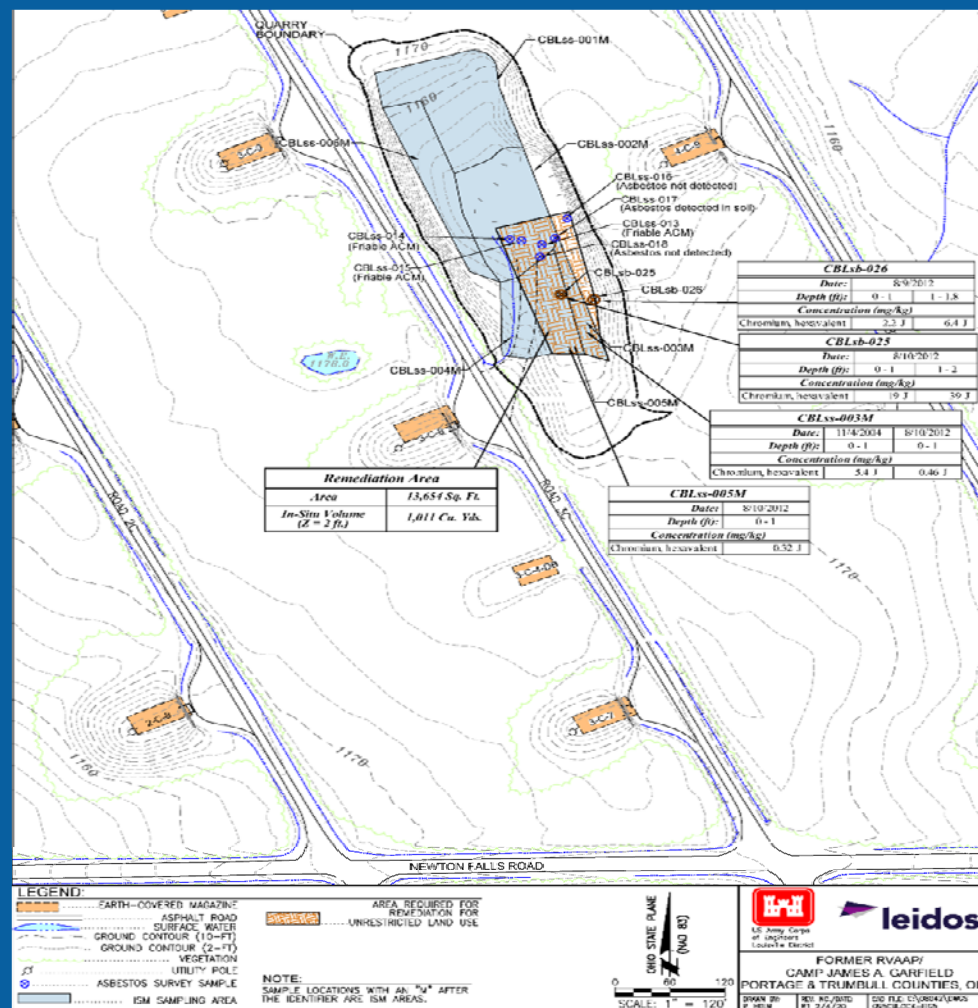


Figure 4, refer to handout.

# **C Block Quarry**

## **Remedial Action Objectives**



### **Prevent:**

- (1) Resident Receptor Exposure to hexavalent chromium in soil above 3 mg/kg at and near sampling locations CBLss-003M and CBLss-005M, and**
- (2) Resident Receptor and Industrial Receptor Exposure to friable ACM at or near sampling locations CBLss-003M and CBLss-005M.**



# *C Block Quarry*

## *Feasibility Study*



The following remedial alternatives were developed for consideration:

- Alternative 1: No Action (required by CERCLA)
- Alternative 2: Surficial ACM Removal and Land Use Controls (LUCs)
  - Remove surficial ACM through non-intrusive methods to prevent Industrial Receptor exposure to ACM in surface soil.
  - Implement LUCs to prevent the Industrial Receptor from digging and possibly encountering ACM in subsurface soil.
  - Implement LUCs to prevent Resident Receptor use of the site.
  - Perform 5-year reviews to assess effectiveness of LUCs and determine if modifications are required.
- Alternative 3: Excavation and Off-Site Disposal (Attain Unrestricted Residential Land Use)
  - Conduct subsurface evaluation of ACM.
  - Complete pre-excavation and waste characterization sampling.
  - Excavation of surface and subsurface soil to remove COC-contaminated soils and ACM.
  - Site restoration (backfilling, grading, and seeding).



# C Block Quarry

## Feasibility Study – Alternative Evaluation



These three 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.**





# C Block Quarry

## Feasibility Study – Alternative Evaluation



- Modifying Criteria
  - Formally evaluated as part of the Record of Decision and after the public has had the opportunity to comment on the Proposed Plan.
    - **State acceptance** – Comments received from state agencies (Ohio EPA).
    - **Community acceptance** – Considers comments made by the community, including stakeholders, on the remedial alternatives being considered.



## **C Block Quarry Preferred Alternative**



### **Alternative 2: Surficial ACM Removal and Implementation of LUCs**

- Implementation of this alternative will result in the removal of surficial ACM, prevent unrestricted residential land use, and prohibit digging by the industrial receptor.
- This alternative meets the threshold and primary balancing criteria, and the established Remedial Action Objectives.
- Implementation will comply with ARARs (federal and local laws/standards).
- Measures will take place to ensure the site workers and community are not impacted during implementation.
- Long-term effectiveness – Protective of industrial land use with a no digging restriction. The Army does not intend future unrestricted (Residential) land use at C Block Quarry.
- Estimated Cost for Alternative 2 (\$108,534) is less than the estimated cost to implement Alternative 3 (\$390,224).



# Atlas Scrap Yard Site Features

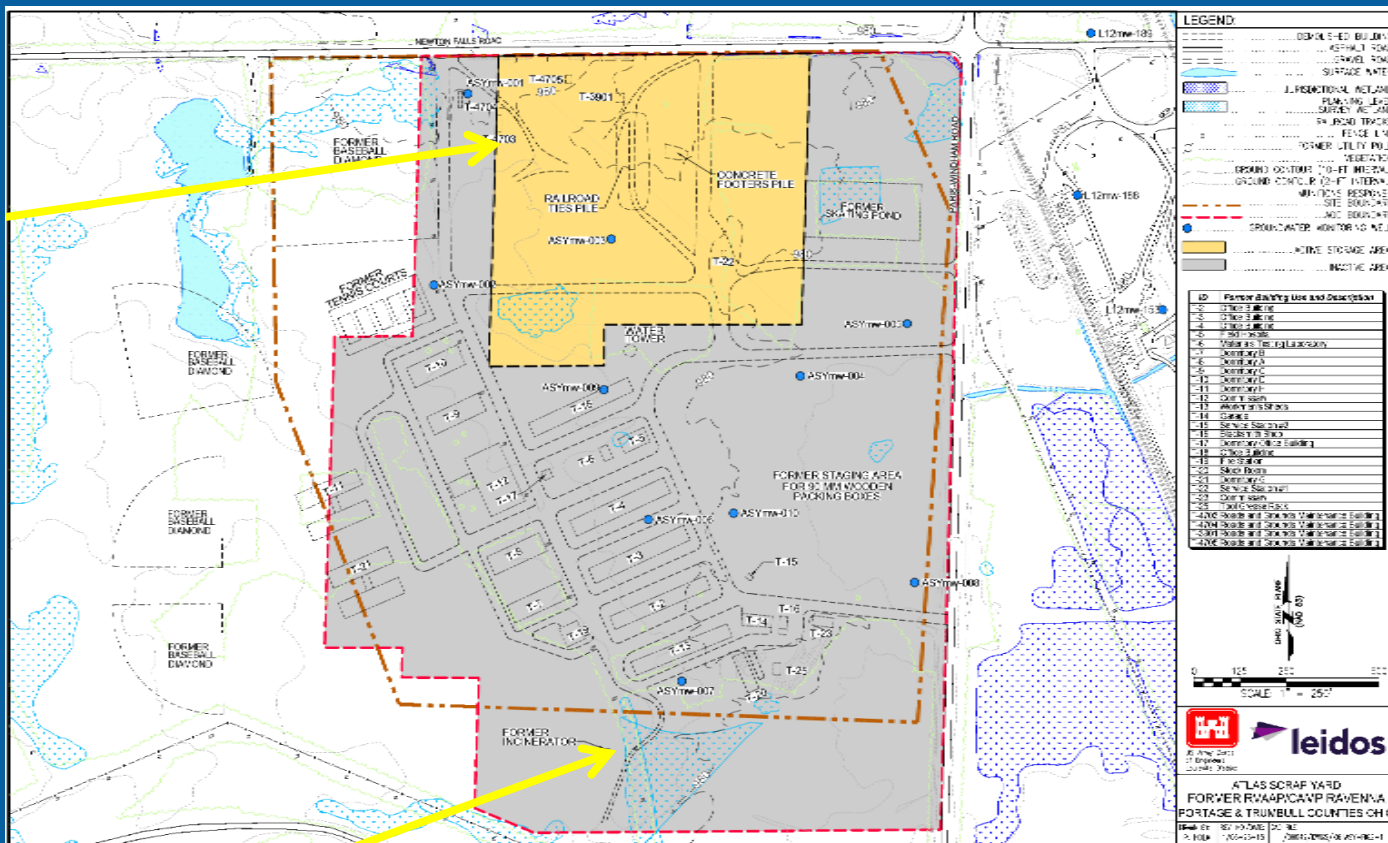


- Located in the southeastern portion of CJAG, southwest of the intersection at Newton Falls Road and Paris-Windham Road.
  - 73-acre AOC.
  - Interior composed of shrub/scrub vegetation. Forested around the perimeter. North-central portion is sparsely vegetated (cover mostly gravel and mulch-like material).
  - All buildings/structures demolished except a brick structure associated with the former incinerator and the slab of the former Building T-3901.
- Remaining features include several slag/gravel access roads that enter from the north and east, a crushed slag parking lot in the north-central portion, and drainage ditches that parallel access roads.
  - Topographically, the site is a low area (higher in the northwest, lower in the central-east).
  - No perennial surface water. However, nine small wetlands were identified.



# Atlas Scrap Yard Site Features

Location of the Former Storage Area



Location of the Former Incinerator Area

Figure 5, refer to handout.

# *Atlas Scrap Yard*

## *Historical Operations*



- Atlas Scrap Yard has served several operational functions over the history of the former RVAAP – Never used for munitions production activities.
- 1940-1945 – Served as a construction camp to house workers and families during construction of the facility.
- 1945 (end of WWII) – Majority of buildings and structures were demolished or relocated.
- Post WWII through 1950s – Four new structures added. These buildings supported facility road and ground maintenance activities.
- Post Vietnam War (1975) – All remaining structures razed.
- North-central portion of Atlas Scrap Yard used as a storage/stockpile area for bulk materials (gravel, railroad ballasts, sand, culvert pipe, railroad ties, and telephone poles).





