

**PUBLIC MEETING FOR
RVAAP-063-R-01 GROUP 8
MUNITIONS RESPONSE SITE**

Contract W912DR-15-D-0016
Delivery Order 0001



**US Army Corps
of Engineers®**

**U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT
10 S. HOWARD STREET, ROOM 7000
BALTIMORE, MARYLAND 21201**

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April 2020

REPORT DOCUMENTATION PAGE

*Form Approved
OMB No. 0704-0188*

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1. REPORT DATE (DD-MM-YYYY) 17-04-2020		2. REPORT TYPE Meeting Memorandum		3. DATES COVERED (From - To) March 11, 2020	
4. TITLE AND SUBTITLE Public Meeting Memorandum for RVAAP-063-R-01 Group 8 Munitions Response Site for meeting held March 11, 2020.				5a. CONTRACT NUMBER W912DR-15-D-0016, Delivery Order 0001	
				5b. GRANT NUMBER NA	
				5c. PROGRAM ELEMENT NUMBER NA	
6. AUTHOR(S) Kimberly Vaughn, PG, HydroGeoLogic, Inc. (HGL)				5d. PROJECT NUMBER NA	
				5e. TASK NUMBER NA	
				5f. WORK UNIT NUMBER NA	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) HGL 11107 Sunset Hills Rd, Suite 400 Reston, VA 20190				8. PERFORMING ORGANIZATION REPORT NUMBER NA	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Corps of Engineers, North Atlantic Division, Baltimore District 2 Hopkins Plaza Baltimore, MD 21201				10. SPONSOR/MONITOR'S ACRONYM(S) USACE	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S) NA	
12. DISTRIBUTION/AVAILABILITY STATEMENT Administrative Record availability					
13. SUPPLEMENTARY NOTES None					
14. ABSTRACT The meeting memorandum describes the activities conducted, documents public attendance and public comment, and records details relevant to the public meeting held on March 11, 2020. The Army National Guard conducted the public meeting, in consultation with the Ohio Environmental Protection Agency, to submit for public review and comments a Proposed Plan for munitions and explosives of concern and munitions constituents at the munitions response site at the former Ravenna Army Ammunition Plant in Portage and Trumbull counties, Ohio; RVAAP-063-R-01 Group 8 MRS.					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Kimberly Vaughn
U	U	U	SAR	59	19b. TELEPHONE NUMBER (Include area code) 512-658-6828

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

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

Public meeting to be held Wednesday, March 11, 2020
for Army National Guard Release of the Proposed Plan
for the Group 8 Munitions Response Site
at the Former Ravenna Army Ammunition Plant

Ravenna - The Army National Guard, in consultation with the Ohio Environmental Protection Agency, submits for public review and comment a Proposed Plan for the Group 8 Munitions Response Site (MRS) at the former Ravenna Army Ammunition Plant (RVAAP) in Portage and Trumbull counties, Ohio.

The Group 8 MRS is within the former RVAAP (now known as Camp James A. Garfield (CJAG)) in Portage and Trumbull Counties, Ohio. The Group 8 MRS is being addressed under the Military Munitions Response Program (MMRP) in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). The Proposed Plan presents the current status and information regarding the MRS. The Proposed Plan details the recommendation for future remediation and provides the rationale for the recommendations.

On Wednesday, March 11, 2020, 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. The first half hour will be an informal open house when technical staff will be available to answer questions. At 6:30 p.m., the Army National Guard will briefly describe the assessment of the MRS, present the recommendations, and then request comments from the public. Written comments regarding this recommendation may be submitted to the Army National Guard during the 30-day comment period from March 4, 2020 to April 4, 2020. All written comments should be addressed to CJAG Environmental Office; 1438 State Route 534 SW, Newton Falls, OH 44444 or sent via email to Kathryn.s.tait.nfg@mail.mil.

In accordance with CERCLA, the recommendation presented in the Proposed Plan was summarized and presented in earlier remedial investigation and feasibility study reports. These reports are now available for public review at the RVAAP Restoration Program Information Repositories at the Reed Memorial Library (167 East Main Street, Ravenna) and the Newton Falls Public Library (204 South Canal Street, Newton Falls). The reports are also available online at www.rvaap.org.

The final remedy for the MRS 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 March 4, 2020 to April 4, 2020. The Army National Guard encourages the public to review and comment on the recommendation presented in this document.

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

#061-2T-March 1 & 8, 2020 #4859

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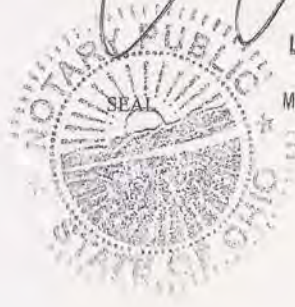
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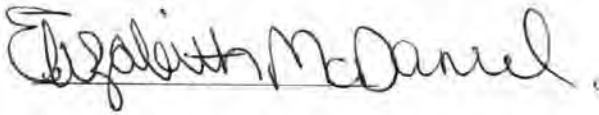
KO-10727375

Proof of Publication

Record Publishing Company
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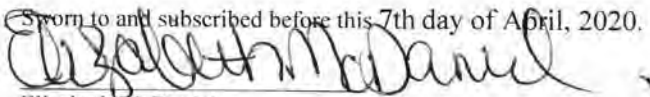
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Name of Account: HydroGeoLogic Inc
Ad Number: 12633378
No. of Lines: 70

Day(s) Published: 03/01, 03/08.
Printers Fee: \$442.00

Sworn to and subscribed before this 7th day of April, 2020.



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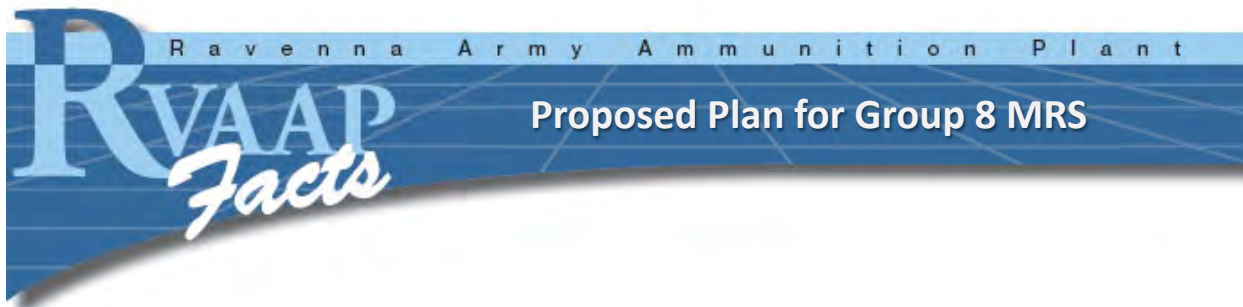
Public Meeting Sign-In Sheet

PUBLIC SIGN-IN SHEET

Ravenna Army Ammunition Plant Restoration Program
Proposed Plan Public Meeting
March 11, 2020

Name	Phone Number	Email
Bill Tameti	[REDACTED]	[REDACTED]
Kevin Sedlak	[REDACTED]	[REDACTED]
Travis McCorn	[REDACTED]	[REDACTED]
TOM COZZA	[REDACTED]	[REDACTED]
KIMBERLY VAUGHN	[REDACTED]	[REDACTED]

Group 8 MRS Fact Sheet



Where is the Group 8 MRS?