# Atlas Scrap Yard

## Previous Investigations



### Historical Assessments and Investigations:

- 1978 Installation Assessment
- 1996 Preliminary Assessment for the Characterization of Areas of Contamination
- 1996 Relative Risk Site Evaluation
- 1998 Environmental Baseline Survey of RVAAP

### Remedial Investigations:

- 2004/2005 Characterization of 14 AOCs
  - Assessed surface soil, collected geotechnical data, and completed a geotechnical investigation over two former service stations with underground storage tanks.
- 2010 PBA08 Remedial Investigation
  - Completed a source area investigation for surface soil to delineate the extent of previously identified contamination.
  - Large-grid Incremental Sampling Methodology (ISM)
    - Purpose – Complete environmental characterization for the entire Atlas Scrap Yard
    - Grids – Ranged in size from 3.1 to 4.2 acres.
- 2011 Supplemental Sampling
  - Refine polycyclic aromatic hydrocarbon (PAH) contamination at the Former Storage Area.
    - Features targeted during sampling activities – Debris Piles (railroad ties, concrete, rubble), Parking Areas made of slag/asphalt gravel (west of railroad ties), and Ditch along access road (entering Atlas Scrap Yard from Newton Falls Road).



# Atlas Scrap Yard Remedial Investigations



- Summary
  - Multiple evaluations and investigations were conducted to assess surface soil, subsurface soil, sediment, and surface water at the Atlas Scrap Yard.
  - Characterization of 14 AOCs
    - Thirty-three ISM soil samples.
    - One ISM sediment sample.
    - Geotechnical borings.
    - Additional activities completed but not included in characterization.
  - 2010 Remedial Investigation
    - Nineteen ISM surface soil samples.
    - Eighteen large-grid ISM soil samples.
    - Three discrete chromium speciation surface soil samples.
    - Nineteen subsurface soil borings.
    - One co-located sediment surface water sample from Load Line 12 incorporated into evaluation.
    - Surface water from Atlas Scrap Yard discharges to Load Line 12.



# Atlas Scrap Yard Remedial Investigations



- Summary (Continued)
  - 2011 Supplemental Sampling.
    - Sixteen ISM surface soil samples (refine delineation of PAH contamination at Debris Piles, Parking Area, and Ditch).
  - The following chemical groups were analyzed during the investigations:
    - Metals, explosives, propellants, SVOCs, VOCs, PCBs, nitrates, herbicides, and pesticides.





# *Atlas Scrap Yard*

## *Remedial Investigations Conclusions*



- Nature and extent of contamination is defined. No further sampling is required to characterize surface soil, subsurface soil, surface water, and sediment.
- Fate and transport modeling, along with weight-of-evidence factors, concluded that contaminant migration chemicals of concern in sediment and soil are not adversely impacting groundwater.
- No further action for sediment or soil is required to be protective of groundwater.
  - Groundwater will continue to be evaluated under the FWGWMP.
- ERA
  - Level I Scoping ERA determined a Level II Assessment was required.
  - Level II ERA determined that no further action is required to protect ecological resources.



# *Atlas Scrap Yard*

## *Remedial Investigations Conclusions*



- The HHRA concluded that there were no chemicals of concern in surface water, sediment, or subsurface soil that would require a Remedial Action to be protective of the Resident Receptor, Industrial Receptor, or National Guard Trainee.
- The HHRA did identify two areas at Atlas Scrap Yard that would require a remedial action and evaluation under a Feasibility Study.
  - Former Incinerator Area (FIA)
  - Former Storage Area (FSA)



# Atlas Scrap Yard

## Former Incinerator Area (FIA)



- Background

- Located in the southern section of Atlas Scrap Yard.
- The former incinerator consists of a 12-foot-long by 8-foot-wide primary chamber that is empty.
- A 14-foot-high chimney is currently attached to the primary chamber.
- The outside structure associated with the former incinerator is currently present.
- All other components of the incinerator have been razed.

(Refer to Figure 5 of the handout for location of FIA.)

# Atlas Scrap Yard Former Incinerator Area (FIA)



- Remedial Investigation Conclusions for the FIA
  - Elevated lead concentrations identified in surface soil (0-1 foot BGS).
  - General area around sampling locations ASYss-019M and ASYsb-064 will require remediation to be protective of Unrestricted (Residential) Land Use, National Guard Training Land Use, and Commercial Industrial Land Use.
  - Lead concentrations at these sample locations exceeded Cleanup Goals for the Resident Receptor, National Guard Trainee, and Industrial Receptor.
  - Cleanup Goal for the Resident Receptor is 400 mg/kg.
  - No other areas at Atlas Scrap Yard require remediation for lead.
  - No other chemicals of concern require remediation at the FIA.

(Refer to Figure 6 of the handout for extent of lead contamination and area requiring remedial action.)



# Atlas Scrap Yard Former Incinerator Area (FIA)

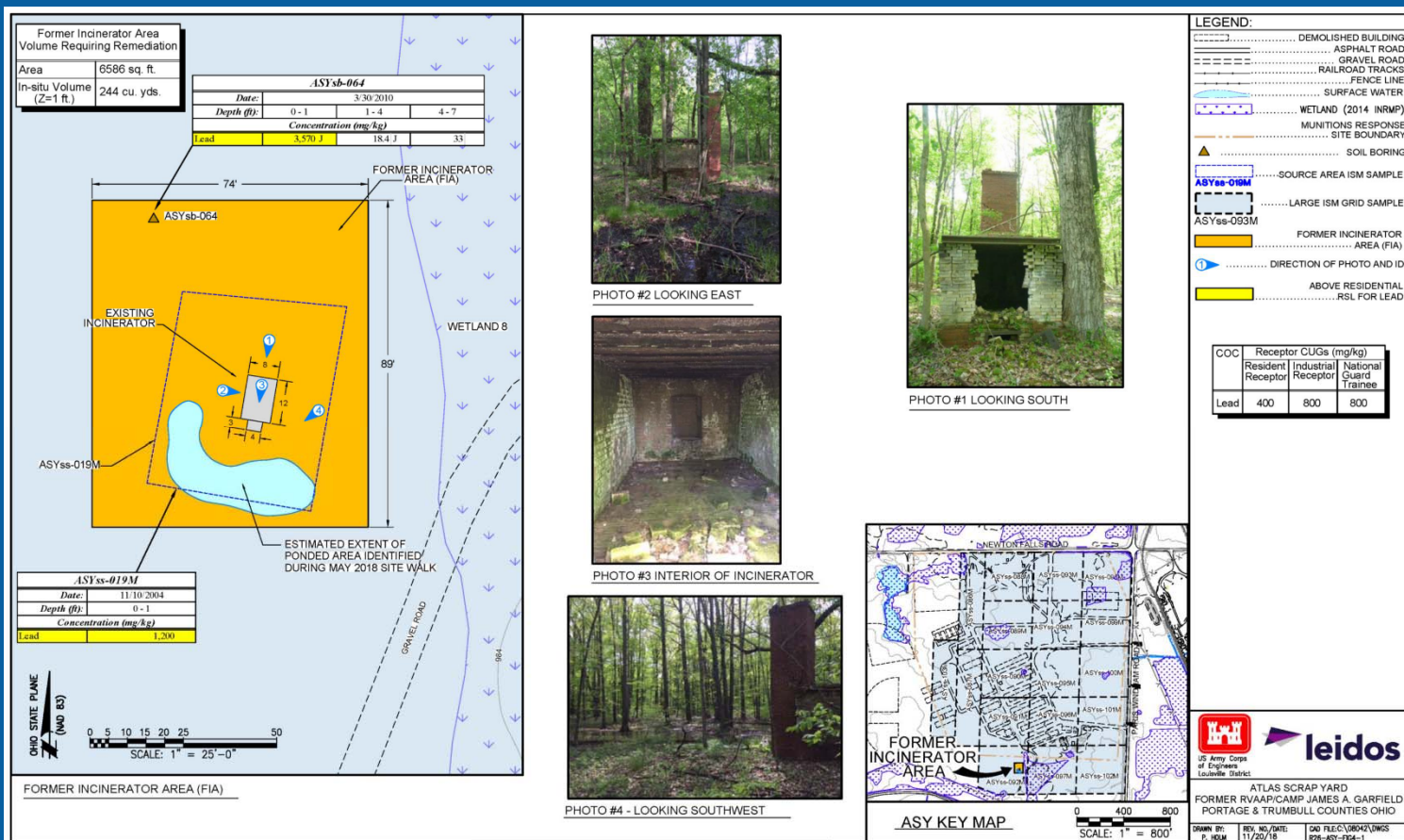


Figure 6, refer to handout.



# *Atlas Scrap Yard*

## *FIA – Remedial Action Objective*



**Prevent:**

- (1) Resident Receptor Exposure to lead in surface soil (0-1 foot BGS) above 400 mg/kg at the FIA.**



# Atlas Scrap Yard FIA – Feasibility Study



The following remedial alternatives were developed for consideration:

- Alternative 1: No Action (required by CERCLA).
- Alternative 2: Excavation, Stabilization, and Off-Site Disposal of Surface Soil at the FIA.
  - Achieves Unrestricted Residential Land Use.
  - The incinerator will be demolished and removed.
    - Brick and grout tested for TCLP metals, PCBs, and asbestos (September 2018 – Results under regulatory limits).
  - Other materials within the incinerator will require waste characterization.
  - Pre-excavation delineation sampling required.
  - Excavation estimated at 244 cubic yards.
  - Excavated soil will be stabilized on-site and tested until confirmed non-hazardous.
  - Post confirmatory sampling of excavation floor and side walls.
  - Restoration (backfilling, regrading, and seeding).



# Atlas Scrap Yard FIA – Feasibility Study



## Remedial alternatives (continued):

- Alternative 3: Excavation and Off-Site Disposal of Surface Soil.
  - Achieves Unrestricted Residential Land Use.
  - Other materials within the incinerator will require waste characterization.
    - Brick and grout tested for TCLP metals, PCBs, and asbestos (September 2018 – Results under regulatory limits).
  - Pre-excavation delineation sampling required.
  - Contaminated soil would be treated as hazardous waste.
  - Post confirmatory sampling of excavation floor and side walls.
  - Restoration (backfilling, regrading, and seeding).





# Atlas Scrap Yard

## FIA Feasibility Study – Alternative Evaluation



These three 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 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.**



# Atlas Scrap Yard

## *FIA Feasibility Study – Alternative Evaluation*



- Modifying Criteria
  - Formally evaluated as part of the Record of Decision and after the public has had the opportunity to comment on the Proposed Plan.
    - **State acceptance** – Comments received from state agencies (Ohio EPA).
    - **Community acceptance** – Considers comments made by the community, including stakeholders, on the remedial alternatives being considered.



# *Atlas Scrap Yard*

## *FIA – Preferred Alternative*



### **Alternative 2: Excavation, Stabilization, and Off-Site Disposal of Surface Soil at the FIA**

- Attains Unrestricted Residential Land Use.
- Green and highly sustainable alternative.
- Reduces mobility of contaminants that will be disposed of in an off-site facility.
- Technically and administratively feasible as excavation and stabilization agents are common and successful in treating lead-contaminated soil.
- Long-term effectiveness – Highly effective as contaminants will be removed from the site.
- Estimated cost for Alternative 2 (\$235,655) is less than estimated cost to implement Alternative 3 (\$372,578).



# *Atlas Scrap Yard*

## *Former Storage Area (FSA)*



- Background

- Located in the north-central section of Atlas Scrap Yard.
- Approximately 14.9 acres.
- Post Vietnam War (1975) – Used as a stockpile storage area for bulk material, including gravel, railroad ballasts, sand, culvert pipe, railroad ties, and telephone poles.
- 2017 – Removal of railroad ties, timber, concrete, and asphalt.
  - 1,160 tons of rail ties and telephone poles.
  - 1,655 tons of concrete and asphalt.
  - Waste characterization sampling – non-hazardous.
  - Off-site disposal.