The RVAAP-063-R-01 Group 8 Munitions Response Site (MRS) is a 2.65-acre site located between Building 846 and 849 at former Ravenna Army Ammunition Plant (RVAAP), now known as Camp James A. Garfield. Camp James A. Garfield is located in east-central Portage County and southwestern Trumbull County, Ohio about 3 miles east-northeast of the city of Ravenna and 1-mile northwest of the city of Newton Falls.

How was this area used?

The Group 8 MRS, formerly known as Area Between Building 846 and 849, was used to burn construction debris and rubbish for an unknown period of time. Before the designation as an MRS, this site was used as a staging area for military vehicles. There are no records available documenting the disposal of munitions at the MRS; however, Munitions and Explosives of Concern (MEC) and Munitions Debris (MD) found onsite indicated munitions may have been historically disposed of at the Group 8 MRS. In 1996, MEC was found at the MRS, in the form of a single antipersonnel fragmentation bomb containing high explosives (HE). MD was found in the form of a demilitarized (i.e. cut in half) 175mm projectile. The antipersonnel fragmentation bomb with HE was removed and detonated at Open Demolition Area #2. The 175mm projectile (determined to be MD) was also removed from the MRS and was taken to Building 1501.

What is happening now at the Group 8 MRS?

Between 2004 and 2019, the United States (U.S.) Army conducted investigative activities that included a site inspection (SI) and remedial investigation (RI) activities at the MRS under the Military Munitions Response Program (MMRP). The purpose of the investigations was to determine if explosive safety hazards or risks due to munitions constituents (MC)-related contamination were present due to DoD military munitions activities conducted at the MRS.

During the SI, instrument-aided visual surveys, digital geophysical mapping, and MC sampling were performed. Two unidentifiable T-bar fuzes were found partially buried in the southwest portion of the MRS and were classified at that time as

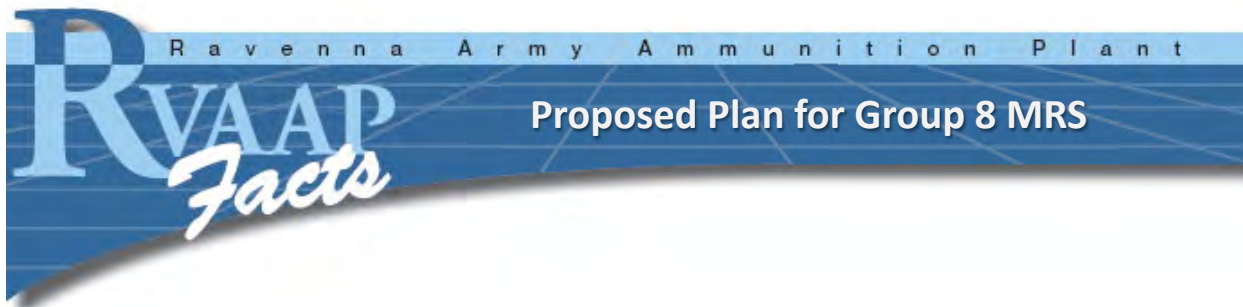
munitions potentially presenting an explosive hazard (MPPEH). Because the scope of the SI did not include any intrusive work or handling/disposal of MPPEH, the fuzes were left in place during the inspection. However, similar items were not found during the subsequent RI, as described further below, and their final disposition is unknown.

During the RI, a digital geophysical mapping (DGM) investigation was conducted to identify metal in the subsurface at the Group 8 MRS. DGM data were collected on 2.563 acres at the Group 8 MRS. A total of 264 anomalies were reacquired during the intrusive investigation and 14 trenches were excavated in areas of high anomaly density (concentrations of buried metal). From these intrusive investigations, 359 individual items of MPPEH that weighed approximately 1,418 pounds were recovered from a maximum depth of 4 feet below ground surface (bgs). The UXO-qualified personnel documented these items were safe and classified them as material documented as safe (MDAS). MDAS does not present explosive hazards.

Sampling for MC-related contamination was also conducted during the RI activities. Four samples were collected using incremental sampling methods (ISM) from sampling units of the same size across the entire MRS at depths between 0 and 0.5 feet bgs. Additional samples were proposed in areas with concentrated MD and those three additional ISM soil samples were collected from the bottom of three of the trenches, at depths of 4 to 4.5 feet bgs. These trenches were locations where buried MD was encountered. The RI Report concluded that no contaminants in subsurface soil were present at concentrations that pose a risk to either human or ecological receptors.

Based on the historical discoveries of MEC, the MRS was assigned a Munitions Response Site Prioritization Protocol (MRSPP) priority of 4 during the RI. A Priority 1 MRS contains the highest potential hazard, while a Priority 8 MRS contains the lowest potential hazard.

The RI conducted did not confirm the previously reported presence of MEC at the MRS and identified MD (no explosive hazard) only. The SI recommended the MRS proceed to the RI phase due to MEC identified historically at the MRS. However, the findings from the RI phase were inconsistent with the historical findings documented in the SI. The items documented in the SI are inconsistent with the types of



MDAS recovered during the RI intrusive investigation. No additional MEC items have been recovered since the identification of the two confirmed MEC items in 1996 and the T-bar fuzes described in the 2007 SI. Only MDAS (which does not pose an explosive hazard) was recovered during the RI. Therefore, the post-RI conclusion for the MRS is that no risk of explosive hazards exists at the MRS.

A Feasibility Study (FS) was prepared for the Group 8 MRS by the ARNG in 2019. Therefore, no further action was recommended for MEC and as a result, the FS addressed only the risks posed to a theoretical future Resident Receptor due to MC-related contamination present at the MRS.

The FS evaluated possible alternatives for the MC-related contamination in detail and provided a comparative analysis of those alternatives, based on criteria outlined in the *National Oil and Hazardous Substances Pollution Contingency Plan* or (NCP). The FS identified three possible alternatives to address the MC-related contamination at the Group 8 MRS. The alternatives consisted of 1) No Action, 2) Land Use Controls (LUCs), and 3) MC-Contaminated Soil Removal (to achieve use of land for unlimited use/unrestricted exposure (UU/UE)). The FS also developed the Remedial Action Objectives (RAOs) based on the potential for MC-related contamination at the Group 8.

What is the Proposed Plan?

The Proposed Plan is a document used to facilitate public involvement in the remedy selection process. The document presents the preliminary recommendations concerning how best to address contamination at the site, presents alternatives that were evaluated, and explains the reasons that the Preferred Alternative is recommended. In the case of the Group 8 MRS, the removal of MC-contaminated soil (Alternative 3 in the FS) is the Preferred Alternative. The Preferred Alternative satisfies the remedial action objectives by removing the MC contamination in surface soil at the MRS. The recommendations provided in the Proposed Plan are not final, and the Army, in consultation with the Ohio EPA, is soliciting input to provide the public with an opportunity to participate in the recommended action selection process. The *Final Proposed Plan for RVAAP-063-R-01 Group 8 MRS*, published in January 2020 is available for public comment.

What is the recommended action?

Risks from MC-related contamination are present at the MRS. The Army, in consultation with the Ohio EPA, is recommending MC Contaminated Soil Removal for the Group 8 MRS.

How can the public participate?

The recommended action can change based on public comments received during a 30-day comment period. The Army encourages interested citizens to review documents related to the Group 8 MRS and comment on the proposed action. During the 30-day comment period from March 4, 2020 to April 4, 2020, the public can read about the proposed action, ask questions, and make recommendations. The Proposed Plan is available online at www.rvaap.org and at the following information repositories:

Reed Memorial Library

167 East Main Street
Ravenna, Ohio 44266
(330) 296-2827

Hours of operation:

9 a.m.–9 p.m. Monday–Thursday
9 a.m.–6 p.m. Friday
9 a.m.–5 p.m. Saturday
1 p.m.–5 p.m. Sunday

Newton Falls Public Library

204 South Canal Street
Newton Falls, Ohio 44444
(330) 872-1282

Hours of operation:

9 a.m.–8 p.m. Monday–Thursday
9 a.m.–5 p.m. Friday and Saturday

Where do I send my comments on the Proposed Plan?

Please send your comments, questions, or suggestions about the Proposed Plan to kathryn.s.tait.nfg@mail.mil or you can mail them directly to:

Ms. Kathryn Tait

Camp James A. Garfield Environmental Office

1438 State Route 534 SW
Newton Falls, Ohio 44444

The last day to postmark your comments to the Proposed Plan is April 4, 2020.

Slide Presentation

PROPOSED PLAN FOR MUNITIONS RESPONSE SITE

GROUP 8

Presented by:
HydroGeoLogic, Inc.
March 11, 2020

“The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation.”

File Name



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Presentation Agenda

- Summary of Military Munitions Response Program
- The presentation of the Group 8 munitions response site (MRS) Proposed Plan, including the following:
 - ▶ Historical Operations and Investigations
 - ▶ Current Conditions
 - ▶ Remedial Investigation and Feasibility Study Results
 - ▶ Recommendations and Rationale
- Questions



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Acronym Cheat Sheet

AOC	Area of Concern
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CJAG	Camp James A. Garfield Joint Military Training Center
DoD	Department of Defense
MC	munitions constituents
MD	munitions debris
MEC	munitions and explosives of concern
MMRP	Military Munitions Response Program
MPPEH	material potentially presenting an explosive hazard
MRS	munitions response site
NFA	No Further Action
RVAAP	Former Ravenna Army Ammunition Plant



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Understanding the MMRP

- The Military Munitions Response Program (MMRP) is a Department of Defense program
 - Follows the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or Superfund, process to address sites
 - This munitions response site (MRS) is suspected to contain munitions and explosives of concern (MEC) and munitions constituents (MC)
- MEC may remain on an MRS due to former munitions-related activities
- MC may be generated by munitions-related activities

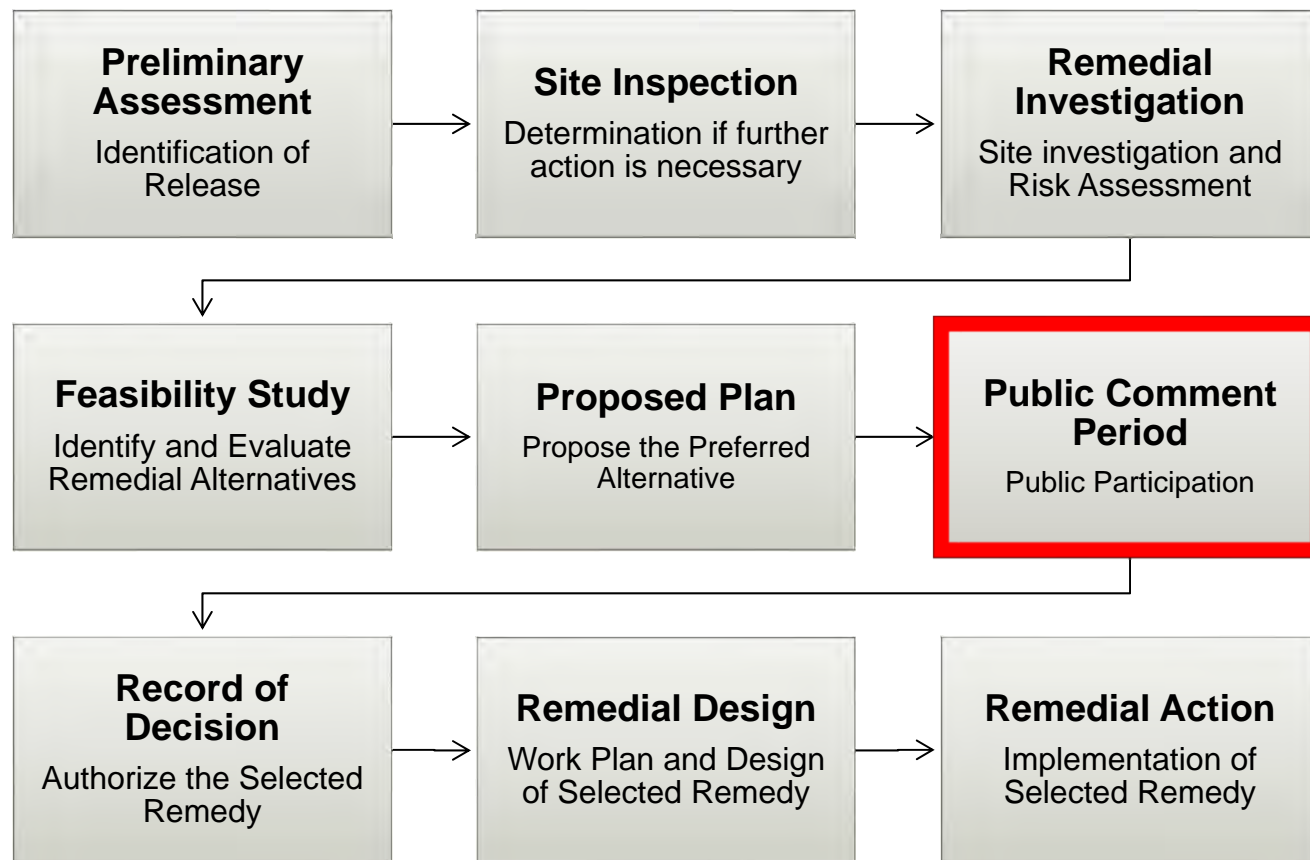


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The Stages of an MMRP Project