(Refer to Figure 5 of the handout for location of FSA.)



# Atlas Scrap Yard Former Storage Area (FSA)



- Remedial Investigation Conclusions for the FSA
  - PAHs detected at numerous sample locations at concentrations exceeding 2017 USEPA Resident Soil Regional Screening Levels (RSLs).
    - Refer to Figure 7 for the 2004/2005 and 2010 PAH results (handout).
    - Refer to Figure 8 for the 2011 PAH results (handout).
  - Large majority of exceedances are within the FSA.
  - Three locations outside the FSA exceed benzo(a)pyrene 2017 USEPA Resident Soil RSLs. However, remedial action is not required to be protective of Residential Receptor.
    - ASYss-069M the following Weight-of-Evidence was provided:
      - Four of five PAHs detected below RSLs.
      - Benzo(a)pyrene (1.7 mg/kg) slightly exceeds RSL (1.1 mg/kg).
      - Surface soil at boring ASYsb-059 (within ASYss-069M ISM ) was below Soil Resident RSLs. Subsurface soil was non-detect.
      - ISM location was taken within a larger ISM area (ASYss-091M) where PAH concentrations in surface soil were all below RSLs.

# Atlas Scrap Yard Former Storage Area (FSA)



- Remedial Investigation Conclusions for the FSA (continued)
  - ASYss-071M (Weight-of-Evidence)
    - Four of five PAHs detected below RSLs.
    - Large portion of sample area was located within the southern access road, which may have contributed to the elevated benzo(a)pyrene results.
    - ISM location was selected within a larger ISM area (ASYss-096M) where PAH concentrations in surface soil were all below RSLs.
  - ASYss-101M (Weight-of-Evidence)
    - Four of five PAHs detected below RSLs.
    - Benzo(a)pyrene (1.4 mg/kg) slightly exceeds RSL (1.1 mg/kg).
    - Sample location likely contributed to elevated benzo(a)pyrene. Adjacent to Paris-Windham Road and within the southern access road to Atlas Scrap Yard.



# Atlas Scrap Yard FSA – 2004/2005 and 2010 PAH Results

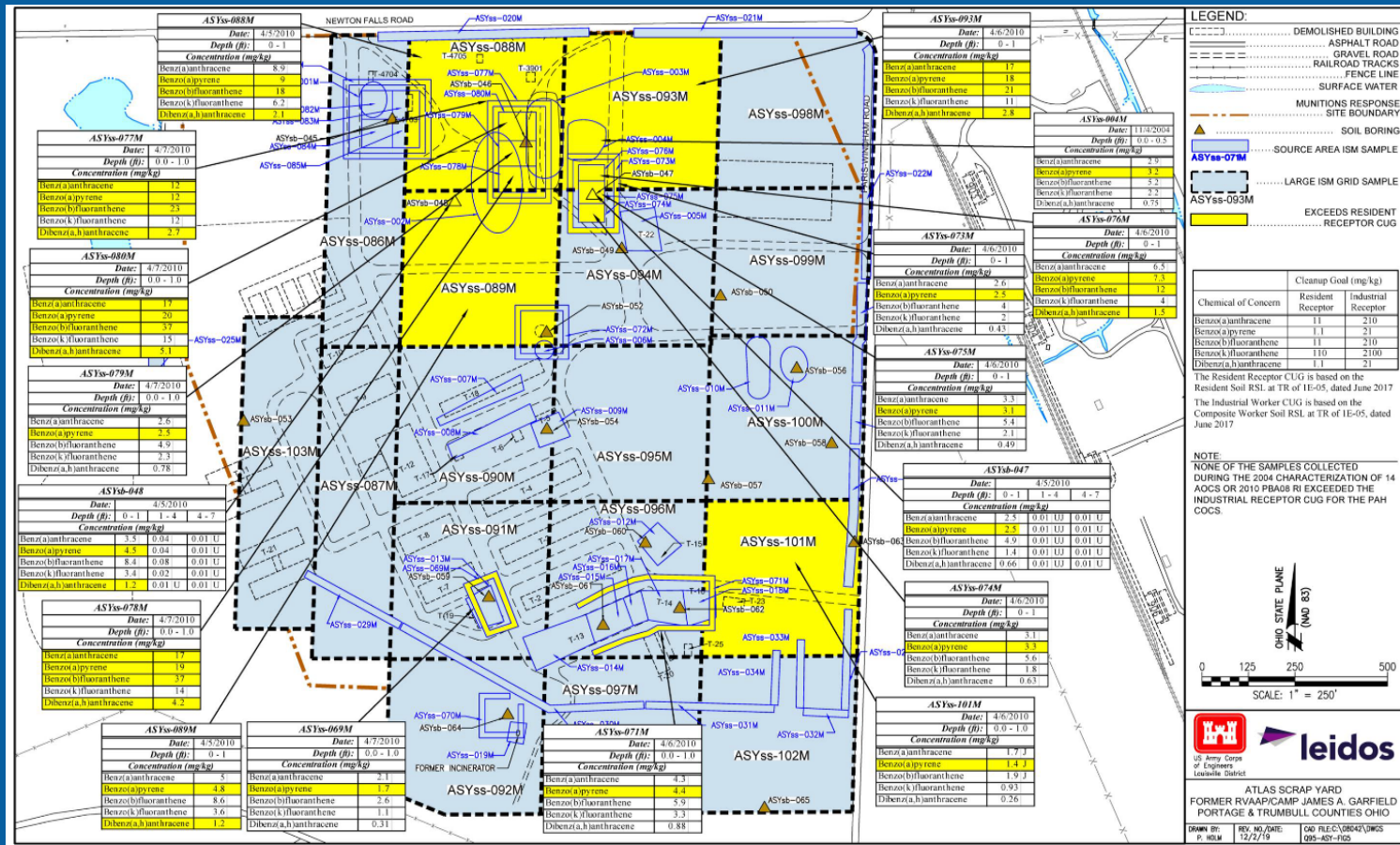


Figure 7, refer to handout.



# Atlas Scrap Yard FSA – 2011 PAH Results

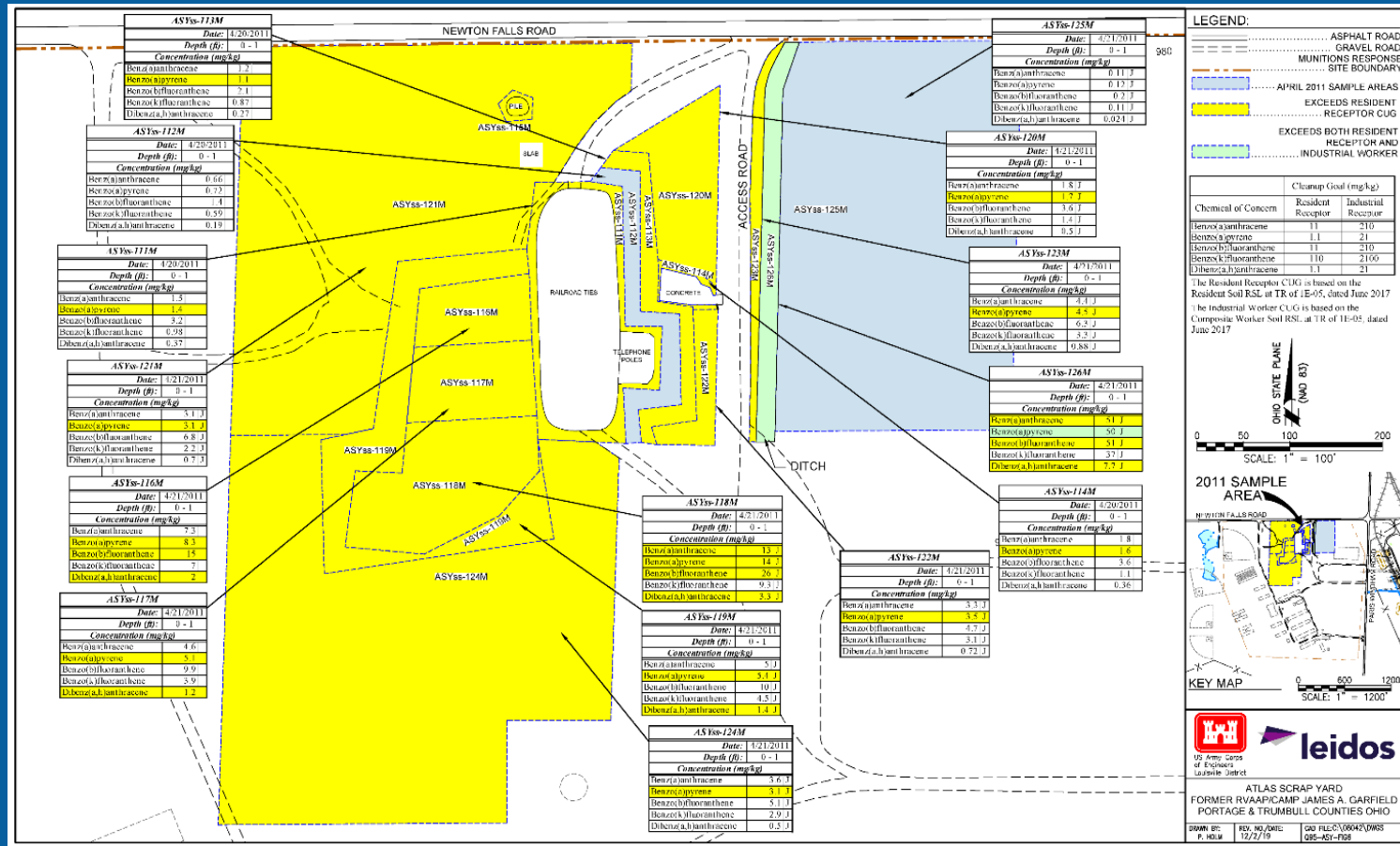


Figure 8, refer to handout.





# *Atlas Scrap Yard*

## *Former Storage Area (FSA)*



- Remedial Investigation Conclusions for the FSA (continued)
  - Remediation is required to be protective of the Industrial Receptor at location ASYss-126M (Refer to Figure 9, handout).
    - Benzo(a)pyrene concentration of 50 mg/kg.
    - Cleanup goal is 21 mg/kg.
  - Remediation is required at the entirety of FSA to attain Unrestricted Residential Land Use (Refer to Figure 10, handout).