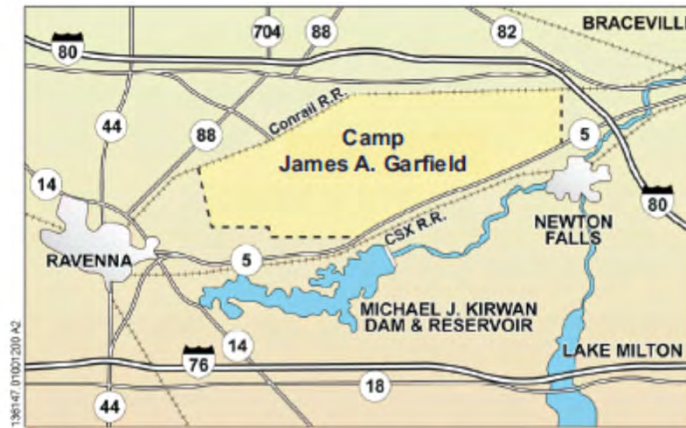
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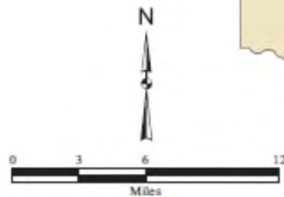
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Former Ravenna Army Ammunition Plant Location



**Camp James A. Garfield/
Former RVAAP
Portage and Trumbull
Counties, Ohio**



Legend

 Camp James A. Garfield



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GROUP 8 MRS (RVAAP-063-R-01)



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Historical Background

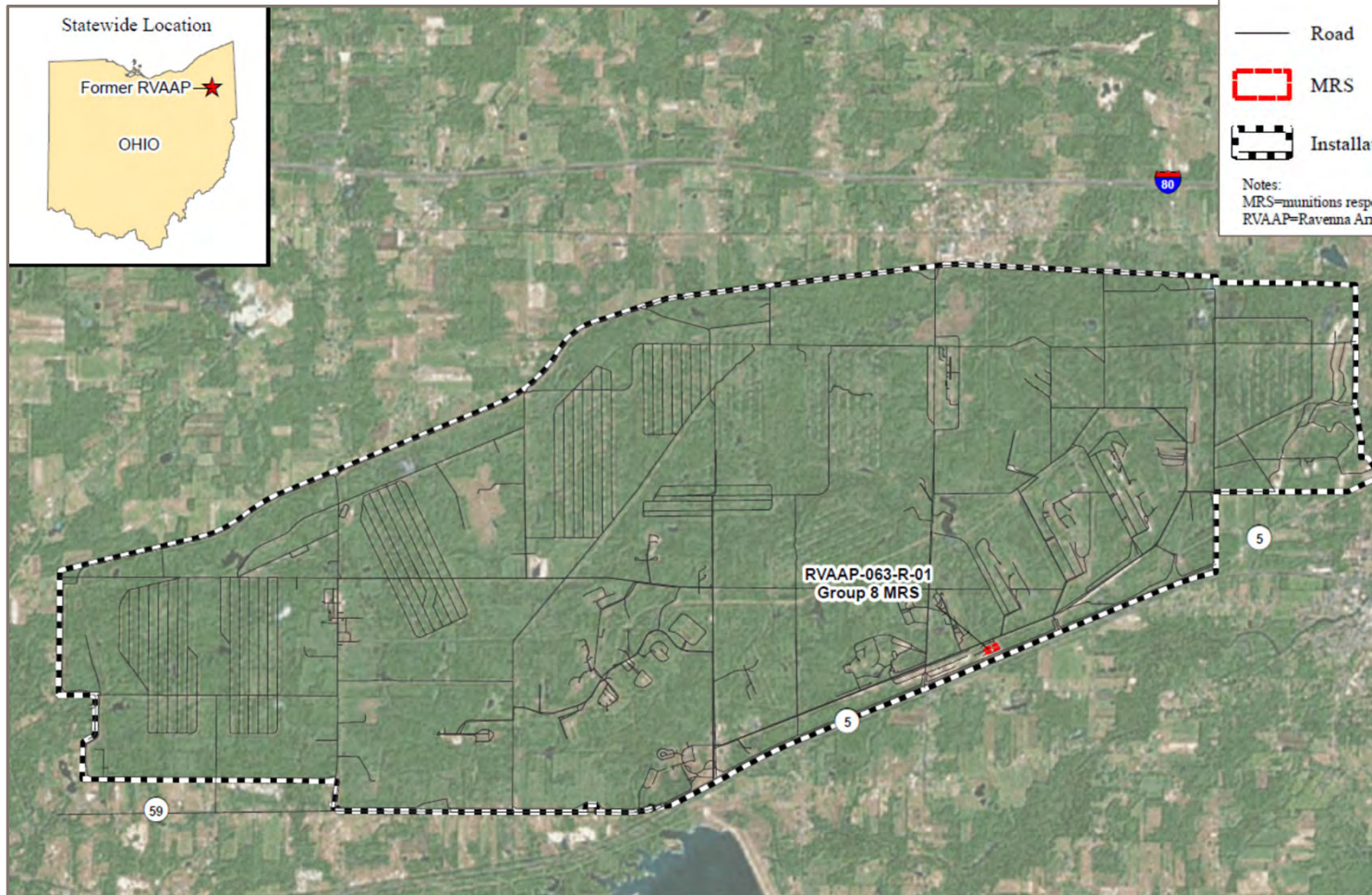
- Group 8 MRS is 2.65-acres located between Buildings 846 and 849, just north of the southern facility boundary.
 - Used to burn debris/rubbish for an unknown period of time;
 - Used as a staging area for military vehicles; and
 - No documentation of prior disposal of munitions, but munitions were found previously.
- The MRS is unimproved grassy land with gravel and dirt roads that pass through the MRS.
- A drainage ditch flows along the southern border of the MRS.



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MRS Location Map



Legend

- Road
- ▭ MRS
- ▭ Installation Boundary

Notes:
MRS=munitions response site
RVAAP=Ravenna Army Ammunition Plant



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Historical Investigations

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- **2004, Archives Search Report**
 - A historical records search to identify sites that contained munitions.
 - Group 8 MRS was not identified as one of the original sites with munitions.
- **2007, Historical Records Review**
 - Described the “Area between Buildings 846 and 849”.
 - Changed the site name to “Group 8 MRS”.
 - Documented 1996 finding of munitions and explosives of concern (MEC).
- **2008, Site Inspection**
 - Magnetometer assisted surveys conducted over 100% of Group 8 MRS.
 - Two unidentifiable T-bar fuzes found partially buried.
 - Classified at that time as munitions potentially presenting an explosive hazard.
 - Munitions constituents (MC) were detected during soil sampling.
- **2015, Remedial Investigation**
- **2018, Feasibility Study**

Remedial Investigation and Feasibility Study details are provided on the next slides



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Group 8 MRS – Site Inspection



2008 Site Inspection Results Group 8 MRS

Legend

- MPPEH (T-Bar Fuzes)
- Ⓢ Utility Pole
- Line Abreast Survey Area
- Standing Water
- ▭ MRS
- ▭ Installation Boundary

Notes:
 MPPEH=material potentially presenting an explosive hazard
 MRS=munitions response site
 RVAAP=Ravenna Army Ammunition Plant



Current Conditions

- The Group 8 MRS is approximately 2.65 acres of vacant, grassy land
 - Located between Buildings 846 and 849.
 - Area provides access to the road network used to access adjacent buildings
- Interim Controls currently in place include:
 - Signage
 - Stakes



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Remedial Investigation

- Field work conducted in 2011
- Activities included:
 - Digital geophysical mapping of 2.563 acres
 - Intrusive investigation
 - A total of 264 anomalies were intrusively investigated and 14 trenches were excavated;
 - 359 individual items classified as material documented as safe (MDAS).
 - Environmental Sampling for MC
 - Four incremental soil samples were collected and three additional incremental soil samples were collected from the bottom of three trenches



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Remedial Investigation Results

2015 Remedial Investigation Results Group 8 MRS



Legend

Single Anomaly Results

- ▽ Control Point (QC)
- MDAS
- Other Debris
- Surface Metal

Trench Results

- MDAS Identified
- MDAS and Other Debris Identified
- Other Debris Identified

▭ MRS

▭ Installation Boundary

Notes:
 MDAS=material documented as safe
 MRS=munitions response site
 QC=quality control
 RVAAP=Ravenna Army Ammunition Plant



Remedial Investigation Results

- Geophysical Investigation
 - 359 individual items of munitions debris were recovered.
 - All were munitions debris (MD) items (no explosive hazard)
 - Maximum depth – 4 feet below ground surface
- MC-Related Contamination Investigation
 - A Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (ERA) were conducted. The RI Report concluded that no contaminants in subsurface soil were present at concentrations that pose a risk to either human or ecological receptors.
- The RI conclusions recommended a Feasibility Study (FS) for evaluation of remedial alternatives, to include evaluation of the unrestricted (Residential) land use



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Feasibility Study

- The risk of explosive hazards was re-evaluated in the Feasibility Study (FS)
 - Previously reported munitions and explosives of concern (MEC) found in 1996 and 2008 were not consistent with the types of munitions debris identified during the RI.
 - No MEC has otherwise been reported since 2008.
 - The RI concluded with a 99 percent confidence level that no MEC are present.
- Therefore, the MRS has no risk from explosive hazards.
- No Further Action is recommended for MEC.



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Feasibility Study

- The FS further evaluated the RI soil sampling results and completed a risk management evaluation for contaminants of concern.
 - Chemicals of concern (COCs) were identified in the surface soil.
 - Remediation of lead and cadmium were recommended.
- FS evaluated three alternatives – 1) No Action, 2) Land Use Controls, and 3) MC-Contaminated Soil Removal

Threshold Criteria	Overall Protection of Human Health and the Environment
	Compliance with ARARs
Balancing Criteria	Long-Term Effectiveness and Permanence
	Reduction of Toxicity, Mobility, or Volume Through Treatment
	Short-Term Effectiveness
	Implementability
	Cost
Modifying Criteria	State Acceptance
	Community Acceptance



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Feasibility Study

Based on the evaluation of alternatives, the Army concluded MC-contaminated soil removal is preferred for:

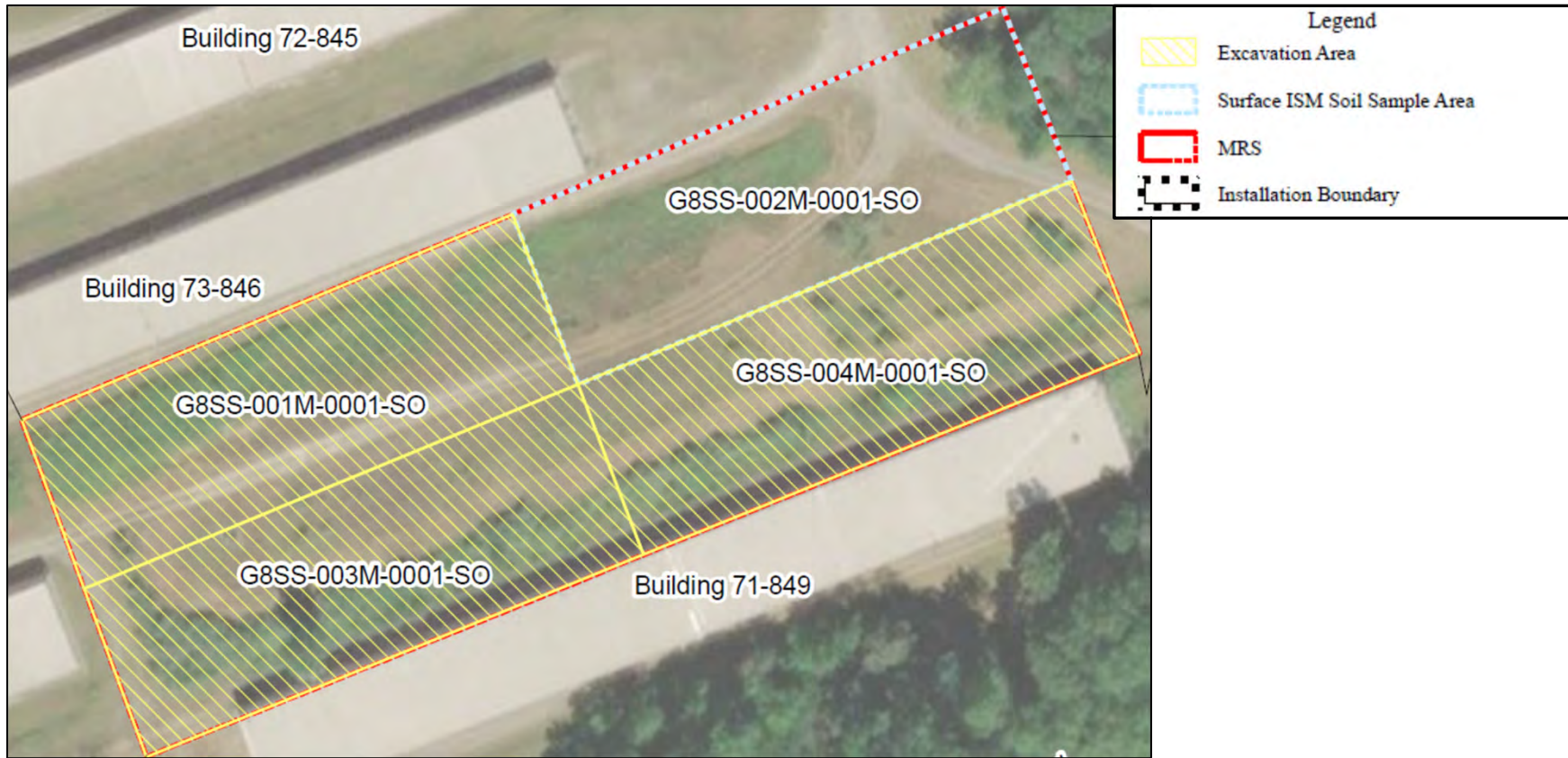
- Preventing exposure of a Resident Receptor to lead and cadmium at the location of soil sample GR8SS-004M, and preventing exposure of a Resident Receptor to lead at the location of soil samples GR8SS-001M and GR8SS-003M, and
- Protecting human health and the environment.