# Atlas Scrap Yard

## FSA – Area Requiring Remedial Action (Commercial/Industrial)

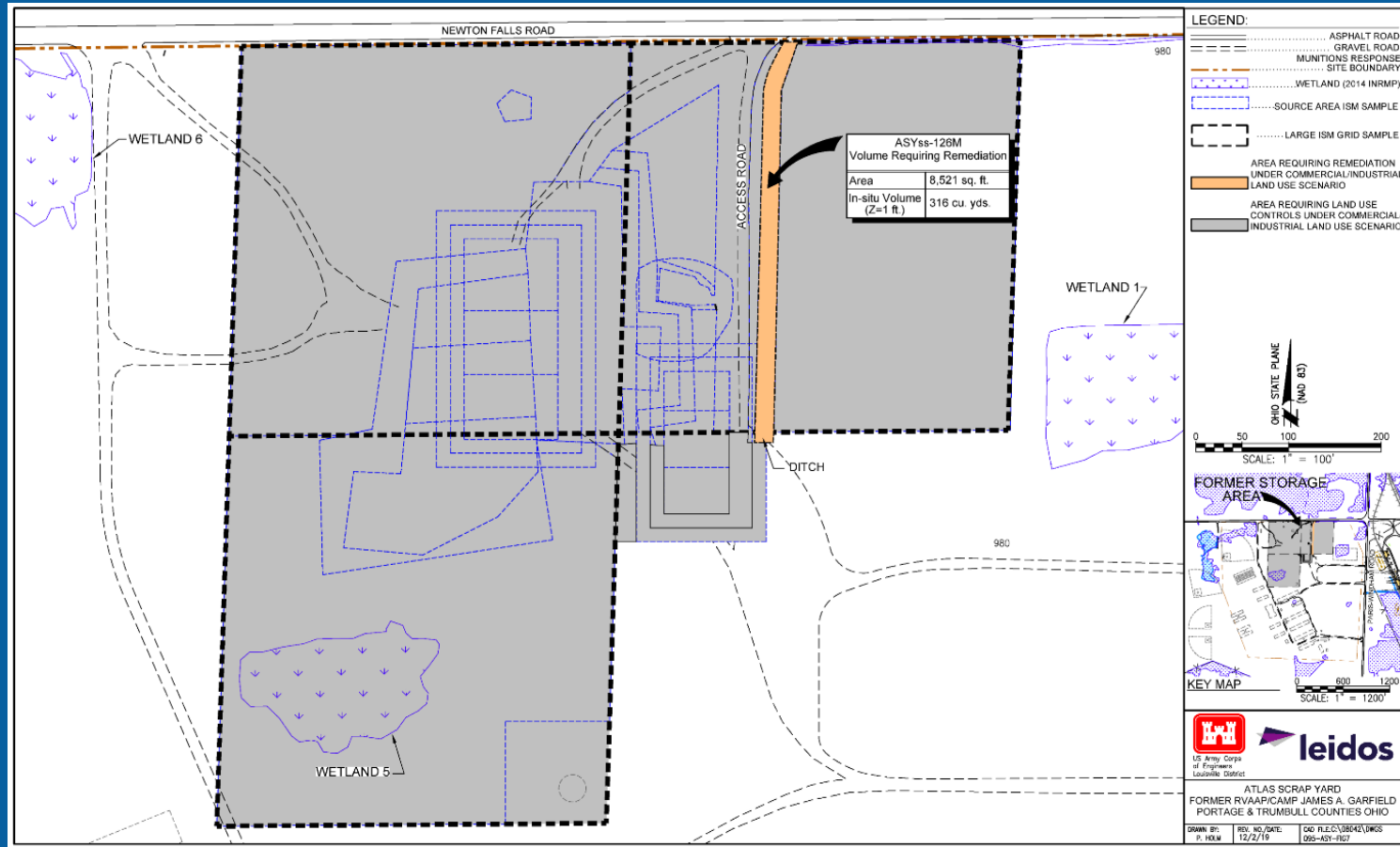


Figure 9, refer to handout.



# Atlas Scrap Yard

## FSA – Area Requiring Remedial Action (Residential/Unrestricted)

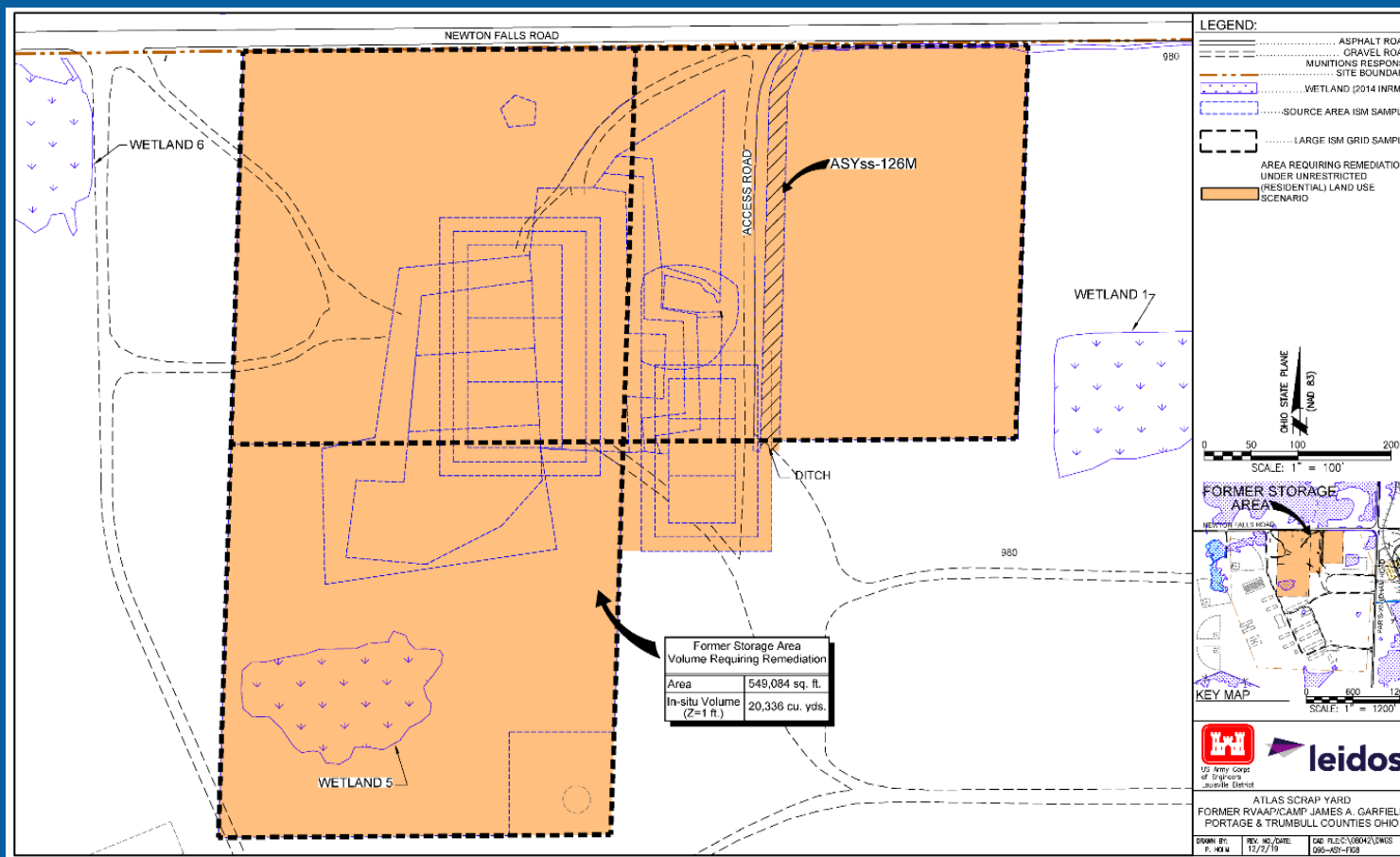


Figure 10, refer to handout.



# *Atlas Scrap Yard*

## *FSA – Remedial Action Objective*



### **Prevent:**

- (1) Resident Receptor Exposure to PAHs (benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, and dibenz[a,h]anthracene) in surface soil (0-1 foot BGS) above Cleanup Goals at the FSA.**



# Atlas Scrap Yard

## FSA – Feasibility Study



The following remedial alternatives were developed for consideration:

- Alternative 1: No Action (required by CERCLA).
- Alternative 2: Excavation and Off-Site Disposal of Surface Soil at ASYss-126M.
  - Achieves Commercial/Industrial Land Use.
  - Estimated excavation is 316 cubic yards.
  - Post confirmatory sampling of excavation floor and side walls.
  - Restoration (backfilling, regrading, and seeding).
  - PAH COCs will remain onsite above Residential Cleanup Goals.
  - LUCs to restrict Resident Receptor Exposure.
  - 5-Year reviews to assess effectiveness of LUCs.
- Alternative 3: Ex Situ Thermal Treatment of Surface Soil at ASYss-126M.
  - Achieves Commercial/Industrial Land Use.
  - Total estimated volume requiring treatment 473 cubic yards.
  - Excavated contaminated soil fed into treatment system.
  - Post treatment soil sampling and excavation floor and wall confirmation sampling.
  - Site restoration (treated soil backfilled, graded, and seeded).



# Atlas Scrap Yard

## FSA – Feasibility Study



### Remedial alternatives (continued):

- PAH COCs will remain on-site above Residential Cleanup Goals.
- LUCs to restrict Resident Receptor Exposure.
- 5-year reviews to assess effectiveness of LUCs.
- Alternative 4: Excavation and Off-Site Disposal of Surface Soil at FSA.
  - Achieves Residential Unrestricted Land Use.
  - Estimated excavation is 20,336 cubic yards.
  - Post confirmatory sampling of excavation floor and side walls.
  - Restoration (backfilling, regrading, and seeding).
- Alternative 5: Ex Situ Thermal Treatment of Surface Soil at FSA.
  - Achieves Residential Unrestricted Land Use.
  - Total estimated volume requiring treatment 30,505 cubic yards.
  - Excavated contaminated soil fed into treatment system.
  - Post treatment soil sampling and excavation floor and wall confirmation sampling.
  - Site restoration (treated soil backfilled, graded, and seeded).



# Atlas Scrap Yard

## FSA Feasibility Study – Alternative Evaluation



These 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 ARARs** – Assesses if the alternative comply 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.**



# Atlas Scrap Yard

## FSA Feasibility Study – Alternative Evaluation



- Modifying Criteria
  - Formally evaluated as part of the Record of Decision and after the public has had the opportunity to comment on the Proposed Plan.
    - **State acceptance** – Comments received from state agencies (Ohio EPA).
    - **Community acceptance** – Considers comments made by the community, including stakeholders, on the remedial alternatives being considered.





# *Atlas Scrap Yard*

## *FSA – Preferred Alternative*



### **Alternative 3: Ex Situ Thermal Treatment of Surface Soil at ASYss-126M**

- Attains Commercial and Industrial Land Use.
- Effective long-term treatment of benzo(a)pyrene in surface soil.
- Green and highly sustainable alternative for on-site treatment and reuse of soil.
- Reduces toxicity, mobility, and volume of contaminants in soil.
- Estimated cost for Alternative 2 is \$224,194, including an estimated \$97,978 for LUCs.
- In the event a thermal treatment system is not available, Alternative 2 (Excavation and Off-Site Disposal of Surface Soil at ASYss-126M) would be readily available.



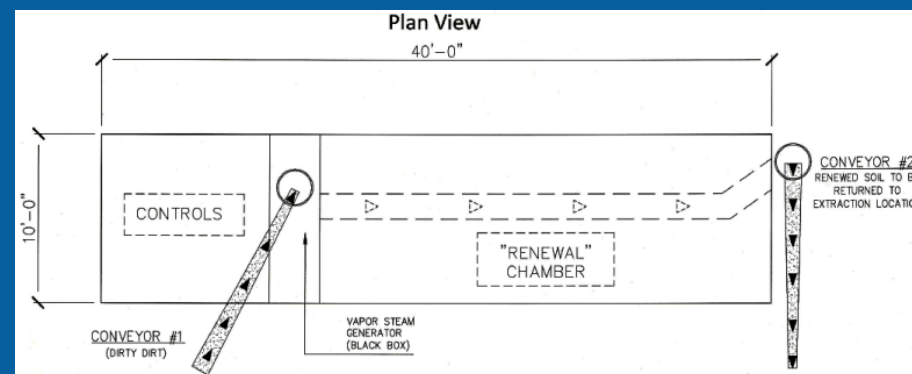
# Atlas Scrap Yard (FSA)

## Example of Thermal Treatment System



- 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.