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MC-Contaminated Soil Removal



**2019 Feasibility Study
Risk Management Evaluation
Delineated MC Contamination**

Proposed Plan Recommendations

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The preferred remedy must be protective of the receptors associated with current and future land use.

Current and future receptors: Industrial receptors (full-time employees or career military personnel at CJAG); Ecological receptors; and theoretical future Resident Receptor

Current and future land use: Industrial land use and potential military training

The results of the Remedial Investigation fieldwork and Feasibility Study evaluation for the Group 8 MRS support the determination that MC-contaminated soil removal is the preferred remedy.

Following completion of the response actions the Group 8 MRS can be used for the anticipated land use and will be protective of the Industrial Receptor or a potential future Residential Receptor (although not anticipated).



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Questions?

Questions can be submitted several ways:

- In writing on the public comment forms provided for you
- By email (email address shown on the public comment forms)
kathryn.s.tait.nfg@mail.mil
- By mail (mailing address shown on the public comment forms)

Ms. Kathryn Tait
Camp James A. Garfield Environmental Office
1438 State Route 534 SW
Newton Falls, Ohio 44444
(614)336-6136

- Asked in person at the public meeting

The public comment period began March 4, 2020 and continues through April 4, 2020.



US Army Corps
of Engineers.



Public Meeting Transcripts

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PUBLIC MEETING

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IN RE: PROPOSED PLAN FOR MUNITIONS

RESPONSE SITE: GROUP 8

Presented by:

U.S. Army Corps of Engineers  
March 11, 2020

Location:

Shearer Community Center  
9355 Newton Falls Road  
Ravenna, Ohio

Todd L. Persson, Notary Public

1 APPEARANCES:

2  
3 On behalf of HydroGeoLogic, Inc.:

4 KIMBERLY S. VAUGHN

5 Senior Section Manager 2

6 4835 University Square

7 Suite Huntsville, AL 35816

8 (254) 228-5616

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10  
11 ALSO PRESENT:

12 Kathryn Tait, Ohio Army National Guard

13 Travis McCoun, US Army Corps of

14 Engineers

15 ~ ~ ~ ~ ~

1 MS. VAUGHN: Welcome, everyone. Thank  
2 you for your time tonight in attending. I  
3 appreciate it. We're going a little bit old  
4 school. Please grab a copy -- a hard copy of the  
5 presentation. We're having some technical  
6 difficulties tonight.

7 My name is Kimberly Vaughn. I work for  
8 HGL, or HydroGeoLogic. We are contracted by the  
9 US Army Corps of Engineers to help with this  
10 project. I do have the slides here. At least I  
11 can flip through them and call out -- it will help  
12 you see maybe what slide we're discussing. And  
13 there are some figures in the paper copy that I  
14 definitely want you to be able to look through and  
15 see up closer.

16 So we have restrooms in this facility.  
17 Please watch out for extension cords over here.  
18 Be safe. We expect this to take -- the formal  
19 presentation part tonight to take, you know, less  
20 than an hour, probably, to cover this information.  
21 We have one munitions response site tonight that  
22 we're talking about, the Group 8 munitions  
23 response site. And we want to have a question and  
24 answer session toward the end. If you don't mind,  
25 please do hold questions til that time, and if you

1 haven't signed in yet, please sign in at the front  
2 desk.

3 Slide 2, what we're going to run through  
4 this evening, we're going to talk about the  
5 Military Munitions Response Program under which  
6 this site has been investigated. We'll talk about  
7 the prior investigations that have gone on there,  
8 its history, and then talk through some of the  
9 phases of the investigation; the site inspection,  
10 the remedial investigation, and the results of  
11 those investigations.

12 So we do have a court reporter here this  
13 evening. That's why I mentioned to hold  
14 questions. It is part of the program that we're  
15 working under that we record this public meeting  
16 where the public is given a chance to provide  
17 feedback. And one reason we do ask to hold  
18 questions is we want to get everyone's name down  
19 accurately for any official questions. We've got  
20 some blank pages on the sign-in sheet where you  
21 can jot down any questions or notes as we go  
22 through the slides, and then we can record those  
23 formally toward the end of the presentation.

24 Slide 3, we do have a lot of acronyms in  
25 the work that we do. We talked about the Group 8

1 munitions response site, or "MRS." You'll hear me  
2 slip into using acronyms "MEC" and "MC" for  
3 munitions and explosives of concern, or munitions  
4 constituents. Those are two important acronyms  
5 that we'll talk about. And one way to think about  
6 it is the history of the site we're talking about  
7 tonight does cover those two major topics.

8           Munitions and explosives of concern are a  
9 munition that's still explosively configured and  
10 is explosively hazardous. And then munitions  
11 constituents are those chemicals that may have  
12 degraded or break down products from the munition.  
13 That's also one angle of the investigations that  
14 we have conducted over time.

15           Slide 4 is an overview of the Military  
16 Munitions Response Program, the program that the  
17 Army Corps of Engineers is implementing for the  
18 Department of Defense. It follows the CERCLA  
19 process, or you may have heard that referred to as  
20 Super Fund. And we'll talk about the different  
21 MEC, again, munitions and explosives of concern  
22 that I hit on during the acronym slide, and  
23 munitions constituents. And then the munitions  
24 response site is any area where DOD munitions are  
25 known to have been used historically in the past.