# Atlas Scrap Yard (FSA)

## Areas Requiring LUCs with Preferred Alternative

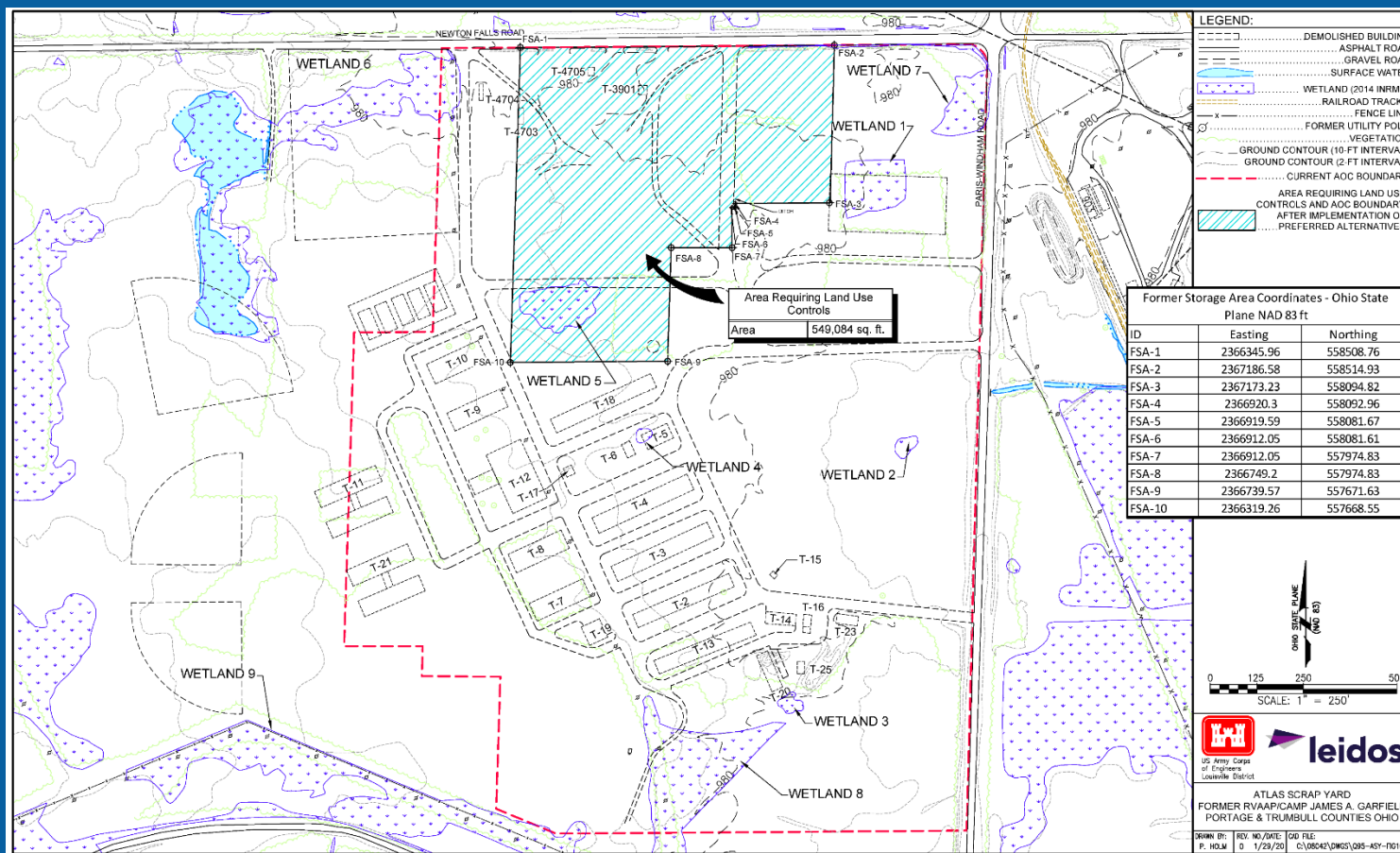


Figure 11, refer to handout.





# *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 CERCLA.
- Public comment period is August 17 to September 16, 2020.





# *Public Participation*

## *Your Comments and Inputs are Appreciated!*



- Provide written or verbal comments at this public meeting.
- Submit written comments by September 16, 2020 to the following address:

Camp James A. Garfield  
Environmental Office  
Attn: Katie Tait  
1438 State Route 534 SW  
Newton Falls, Ohio 44444

E-mail address: [kathryn.s.tait.nfg@mail.mil](mailto:kathryn.s.tait.nfg@mail.mil)



# Questions?

# **Court Reporter Transcript**

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PROPOSED PLANS  
FOR SOIL, SEDIMENT AND SURFACE WATER  
AT C BLOCK QUARRY AND ATLAS SCRAP YARD  
  
FORMER RAVENNA ARMY AMMUNITION PLANT  
RAVENNA, OHIO

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

PUBLIC MEETING  
Wednesday  
August 26, 2020

Camp James A. Garfield  
8451 State Route 5  
Ravenna, Ohio 44266

- - -

1     **APPEARANCES :**

2

3             Samantha Coldwell, Facilitator

4

5             Heather Adams, P.G.

6             Leidos

7             8866 Commons Boulevard

8             Twinsburg, Ohio 44087

9

10            Jed Thomas, PE, PMP

11            Environmental Engineer

12            Leidos

13            8866 Commons Boulevard

14            Twinsburg, Ohio 44087

15            330/405-5802

16            jed.h.thomas@leidos.com

17

18     **ALSO PRESENT :**

19            Kevin Sedlak, ARNG

20            Katie Tait, OHARNG

21                                   - - -

22

23

24

25

1                   **MS. COLDWELL:**           Good evening,  
2 everyone. Welcome to the public meeting. My  
3 name is Samantha Coldwell. I am a private  
4 citizen from Akron, Ohio. I am here tonight to  
5 serve as the meeting's facilitator.

6           This public meeting serves as one of several  
7 opportunities for public comment on the Army's  
8 proposed plans. I am responsible for ensuring  
9 that everyone who wishes to comment about the  
10 proposed plans has an opportunity to do so.

11           Before we get started tonight, please review  
12 the COVID-19 safety precautions. Please keep a  
13 face covering or mask on at all times. Please  
14 maintain a distance of at least six feet, and do  
15 not adjust the seating arrangements. Please take  
16 a moment to silence all electronic devices.

17           There is a rest room located just outside  
18 the garage door exit to your right. Please help  
19 yourself to the bottled water available located  
20 near the front entrance.

21           This public meeting will present the Army's  
22 proposed plans for soil, sediment and surface  
23 water media at two sites within the Former  
24 Ravenna Army Ammunition Plant. These two sites  
25 are C Block Quarry and Atlas Scrap Yard.

1           Comments received from the public on  
2           the proposed plans will be considered when  
3           determining the final remedy that will be  
4           documented in Records of Decision. The Records  
5           of Decision will include a Responsiveness  
6           Summary addressing public comments.

7           Tonight we have Kevin Sedlak representing  
8           the Army. In addition, we have a court reporter  
9           here to document tonight's meeting. Due to  
10          restriction on attendance in response to COVID-19  
11          safety precautions, representatives from the Ohio  
12          EPA could not attend this meeting.

13          However, Ohio EPA has asked that I read  
14          their concurrence letters during this public  
15          meeting for the administrative record. Please  
16          refer to your handouts for copies of the Ohio EPA  
17          approval letters.

18          The first approval letter is dated April 30,  
19          2020. The second paragraph reads, "Ohio EPA has  
20          no comments to the Final Proposed Plan. Based on  
21          the information contained in the Final Proposed  
22          Plan document, other investigation documents and  
23          reports, and Ohio EPA's oversight participation  
24          during the investigations, Ohio EPA concurs with  
25          the Final Proposed Plan for RVAAP-06, C Block

1 Quarry recommending Removal of Surficial Asbestos  
2 Containing Materials and Land Use Controls.

3 "If you have questions concerning this  
4 letter, please contact Kevin Palombo at 330-  
5 963-1292."

6 The second approval letter received, dated  
7 July 8, 2020, the second paragraph reads, "Ohio  
8 EPA has no comments on the Final Proposed Plan  
9 (PP). Based on the information contained in  
10 the Final PP document, other investigation  
11 documents and reports, and Ohio EPA's oversight  
12 participation during the investigation, Ohio EPA  
13 concurs with the Final PP document for soil,  
14 sediment and surface water at RVAAP-50 Atlas  
15 Scrap Yard recommending excavation, stabilization  
16 and off-site disposal of surface soil in the  
17 Former Incinerator Area to attain residential  
18 land use and ex-situ thermal treatment of surface  
19 soil in the Former Storage Area to attain  
20 commercial/industrial land use.

21 "If you have any questions concerning this  
22 letter, please contact Edward D'Amato at 330-  
23 963-1170."

24 Our presenter tonight is Heather Adams.  
25 Heather is an Environmental Project Manager and

1 Geologist from Leidos, which is a contractor for  
2 the Army. Heather will present information  
3 regarding the two sites and the Army's proposed  
4 plans for these sites.

5 Following the presentation, we will open the  
6 floor for your questions and comments.

7 **MS. ADAMS:** Thank you,  
8 Samantha.

9 Welcome everyone. As Samantha introduced, I  
10 will be discussing two areas of concern this  
11 evening; C Block Quarry and Atlas Scrap Yard. I  
12 will be discussing how soil, sediment and surface  
13 water has been addressed at both of those areas  
14 of concern.

15 As you may be familiar, groundwater at these  
16 sites is being evaluated and addressed under the  
17 Facility-wide Groundwater Monitoring Program and  
18 will not be further discussed under this  
19 presentation.

20 I will start off by briefly going over the  
21 agenda. I will begin with just a general  
22 description of CERCLA; and then I will go over  
23 the site evaluation and features; the historical  
24 operations; the Remedial Investigations and  
25 conclusions; the Feasibility Study and preferred

1 remedial alternatives for each of the sites; and  
2 then we will discuss the public's participation  
3 and open up the floor for questions.

4           What is CERCLA? CERCLA stands for the  
5 Comprehensive Environmental Response,  
6 Compensation and Liability Act. This was passed  
7 in December of 1980 in response to the discovery  
8 of a large number of abandoned, leaking hazardous  
9 waste sites that posed a serious threat to both  
10 human health and the environment.

11           CERCLA was designed to impose cleanup and  
12 reporting requirements on the private sector, as  
13 well as Federal facilities by the following three  
14 actions:

15           First, identifying those sites where  
16 releases of hazardous substances has occurred or  
17 might occur and pose a serious threat to human  
18 health and the environment.

19           Second, taking appropriate action to remedy  
20 these releases.

21           And, finally, the third, to seek those  
22 parties responsible for the environmental hazards  
23 to pay for the cleanup activities.

24           Here tonight, we are in the phase of the  
25 CERCLA process, which is seeking input from the

1 public on the preferred alternatives at our  
2 sites.