1 Slide 5, in that CERCLA process as it is  
2 applied to military munitions, these are the  
3 different stages of the CERCLA process. We're in  
4 the proposed plan phase that you see the public  
5 comment period circled in red there. But one  
6 thing to highlight and just make sure that you  
7 take away, is that each of these phases or stages  
8 that are shown has a different set of work plan  
9 documents, investigations that are done, and  
10 reports that are done. So each stage is very  
11 robust in and of itself that the Army team and the  
12 regulatory team assigned to this site. We are  
13 involved in each of those phases.

14 To locate us in general, slide 6, here's  
15 the former Ravenna Army Ammunition Plant location  
16 shown in Ohio, now renamed to Camp James A.  
17 Garfield. And then we'll have some slides and  
18 figures showing exactly where the Group 8 MRS is  
19 in the future in the slide deck, and slides coming  
20 up.

21 Because we are moving to the munitions  
22 response site itself now, Group 8, and its  
23 assigned RVAAP-063 ID number shown there on slide  
24 7. And then on slide 8 we'll start going through  
25 the history. So, you know, remembering those



1 CERCLA process stages, you know, this is what we  
2 knew about the site at the beginning phases. A  
3 little over two-and-a-half acres, it was known  
4 that it was used to burn debris or rubbish on the  
5 site, but it was unknown exactly what period of  
6 time or what may have been done. After that, it's  
7 used as a staging area for military vehicles, and  
8 it is between some buildings in place.

9 So then looking at the general location  
10 on slide -- I think that's slide 9 -- we've got  
11 the red boundary shows -- the red outline shows  
12 Group 8 MRS there on the southern boundary, right  
13 at the edge of the Camp James A. Garfield.

14 Moving to slide 10 -- and, you know, this  
15 is a lot of information on one slide, but it is  
16 the various stages of MMRP investigations that  
17 were performed. There is an archive search report  
18 that's performed, and it actually looks through  
19 records to try to find the history of that site.  
20 The archive search report actually didn't identify  
21 this site as having had munitions used in the  
22 past.

23 Then a historical records review was  
24 performed and documented some previous findings,  
25 some anecdotal evidence in 1996 that Ohio Army

1 National Guard personnel had located on the site.

2 Then a site inspection was performed.  
3 That's the 2008 site inspection. We'll talk a  
4 little more and show some results of that site  
5 inspection from 2008, which included walking  
6 surveys using handheld detectors. In the proposed  
7 plan, that you can pick up a copy of here, it does  
8 have some figures showing what was done in that  
9 2008 site inspection.

10 So, for instance, if you flip to slide  
11 11, the site inspection did find some evidence of  
12 suspected material potentially presenting an  
13 explosive hazard. So it was suspected to have an  
14 explosive hazard. This figure is also Figure 4,  
15 and it's a large size at the very back of the  
16 slides that are assembled. Let's see, Figure 3.  
17 If you need to unfold it, it's an 11 by 17 that's  
18 also available to you and may show up better at  
19 the back of the slide deck.

20 So, you know, as I had mentioned, the  
21 Group 8 munitions response site is between two  
22 buildings, Buildings 846 and 849. It's got some  
23 grassy land, some gravel, some gravel roads that  
24 pass through the MRS, and then a ditch along one  
25 edge. So these are just the relevant site

1 features, and then the location where the  
2 suspected explosively hazardous items were found  
3 from that site inspection results.

4 Moving to slide 12, it's more of just a  
5 textual summary of what we just talked about while  
6 looking at the figure for Group 8 MRS. And then  
7 the main thing to take away up through slide 13 is  
8 we've been summarizing now what we knew about the  
9 site up to and including the site inspection  
10 phase. You now will move into the remedial  
11 investigation phase, and the next few slides are  
12 going to tell us what was uncovered and what the  
13 conclusions of the remedial investigation phase  
14 were.

15 So slide 13, again, moving back to that  
16 next stage in an MMRP project, the RI stage, we  
17 had a coverage of 100 percent of the 2.65 acres  
18 with geophysical mapping that was conducted, and  
19 that is geophysical surveying, looking for  
20 subsurface metal. The data that's collected is  
21 then evaluated. It's known that there may be  
22 subsurface metal there from the geophysical survey  
23 data, but then it has to be dug up, what we call  
24 the intrusive investigation, then to see what that  
25 metal is. You know, we'll have done a geophysical

1 survey, but we may not really have confirmation  
2 yet that what is found is a munition until it's  
3 dug up and confirmed. There was also soil  
4 sampling done with the incremental sampling  
5 methodology for soils at the bottom of some of the  
6 trenches that were placed and across the MRS  
7 itself.

8 So slide 14, you know, from that quick  
9 overview that I gave of the remedial investigation  
10 field activities, slide 14 then shows what those  
11 results were after the digging, or after the  
12 intrusive investigation. This is also Figure 4, a  
13 larger size, 11 by 17, at the back of the slide  
14 deck, if it will help you to see this symbology a  
15 little better on a larger map.

16 So in concentrated areas where there was  
17 a lot of surface metal, subsurface metal, instead  
18 of digging one point, trenches were actually then  
19 placed. So there were -- the rectangles shown  
20 were blue or light blue if munitions debris was  
21 located in that trench. That is -- munitions  
22 debris is safe material that does not have an  
23 explosive hazard, material documented as safe.

24 And then in other locations where on this  
25 figure you may see a pale yellow circle, that was

1 where an actual point was done, or we'll refer to  
2 it as an anomaly, a single-point location is  
3 intrusively investigated or dug. And the pale  
4 yellow circle were munitions debris, and then the  
5 light tan squares were other debris, not munitions  
6 related.

7 Let's see, any other summary items here I  
8 want to make sure and tell you on slide 14. Slide  
9 15 is, again, more of a text write-up, you know,  
10 of what we were just talking about while we looked  
11 at the figure. So 359 different pieces of  
12 munitions debris were removed from all of those  
13 holes that were dug and from all of the trenches  
14 that were excavated, and all of those pieces were  
15 munitions debris. In other words, they had no  
16 explosive hazard, so they were not munitions and  
17 explosives of concern, or MEC that you'll hear us  
18 talk about.

19 Remember early on talking about acronyms,  
20 and then talking about sampling, I mentioned the  
21 munitions constituents portion, the leg of our  
22 investigations. So that's summarized here for the  
23 munitions constituents that were investigated.

24 Incremental sampling methodology samples were  
25 collected, a risk assessment was performed, and

1 the RI report had concluded that there was no  
2 contamination that caused a risk to either human  
3 or ecological receptors.

4 And the conclusions of the RI then were  
5 to move to the next phase, or the feasibility  
6 study phase, with one additional step that was to  
7 be conducted in the feasibility study, and that  
8 was to go ahead and take a look at a receptor for  
9 a future theoretical resident as if it became  
10 residential land use. There's no plans that there  
11 will be any residential land use at the site in  
12 the future, but that was a theoretical component  
13 that was going to be looked at as part of the  
14 feasibility study.

15 So moving to slide 16, we're now moving  
16 to yet another of the phases under MMRP as CERCLA  
17 is applied to it. So the next couple of slides  
18 will go through the feasibility study phase  
19 particular to the Group 8 MRS.

20 So one of the first decisions highlighted  
21 or summarized on this slide was the evaluation of  
22 the explosive hazards that may be present at Group  
23 8 MRS. So remember earlier slides we talked about  
24 the 1996 finds, then we had in 2008 the site  
25 inspection had found some fuses that were

1 considered material potentially presenting an  
2 explosive hazard. And then all of the RI field  
3 activities that we did summarize on a few slides  
4 earlier and all the digging that was done did not  
5 confirm -- did not dig up anything that had a  
6 classification as MEC, or an explosive hazard. So  
7 everything that was recovered in the remedial  
8 investigation was not explosively hazardous. No  
9 other MEC had been reported by -- anecdotally by  
10 facility personnel. And the RI had concluded that  
11 there was a 99 percent confidence level no MEC was  
12 present. So the conclusion was that the early  
13 investigations recommended more work be done. The  
14 RI then performed that additional work and has  
15 concluded there's no explosive hazards present.

16 The other kind of two-legged -- the other  
17 leg of our two-legged investigation, moving to  
18 slide 17, were the munitions constituents  
19 components. So the feasibility study did take the  
20 remedial investigation soil sampling results and  
21 took them a step further to evaluate that  
22 theoretical future residential receptor, you know,  
23 in case at any time in the future land use changes  
24 to residential.

25 So the conclusions were that lead and

1 cadmium were recommended to be excavated to a  
2 minimum depth of a half a foot where the  
3 preliminary remediation goals are exceeded for  
4 lead or cadmium, and then -- well, I think I'm  
5 skipping ahead, actually.

6 Slide 17 is showing more what the three  
7 alternatives that the feasibility study evaluated  
8 were. We always evaluate a no action alternative  
9 to give use as a comparison, and then evaluated  
10 land use controls being put in place just to try  
11 to limit receptor interaction with any hazards.  
12 And then the third alternative was the MC  
13 contamination soil removal that I began talking  
14 about with the excavation of the soil.

15 So, again, skipping ahead to slide 18,  
16 which I had kind begun to talk about already, the  
17 lead and cadmium from the soil samples, those  
18 sample IDs shown there are the IDs assigned to the  
19 incremental soil sampling methods during the  
20 remedial investigation. As a conservative step,  
21 the team for Group 8 has decided to go ahead and  
22 excavate those soils to a minimum depth of a half  
23 a foot, and evaluate the soils, dispose of them  
24 offsite as needed, and then confirmation sampling  
25 would be collected, and it would go to an



1 additional depth if required until sampling  
2 results were coming back without an exceedance.

3 The next slide shows a figure. That  
4 figure is also included at the back, Figure 6 at  
5 the back of the packet if you need to see it on  
6 the larger size and zoomed in a little more. And  
7 it shows the three areas associated with the three  
8 soil sample IDs that would be excavated, and those  
9 soils would then be evaluated and disposed of  
10 properly offsite.

11 Let's see, what else -- I want to make  
12 sure -- so, again, those yellow crosshatch areas  
13 are the areas where soils would be excavated under  
14 a future project, and that's the preferred  
15 alternative that's being placed in front of the  
16 public for consideration and for feedback and  
17 input from members of the community.

18 So, again, slide 20 is -- there's a lot  
19 of text on slide 20. But the phase where the  
20 proposed plan is prepared, reviewed by all of the  
21 regulators and the Army team, and then is put out  
22 in the public domain for review and comment. You  
23 know, this is in essence a summary of those  
24 proposed plan elements. So based on all of the  
25 site history that's been evaluated, all of the

1 data that's been gathered in the several  
2 investigations where field work was conducted, the  
3 feasibility study evaluation that took a deeper  
4 look at the data and evaluated multiple  
5 alternatives, you know, now the proposed plan is  
6 showing the preferred alternative that best  
7 protects the receptors. And, again, receptors are  
8 just the humans who will be accessing that land  
9 and performing work on that land, etc. And all of  
10 the current and future potential land uses are  
11 considered for the site.

12 So that was, I know, a lot of information  
13 really quickly. I appreciate your patience while  
14 we worked through the slide projector issues. I'm  
15 sure if we had -- if my 10-year-old nephew was  
16 here, maybe he would have gotten it right away,  
17 but it was challenging for me. But we do ask for  
18 questions from the public on the preferred  
19 alternative presented tonight.

20 Summarized here are several ways you can  
21 submit your questions, by e-mail, by phone. You  
22 can write them down on one of the blank forms  
23 provided for your use, you know, turn them in and  
24 hand them to one of the government representatives  
25 available here today. And then we do ask for any

1 questions verbally submitted tonight, we do want  
2 to get your name in the record and might ask you  
3 to spell your name, etc., for the court reporter  
4 tonight.

5 But we did also want to -- because of  
6 some of the current issues, we didn't have a  
7 representative from Ohio EPA here tonight, but  
8 Katie, I believe you said you wanted to indicate  
9 their feedback.

10 MS. TAIT: So the Ohio EPA was unable to  
11 attend the meeting tonight, but they asked that we  
12 make a statement on their behalf. And based on  
13 the information contained in the final proposed  
14 plan document, other investigation documents and  
15 reports, and the Ohio EPA's oversight  
16 participation during the investigation, the Ohio  
17 EPA concurs with the final proposed plan document  
18 for the Group 8 munitions response site  
19 recommending a removal action.

20 MS. VAUGHN: Thank you, Katie. And that  
21 concurrence letter is part of the proposed plan.  
22 You'll see that it's actually included with the  
23 document that's out there for review. So I  
24 think -- oh, I definitely wanted to point out the  
25 comment period does run for 30 days, and we would

1 ask that questions please be submitted by April  
2 4th. That's when our comment period will expire  
3 and we'll be moving to the next phase.

4 Anything else? Any questions? We'll  
5 conclude the formal part of the meeting, and then  
6 government representatives will still be here for  
7 the next little while if you have any other  
8 questions. Thank you for your time.

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REPORTER'S CERTIFICATE

I, Todd L. Persson, do hereby certify that as such Reporter I took down in Stenotypy all of the proceedings had in the foregoing transcript; that I have transcribed my said Stenotype notes into typewritten form as appears in the foregoing transcript; that said transcript is the complete form of the proceedings had in said cause and constitutes a true and correct transcript therein.



*Todd L. Persson*

Todd L. Persson, Notary Public  
within and for the State of Ohio

My commission expires August 1, 2022.

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