3 For each site, we will discuss the  
4 investigations conducted and summarize the  
5 following evaluations that are provided in the  
6 Remedial Investigation Reports.

7 First are Human Health Risk Assessments.  
8 These are conducted to determine if chemicals  
9 in soil, sediment and surface water pose  
10 unacceptable risk.

11 The second is the Ecological Risk  
12 Assessment. This is conducted to, one, evaluate  
13 if important or significant ecological resources  
14 are present at the site. For example, wetlands  
15 or protected species. And, two, if chemical  
16 contamination requires an action to protect those  
17 resources.

18 Finally, a Fate and Transport Assessment is  
19 completed to determine if chemicals at the site  
20 may adversely impact groundwater.

21 These assessments are used to determine if  
22 the site can be used in the future. Unrestricted  
23 Residential Land Use means that the Army can use  
24 the site with no restrictions. Commercial/  
25 Industrial Land Use means that the Army can use



1 the site, but there will be restrictions in place  
2 on the site and the use.

3 If you refer to your handout packet, you  
4 can see Figure 1 and Figure 2 for the general  
5 locations of the sites that I will be presenting  
6 this evening.

7 C Block Quarry is located in the northern  
8 portion of the facility. And Atlas Scrap Yard is  
9 located in the southern portion of the facility.

10 I will first present to you the findings  
11 from C Block Quarry. This is a relatively small  
12 AOC at .96 acres. It is located in the northwest  
13 portion of CJAG, at C Block Storage Area. This  
14 is an area that contains 99 aboveground storage  
15 igloos.

16 Our site is located between Roads 3C and 4C  
17 of the C Block Storage Area. If you refer to  
18 Figure 3 of your handouts, you can see that  
19 location a little better.

20 C Block Quarry is located on a sandstone  
21 bedrock high, and surface water only occurs  
22 intermittently at the site as stormwater runoff,  
23 which flows radially towards the bottom of the  
24 quarry.

25 Figure 3 of your handout is an aerial

1 photograph from 1959, which shows what the Block  
2 C Storage Area looked like and where C Block  
3 Quarry is located within that Storage Area.

4 Between the 1940s and the 1950s, the quarry  
5 was mined for sandstone. In March of 1950, a  
6 conference was held to determine waste disposal  
7 practices for the RVAAP.

8 C Block Quarry was chosen at that meeting  
9 for a facility waste disposal site. Wastes  
10 included sulfuric acid, nitric acid, mercury,  
11 chromic acid, phosphorous -- phosphoric acid as  
12 an accelerator, alkali compound stripper and  
13 surfactants commonly used in detergents.

14 Between the 1950s and the 1960s, C Block  
15 Quarry was used as a disposal area for annealing  
16 processing wastes. Currently the site is not  
17 used and is heavily forested with brush and  
18 trees.

19 Between 1982 and 1996, C Block Quarry was  
20 included in several historical assessments and  
21 investigations. Those included Soil and Sediment  
22 Analysis, Installation Reassessment of RVAAP,  
23 Soil Contamination Survey, the RCRA Facility  
24 Assessment, the Preliminary Assessment and the  
25 Relative Risk Site Evaluation.

1           Then in 2004, the Remedial Investigations  
2 began at C Block Quarry under the  
3 Characterization of 14 AOCs. During this  
4 investigation, surface soil was assessed at C  
5 Block Quarry.

6           Then again in 2010, the PBA08 Remedial  
7 Investigation completed -- I am sorry.

8                   **MS. COLDWELL:**           I am sorry.

9                   **MS. ADAMS:**           That is okay.

10          Where surface soil and subsurface soils were  
11 assessed. We also completed vertical delineation  
12 of contamination where previous surface soil data  
13 exceeded screening criteria.

14          We also completed an asbestos survey to  
15 address suspected asbestos-containing material,  
16 also referred to as ACM in the presentation, that  
17 was identified during the 2008 site walk.

18          Then again in 2012, under the same PBA08  
19 Remedial Investigation, additional sampling was  
20 completed to characterize chromium in the soil.

21          Multiple evaluations and investigations were  
22 conducted to assess surface and subsurface soil  
23 at C Block Quarry. The total number of samples  
24 collected include 21 surface soil samples, 10  
25 subsurface soil, 7 sediment, 5 surface water and

1 6 building debris samples.

2 The following chemical groups that were  
3 analyzed during the investigations include  
4 metals, explosives, propellants, SVOCs, VOCs,  
5 PCBs, nitrates, herbicides and pesticides.

6 And if you would like to flip to the third  
7 page of your packet, we have an acronyms list,  
8 which will help you define any of the chemicals  
9 or any of the other abbreviations that you see on  
10 the presentation.

11 Conclusions of the Remedial Investigation  
12 are that nature and extent of contamination is  
13 defined. No further sampling is required to  
14 characterize surface or subsurface soil.

15 Fate and transport modeling concluded that  
16 contaminant migration chemicals of concern in  
17 soil are not adversely impacting groundwater, and  
18 future impacts are not predicted.

19 No further action for soil is required to  
20 protect groundwater. And as I mentioned  
21 previously, groundwater will continue to be  
22 evaluated under the Facility-Wide Groundwater  
23 Monitoring Plan.

24 The Ecological Risk Assessment concluded  
25 that no further action is required to protect

1 ecological resources.

2           Finally, the Human Health Risk Assessment  
3 identified the following locations and chemicals  
4 as requiring remediation: Soil at and near two  
5 sample locations, CBLss-003M and CBLss-005M.  
6 Soil within this area was determined to be  
7 contaminated with hexavalent chromium and friable  
8 ACM.

9           If you refer to Figure 4 of your handout,  
10 you will see the results of our C Block Quarry  
11 exceedances of the two locations that I  
12 mentioned.

13           At both locations, the sample results  
14 exceeded the Residential Cleanup Goal of 3  
15 milligrams per kilogram, and ACM was found to be  
16 mixed with soil at both locations. And the ACM  
17 was primarily composed of transite and black tar  
18 paper.

19           Two Remedial Action Objectives were  
20 established for C Block Quarry. The first is  
21 to prevent residential exposure of hexavalent  
22 chromium in the soil above 3 milligrams per  
23 kilogram at or near the sample locations  
24 previously stated where exceedances were  
25 identified.

1           And, two, to prevent Residential Receptors  
2 and Industrial Receptor exposure to friable ACM  
3 at or near those sample locations.

4           The following remedial alternatives were  
5 developed for consideration in the Feasibility  
6 Study to address these areas of contamination.  
7 Alternative 1 is a no action alternative. This  
8 is required by CERCLA.

9           Alternative 2 includes surficial ACM removal  
10 and Land Use Controls. Under Alternative 2, we  
11 would remove surficial ACM through non-intrusive  
12 methods to prevent Industrial Receptor exposure  
13 to ACM in surface soil. We would implement Land  
14 Use Controls to prevent the Industrial Receptor  
15 from digging and possibly encountering ACM in  
16 subsurface soil. We would implement Land Use  
17 Controls to prevent Residential Receptor use of  
18 the site. And, finally, we would perform 5-year  
19 reviews to assess effectiveness of the Land Use  
20 Controls and determine if modifications are  
21 required.

22           Finally, we have Alternative 3, which  
23 includes the excavation and off-site disposal to  
24 attain Unrestricted Residential Land Use. Under  
25 this alternative, we would conduct a subsurface

1 evaluation for ACM. We would complete pre-  
2 excavation and waste characterization sampling.  
3 We would excavate the surface and subsurface soil  
4 to remove COCs -- COC-contaminated soils and  
5 ACM. And the site would be restored by  
6 backfilling, grading and seeding.

7 The three alternatives were compared against  
8 one another using the criteria below: The first  
9 criteria is the Threshold Criteria. This  
10 includes evaluating the protectiveness of human  
11 health and the environment. Under this first  
12 evaluation, Alternative 1, which was no action,  
13 will not -- we determined would not be protective  
14 of human health and is eliminated from further  
15 consideration.

16 The second Threshold Criteria is the  
17 compliance with applicable and relevant and  
18 appropriate requirements, which are known as  
19 ARARs. This assesses if the alternative complies  
20 with federal and local laws and standards.

21 The second criteria is the Balancing  
22 Criteria. This looks at the long-term  
23 effectiveness and evaluates the magnitude of the  
24 remaining risk or contamination. It also looks  
25 at the reduction of toxicity, mobility and volume

1 through treatment. It looks at the short-term  
2 effectiveness and evaluates the protection of  
3 workers and the community during implementation  
4 of the remedial action. It looks at  
5 implementability. This evaluates the ability and  
6 reliability of the alternative's technology.  
7 And, finally, there is an assessment for cost.

8 The third Modifying Criteria is formally  
9 evaluated as part of the Record of Decision and  
10 after the public has had the opportunity to  
11 comment on the Proposed Plans.

12 There are two criteria: The state  
13 acceptance, which are comments received from the  
14 state agencies, which in our case is the Ohio  
15 EPA, that we have already received. We also have  
16 community acceptance. This considers comments  
17 made by the community, including the  
18 stakeholders, on the remedial alternatives being  
19 considered.

20 For C Block Quarry, our preferred  
21 alternative is Alternative 2. This is the  
22 surficial ACM removal and implementation of Land  
23 Use Controls.

24 Implementation of this alternative will  
25 result in the removal of surficial ACM, prevent



1 unrestricted residential land use and prohibit  
2 digging by the Industrial Receptor.

3 This alternative meets the threshold and  
4 primary balancing criteria, and the established  
5 Remedial Action Objectives. Implementation will  
6 also comply with the ARARs, which is a reminder  
7 of the federal and local laws and standards.

8 Measures will take place to ensure that site  
9 workers and the community are not impacted during  
10 implementation.

11 With regards to long-term effectiveness,  
12 this alternative is protective of the industrial  
13 land use for a no digging restriction. And the  
14 Army does not intend further unrestricted  
15 residential land use at C Block Quarry.

16 The estimated cost for Alternative 2 is  
17 \$108,534, which is less than the estimated cost  
18 for Alternative 3, which was estimated at  
19 \$390,224.

20 The second Area of Concern that I am going  
21 to present is Atlas Scrap Yard. This AOC is  
22 located in the south -- sorry -- southeastern  
23 portion of CJAG, southwest of the intersection of  
24 Newton Falls Road and Paris-Windham Road.

25 This is a much larger AOC at 73 acres. The

1 interior of the AOC consists of a shrub/scrub  
2 vegetation, while the perimeter is forested. The  
3 north-central portion is sparsely vegetated and  
4 mostly covered with gravel and mulch-like  
5 materials.

6 All buildings and structures are demolished  
7 except the brick structure associated with the  
8 former incinerator and the slab of the former  
9 Building T-3901.

10 Remaining features at Atlas Scrap Yard  
11 include several slag and gravel access roads that  
12 enter from the north and the east, a crushed slag  
13 parking lot in the north-central portion exists,  
14 and drainage ditches run parallel to the access  
15 roads.

16 Topographically, the site is a low area. It  
17 is higher in the northwest and lower in the  
18 central-east. There is no perennial surface  
19 water at Atlas Scrap Yard. However, nine small  
20 wetlands have been identified.

21 Two site features to note, if you can flip  
22 to Figure 5 of your handouts that I am going to  
23 discuss in a little more detail. This northern  
24 area right here is the location of the Former  
25 Storage Area. And the small piece right here is

1 the location of the Former Incinerator.

2 Atlas Scrap Yard served several operational  
3 functions over the history of the former RVAAP.  
4 However, it was never used for munitions  
5 activities -- production activities.

6 Between 1940 and 1945, it served as a  
7 construction camp to house workers and families  
8 during the construction of the facility.

9 In 1945, at the end of World War II, the  
10 majority of the buildings and structures were  
11 demolished or relocated.

12 Through the 1950s, four new structures were  
13 added. These buildings supported facility road  
14 and ground maintenance activities at the  
15 facility.

16 Then in 1975, after the Vietnam War, all  
17 remaining structures were razed.

18 The north-central portion of Atlas Scrap  
19 Yard was used as a storage/stockpile area for  
20 bulk materials. Those materials included gravel,  
21 railroad ballasts, sand, culvert pipe, railroad  
22 ties and telephone poles.

23 Similarly to C Block Quarry, Atlas Scrap  
24 Yard has been included in several historical  
25 assessments and investigations.

1           Between 1978 and 1998, it was included in  
2 the Installation Assessment, the Preliminary  
3 Assessment, the Relative Risk Site Evaluation and  
4 the Environmental Baseline Survey for RVAAP.

5           In 2004, Remedial Investigation activities  
6 began under the Characterization of 14 AOCs.  
7 Under this investigation, we assessed surface  
8 soil, collected geotechnical data and completed  
9 the geotechnical investigation over two former  
10 service stations with underground storage tanks.

11           In 2010, the PBA08 Remedial Investigation  
12 completed a source area investigation for surface  
13 soil to delineate the extent of previously  
14 identified contamination. Under this  
15 investigation, we utilized a large Incremental  
16 Sampling Methodology, a sampling process known as  
17 ISM. The purpose of this was to provide a  
18 complete environmental characterization of the  
19 entire Atlas Scrap Yard. Grid samples ranged in  
20 size from 3.1 to 4.2 acres in size.

21           Then in 2011, Supplemental Sampling was  
22 completed to refine the PAH contamination at the  
23 Former Storage Area. Features targeted during  
24 this sampling activity were the debris piles,  
25 which were comprised of railroad ties, concrete

1 and rubble; the parking area, which was made of  
2 slag and asphalt gravel (west of the railroad tie  
3 piles); and the ditch along the access road  
4 entering Atlas Scrap Yard from Newton Falls  
5 Road.

6 Multiple evaluations and investigations were  
7 conducted to assess surface soil, subsurface  
8 soil, sediment and surface water at Atlas Scrap  
9 Yard.

10 Under the Characterization of 14 AOCs  
11 investigation; 33 ISM soil samples, 1 ISM  
12 sediment sample, geotechnical borings and  
13 additional activities were completed at the  
14 site.

15 In 2010, under the Remedial Investigation,  
16 19 ISM surface soil samples, 18 large-grid ISM  
17 soil samples, 3 discrete chromium speciation soil  
18 samples, 19 subsurface soil borings, 1 located --  
19 co-located sediment surface water sample from  
20 Load Line 12, and surface water from Atlas Scrap  
21 Yard that discharged into Load Line 12 was  
22 included in that investigation.

23 As part of a 2011 Supplemental Sampling, an  
24 additional 16 ISM surface soil samples to refine  
25 the delineation of the PAH contamination at the

1 debris piles, parking area and the ditch were  
2 completed.

3 The following chemical groups were analyzed  
4 during the investigations: Explosives, metals,  
5 propellants, SVOCs, VOCs, PCBs, nitrates,  
6 herbicides and pesticides.

7 I am going to take a breather.

8 Conclusions of the Remedial Investigation  
9 were that nature and extent of contamination is  
10 define. No further sampling is required to  
11 characterize surface soil, subsurface soil,  
12 surface water or sediment.

13 Fate and transport modeling, along with  
14 weight-of-evidence factors, concluded that  
15 contaminant migration chemicals of concern in  
16 sediment and soil are not adversely impacting  
17 groundwater.

18 No further action for sediment or soil is  
19 required to be protective of groundwater. And as  
20 stated previously, groundwater will continue to  
21 be evaluated under the Facility-Wide Groundwater  
22 Monitoring Program.

23 During the Ecological Risk Assessment  
24 evaluation, a Level I Scoping Ecological Risk  
25 Assessment determined that a Level II assessment

1 was required. A Level II Ecological Risk  
2 Assessment was completed and determined that no  
3 further action is required to protect ecological  
4 resources.

5 The Human Health Risk Assessment concluded  
6 that there were no chemicals of concern in  
7 surface water, sediment or subsurface soil that  
8 would require a Remedial Action to be protective  
9 of the Resident Receptor, Industrial Receptor or  
10 the National Guard Trainee.

11 However, the Human Health Risk Assessment  
12 did identify two areas at Atlas Scrap Yard that  
13 would require Remedial Action for surface soils  
14 and require the evaluation under a Feasibility  
15 Study. Those two areas are the Former  
16 Incinerator Area and the Former Storage Area.

17 The first of those two areas is the Former  
18 Incinerator Area that I will discuss. This area  
19 is located in the southern section of Atlas Scrap  
20 Yard. The former incinerator consists of a  
21 12-foot long by 8-foot wide primary chamber that  
22 is currently empty. It also has a 14-foot high  
23 chimney, which you can see slightly in the  
24 photograph, that is attached to the primary  
25 chamber.

1           The outside structure associated with the  
2 former incinerator is currently present. All  
3 other components of the incinerator have been  
4 razed.

5           And you can refer to Figure 5 of your  
6 handout to see more details of the former  
7 incinerator.

8           The conclusions for the Former Incinerator  
9 Area in the Remedial Investigation were that  
10 elevated lead concentrations were identified in  
11 surface soil. And this is surface soil that is  
12 0-1 foot below ground surface.

13           General -- the general area surrounding  
14 location ASYss-19M and ASYsb-064 will be required  
15 for remediation to be protective of Unrestricted  
16 Residential Land Use, National Guard Training  
17 Land Use and Commercial/Industrial Land Use.

18           Lead concentrations at these sample  
19 locations exceeded cleanup goals for the Resident  
20 Receptor, National Guard Trainee and the  
21 Industrial Receptor.

22           The cleanup goal for the Resident Receptor  
23 is 400 milligrams per kilogram. No other areas  
24 at Atlas Scrap Yard require remediation for  
25 lead. Additionally, no other chemicals of



1 concern require remediation at the Former  
2 Incinerator Area.

3 And you can refer to Figure 6 of your  
4 handout to see the lead contamination and the  
5 area required for remedial action. It is also on  
6 the screen here, but also some good photographs  
7 of the site feature that we are discussing.

8 Based on the conclusions of the Remedial  
9 Investigation, the following Remedial Act --  
10 Remedial Action Objective was established for the  
11 Former Incinerator Area at Atlas Scrap Yard. And  
12 that is to prevent Residential Receptor exposure  
13 to lead in surface soil above 400 milligrams per  
14 kilogram.

15 Similarly how we presented the information  
16 for C Block Quarry, we will do the same for Atlas  
17 Scrap Yard. The following remedial alternatives  
18 were developed for consideration for the Former  
19 Incinerator Area.

20 One is the -- Alternative 1 is the no action  
21 alternative. Alternative 2 included excavation,  
22 stabilization and off-site disposal of surface  
23 soil at the Former Incinerator Area.

24 Alternative 2 achieves the Unrestricted  
25 Residential Land Use. The incinerator will be

1 demolished under this plan and removed. In 2018,  
2 the brick and grout had already been tested to  
3 see if they were under the regulatory limits,  
4 which they were.

5 The other materials within the incinerator  
6 will require waste characterization. Pre-  
7 excavation delineation sampling will be required.  
8 They estimate the excavation to be 244 cubic  
9 yards. Excavated soil will be stabilized on-site  
10 and tested until confirmed to be non-hazardous.  
11 Post confirmatory sampling of the excavation  
12 floor and side walls will be conducted. And  
13 restoration of the site will include backfill,  
14 regrading and seeding of the area.

15 The third alternative for the site is the  
16 excavation and off-site disposal of surface  
17 soil. Alternative 3 achieves Unrestricted  
18 Residential Land Use.

19 Similar to Alternative 2, the other  
20 materials in the incinerator will be removed --  
21 will require waste characterization. The pre-  
22 excavation delineation sampling will be  
23 required. Contaminated soil will be treated as  
24 hazardous waste. And post confirmatory sampling  
25 and excavation floor and side wall sampling will

1 be required; in addition to restoration, which  
2 would include backfill, regrading and seeding.

3 The three alternatives established for the  
4 Former Incinerator Area were compared against one  
5 another using the same criteria as previously  
6 discussed.

7 The Threshold Criteria, which is the  
8 protectiveness of human health and the  
9 environment, also eliminated Alternative 1, which  
10 was no action.

11 The compliance with the ARARs -- again, as  
12 a reminder, this is the assessment of the  
13 alternative, compliance with federal or local  
14 laws and standards.

15 We looked at the Balancing Criteria, the  
16 long-term -- which includes the long-term  
17 effectiveness; reduction of toxicity, mobility  
18 and volume through treatment; the short-term  
19 effectiveness; the implementability and the  
20 estimated costs.

21 Finally, we will look at the Modifying  
22 Criteria, which will be formally evaluated as  
23 part of the Record of Decision after the public  
24 has had an opportunity to comment on the Proposed  
25 Plans. And this will include the state and the

1 community acceptances.

2 For the Atlas Scrap Yard Former Incinerator  
3 Area, the preferred alternative is Alternative 2,  
4 which is the excavation, stabilization and  
5 off-site disposal of surface soil.

6 This alternative will attain the  
7 Unrestricted Residential Land Use. It is a green  
8 and highly sustainable alternative. It reduces  
9 the mobility of the contamination that will be  
10 disposed of in an off-site facility.

11 Technically and administratively feasible as  
12 excavation and stabilization agents are common  
13 and successful in treating lead-contaminated  
14 soils. There is long-term effectiveness, and  
15 this is highly effective as contamination will be  
16 removed from the site.

17 The estimated cost for Alternative 2 is  
18 235,655 -- I am sorry -- \$235,655, which is  
19 less than the estimated cost of implementing  
20 Alternative 3, which is \$372,578.

21 The second site at Atlas Scrap Yard that  
22 requires remediation is the Former Storage Area.  
23 This is located in the north-central section of  
24 Atlas Scrap Yard. It is a slightly larger area  
25 that is comprised of approximately 14.9 acres.

1           In 19 -- after the Vietnam War in 1975, the  
2 site was used as a stockpile storage area for  
3 bulk materials including gravel, railroad  
4 ballasts, sand, culvert pipes, railroad ties and  
5 telephone poles.

6           In 2017, removal of the railroad ties,  
7 timber, concrete and asphalt occurred. During  
8 this, 1,160 tons of rail ties and telephone  
9 poles; 1,655 tons of concrete and asphalt were  
10 removed from the site. The waste was  
11 characterized and determined to be non-hazardous  
12 and was disposed of off-site.

13           You can refer to Figure 5 of your handouts  
14 for additional details for this area.

15           The Remedial Investigation for the Former  
16 Storage Area concluded that PAHs detected at  
17 numerous sample locations at concentrations  
18 exceeding the 2017 USEPA Residential Soil  
19 Regional Screening Levels, which will be referred  
20 to as RSLs.

21           You can refer to Figure 7 to see the 2004/  
22 2005 and 2010 PAH sample results. And you can  
23 refer to Figure 8 to see the 2011 PAH sampling  
24 results.

25           In general, a large majority of the

1 exceedances for Atlas Scrap Yard were within the  
2 Former Storage Area.

3 Three locations outside of the Former  
4 Storage Area exceeded benzo(a)pyrene, which is a  
5 PAH, the USEPA RSLs. However, remedial action is  
6 not required to be protective of the Resident  
7 Receptor based on the following weight-of-  
8 evidence: For sample location ASYss-69M, four of  
9 the five PAHs detected were below the RSLs.  
10 Benzo(a)pyrene had a maximum concentration of 1.7  
11 milligrams per kilogram, which was just --  
12 slightly exceeded the RSL of 1.1 milligrams per  
13 kilogram.

14 Surface soil at boring ASYsb-59, which is  
15 located within the ISM sample location, was below  
16 soil resident RSLs. Subsurface soil was non-  
17 detect for PAHs. ISM location was -- the ISM  
18 location was taken within a larger ISM area,  
19 which was ASYss-91M, where PAH concentrations in  
20 surface soil were below the RSLs.

21 The second location, which is ASY-71M, also  
22 had four of the five PAHs detected below the  
23 RSLs. A large portion of the sample area was  
24 located within the southern access road,  
25 which may have contributed to the elevated

1 benzo(a)pyrene results observed in the sample.

2 ISM location was selected within a  
3 larger ISM, also ASYss-96M, where PAH  
4 concentrations in surface soil were below  
5 the RSLs.

6 The third and final location was ASYss-101M;  
7 four of the five PAHs were detected below the  
8 RSLs. The maximum benzo(a)pyrene concentration  
9 was 1.4 milligrams per kilogram, which again  
10 is just slightly above the 1.1 milligram per  
11 kilogram RSL.

12 And the sample location likely had  
13 contributions to elevated benzo(a)pyrene, because  
14 they were adjacent to the Paris-Windham Road and  
15 within the southern access road to Atlas Scrap  
16 Yard.

17 This figure presents to you the data and  
18 the information, in Figure 7 of the handout, for  
19 the -- for the Former Storage Area, sample  
20 results from 2004 and '05 and '10.

21 And then Figure 8, as I mentioned, already  
22 has the 2011 PAH results.

23 Remedial Investigation conclusions for the  
24 Former Storage Area were that remediation is  
25 required to be protective of the Industrial

1 Receptor at location ASY-126M.

2 If you refer to Figure 9 of your handouts,  
3 you can see that small orange area. That is the  
4 area -- or that is the location that we are  
5 talking about.

6 The benzo(a)pyrene concentration was 50  
7 milligrams per kilogram, which was -- which is  
8 above the cleanup goal, which is established as  
9 21 milligrams per kilogram.

10 Remediation is required for the entire  
11 Former Storage Area to attain an Unrestricted  
12 Land Use. And you can refer to Table -- to  
13 Figure 10 for that.

14 So this -- the thin area right here is the  
15 area that would need to be remediated to attain  
16 the Commercial/Industrial Land Use.

17 And this entire area here is the area  
18 that would need to be remediated to meet the  
19 Unrestricted Residential Land Use.

20 Based on the conclusions of the RI, the  
21 final Remedial Action Objectives were established  
22 for the Former Storage Area. And that is to  
23 prevent the Resident Receptor exposure to the  
24 following PAHs in surface soil from 0-1 feet  
25 below ground surface, above the cleanup goals for



1 the Former Storage Area.

2 The following remedial alternatives were  
3 developed for consideration: Alternative 1, a no  
4 action alternative. Alternative 2 included the  
5 excavation and off-site disposal of the surface  
6 soil at ASY-126M, which was the smaller section  
7 of land.

8 This would achieve the Commercial/Industrial  
9 Land Use. The estimated excavation is 316 cubic  
10 yards. Post confirmatory sampling of excavation  
11 floors and side walls will be conducted.  
12 Restoration would include backfilling, regrading  
13 and seeding of the site.

14 Under Alternative 2, PAH COCs would remain  
15 on the site above the residential cleanup goals.  
16 Land Use Controls would be in place to restrict  
17 Residential Receptor exposure. And five-year  
18 reviews to assess the effectiveness of the Land  
19 Use Controls would be implemented.

20 Alternative 3 is the Ex Situ Thermal  
21 Treatment of surface soil at that same location,  
22 ASY-126M. This would achieve the Commercial/  
23 Industrial Land Use. A total estimated volume  
24 requiring treatment under this alternative would  
25 be 473 cubic yards.

1           We would excavate contaminated soil and  
2           feed it into a treatment system. The post  
3           treated soil sampling and excavation floor and  
4           wall confirmation sampling would be completed.  
5           And site restoration would include backfilling  
6           with the treated soil, grading and seeding the  
7           site.

8           Under Alternative 3, PAHs would remain on  
9           the site above the residential cleanup goals.  
10          The Land Use Controls to restrict Residential  
11          Receptor exposure would be in place. And the  
12          five-year review to assess the effectiveness of  
13          the Land Use Controls would be implemented.

14          Alternative 4 includes the excavation and  
15          off-site disposal of surface soil for the Former  
16          Storage Area. This alternative would achieve the  
17          Residential Unrestricted Land Use. The estimated  
18          excavation would be 20,336 cubic yards of soil  
19          removed. Post confirmation sampling and  
20          excavation floor sampling and side wall sampling  
21          would be completed. And the restoration would be  
22          backfilling the area, regrading and seeding.

23          The final alternative is Alternative 5.  
24          This includes the Ex Situ Thermal Treatment of  
25          surface soil within the entire Former Storage

1 Area. This would achieve the Residential Un-  
2 restricted Land Use. The total estimated volume  
3 requiring treatment will be 30,505 cubic yards of  
4 soil.

5 The excavated contaminated soil would be fed  
6 into a treatment system. Post treatment soil  
7 sampling and excavation floor and wall  
8 confirmation sampling will be completed. And the  
9 site would be restored by backfilling the area  
10 with the treated soil, grading and seeding.

11 Similar to the previous sites that we have  
12 discussed, the five alternatives were compared  
13 against the same criteria below: The Threshold  
14 Criteria, which is the protectiveness of human  
15 health and the environment. Again, that  
16 automatically eliminated Alternative 1, which is  
17 no action.

18 The second Threshold Criteria is the  
19 compliance with the ARARs, which is the  
20 assessment to local law and federal laws and  
21 standards.

22 The Balancing Criteria were long-term  
23 effectiveness; reduction of toxicity, mobility  
24 or volume through treatment; short-term  
25 effectiveness; implementability; and a cost

1 evaluation were completed.

2 As with the other two sites, the Modifying  
3 Criteria will be formally evaluated as part of  
4 the Record of Decision, and after the public has  
5 had the opportunity to comment on the Proposed  
6 Plans. This would include the state acceptance  
7 and the community acceptance criteria.

8 Based on the evaluation of the alternatives  
9 for the Former Storage Area at Atlas Scrap Yard,  
10 the preferred alternative is Alternative 3, which  
11 is Ex Situ Thermal Treatment of surface soil at  
12 ASY-126M.

13 This will attain the Commercial and  
14 Industrial Land Use. It is effective long-term  
15 treatment by removing benzo(a)pyrene in the  
16 surface soil. It is a green and highly  
17 sustainable alternative for on-site treatment and  
18 reuse of soil. It reduces toxicity, mobility and  
19 volume of contaminants in soil.

20 The estimated cost for Alternative 2 is  
21 \$224,194, which includes the estimated cost for  
22 Land Use Controls, which is \$97,978.

23 In the event that a thermal treatment system  
24 is not available, Alternative 2, which is the  
25 excavation and off-site disposal of surface soil,

1 at the same location, would be readily  
2 available.

3 I have included an example of a thermal  
4 treatment system that could be used at the site.  
5 If you look up -- sorry. I have my pointer going  
6 the wrong way -- at the photograph at the top,  
7 soil can be loaded onto this conveyor belt and  
8 into the treatment system.

9 The contaminated soil would be exposed  
10 to high temperatures in what is called the  
11 "Renewal Chamber." During this process, soil  
12 contaminants, for example, PAHs, are heated up  
13 and desorbed from the soil and turned into  
14 vapors. The vapors are then passed through  
15 filters and are captured in the treatment.

16 The treated soil is then stockpiled for  
17 confirmation testing. If the soil is confirmed  
18 to be below the cleanup goals, the soil is then  
19 placed back into the original excavation.

20 Under our preferred alternative, the area  
21 requiring the Land Use Control is denoted by the  
22 blue hashes in your Figure 11 of your handouts.

23 Your comments and input are appreciated.  
24 Public participation is an important component  
25 of a remedy selection. The Army is soliciting

1 input from the community as part of the public  
2 participation responsibilities under Section  
3 117(a) of CERCLA.

4 The public comment period for the two  
5 proposed plans that I have just presented is  
6 August 17th to September 16, 2020.

7 You can provide written or verbal comments  
8 at this public meeting, or you can submit written  
9 comments by September 16, 2020, to the following  
10 address; which is the Camp James A. Garfield  
11 Environmental Office, to Katie Tait's attention.

12 That concludes my presentation. Are there  
13 any questions?

14 And I will leave this address up here, in  
15 case anyone needs to write that down.

16 **MS. COLDWELL:** If there are any  
17 questions at this time, we can take them now.

18 **MS. LOCK:** Hi. I do have a  
19 question. On the slide number --

20 **THE REPORTER:** I am sorry. Could  
21 you please speak up so I can hear?

22 **MS. ADAMS:** Yes. Do you mind  
23 stating your name for the record?

24 **MS. LOCK:** Oh, Sarah Lock.

25 **THE REPORTER:** I am sorry?

1                   **MS. LOCK:**                   Sarah Lock,  
2    L-o-c-k.

3                   **THE REPORTER:**                I am sorry.

4                   **MS. LOCK:**                    On the slide --

5                   **MS. ADAMS:**                 I am sorry. Did  
6    you say "Block," B-l-o --

7                   **MS. LOCK:**                    Lock, L-o-c-k.

8                   **MS. ADAMS:**                 Did you get it?

9                   **THE REPORTER:**                Okay. Thank you.

10                  **MS. ADAMS:**                 L-o-c-k. Okay.

11    Sorry, Sarah.

12                  **MS. LOCK:**                    On Slide 49, which  
13    is the Atlas Scrap Yard for Alternative --  
14    Alternative 3. It says this is the estimated  
15    cost for Alternative 2. So what is the cost for  
16    Alternative 3?

17                  **MS. ADAMS:**                 We have that in  
18    our report here. Just give us one second. We  
19    will look that up for you. I don't know those  
20    numbers off the -- by heart.

21                  **MS. LOCK:**                    Or is that  
22    Alternative 3?

23                  **MR. THOMAS:**                 Yes, that is for  
24    Alternative 3. That is a typo. So it should  
25    say the estimated cost for Alternative 3 is

1 \$224,000.

2 MS. LOCK: Okay. Thank you.

3 That is it.

4 MS. COLDWELL: Are there any  
5 other questions?

6 Okay. Well, thank you so much for being  
7 here tonight. And if there -- you have the  
8 information if you want to submit comments by  
9 the due date. Thank you.

10 MS. ADAMS: Thank you  
11 everyone.

12 (Thereupon, the public meeting  
13 was concluded at 6:23 p.m.)

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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 3rd day of September, 2020.

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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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