

Appendix C

Ohio Environmental Protection Agency Correspondence



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

December 16, 2016

Mr. Mark Leeper
Army National Guard Directorate
Acting Chief
ARNGD-ILE Clean Up
111 South George Mason Drive
Arlington, VA 22204

**Re: US Army Ammunition Plt RVAAP
Remediation Response
Project Records
Remedial Response
Portage
267000859230**

Subject: Ravenna Army Ammunition Plant, Portage/Trumbull Counties. Request for Extension for Review of the Draft Visual Assessment Survey Report for the Evaluation, Identification and Management of Potential Solid Waste Disposal Sites, Former RVAAP, Dated November 2, 2016. Ohio EPA ID # 267-000859-230

Dear Mr. Leeper:

The Ohio Environmental Protection Agency (Ohio EPA) has received the "Draft Visual Assessment Survey Report for the Evaluation, Identification and Management of Potential Solid Waste Disposal Sites" at the Former Ravenna Army Ammunition Plant (RVAAP), Ravenna, Ohio. This document was received at Ohio EPA's Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR), on November 3, 2016. The report was prepared for the Army National Guard by AECOM Technical Services, Inc. under Contract Number W91333L-14-D-0001.

This document is undergoing review by personnel from Ohio EPA, DERR. Due to additional concern about certain areas of disposal, and recent discussions with representatives of the Army National Guard, Ohio EPA requests a revised "due date" for comments related to this document of January 27, 2017.

RECEIVED
22 Dec 2016

MR. MARK LEEPER
ARMY NATIONAL GUARD DIRECTORATE
DECEMBER 16, 2016
PAGE 2

Ohio EPA respectfully requests your review and approval of this extension request pursuant to the Orders. If you have any questions concerning this correspondence, please do not hesitate to contact me at (330) 963-1292.

If you have any questions, please call me at (330) 963-1292.

Sincerely,



Kevin M. Palombo
Environmental Specialist
Division of Environmental Response and Revitalization

KP/nvr

cc: Katie Tait, OHARNG RTLS
Kevin Sedlak, ARNG
Rebecca Shreffler/Gail Harris, VISTA Sciences Corp.

ec: Rodney Beals, Ohio EPA NEDO DERR
Bob Princic, Ohio EPA NEDO DERR
Kelly Kaletsky, Ohio EPA, CO DERR



NATIONAL GUARD BUREAU
111 SOUTH GEORGE MASON DRIVE
ARLINGTON VA 22204-1373

May 10, 2017

Ohio Environmental Protection Agency
DERR-NEDO
Attn: Mr. Kevin Palombo
2110 East Aurora Road
Twinsburg, OH 44087-1924

Subject: Former Ravenna Army Ammunition Plant/Camp Ravenna Joint Military Training Center, Portage/Trumbull Counties, *Evaluation, Identification, and Management of Potential Solid Waste Sites, Draft Visual Assessment Survey Report*, Ohio EPA # 267-000859-230

Dear Mr. Palombo:

Enclosed for your review and approval, please find the responses to Ohio EPA comments dated 9 February 2017 on the *Draft Visual Assessment Survey Report for the Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites* at the former Ravenna Army Ammunition Plant/Camp Ravenna Joint Military Training Center (CRJMTC) in Portage and Trumbull Counties, Ohio. These responses to comments reflect collective decisions made at the 18 April 2017 Clarification Meeting that was held at the Ohio EPA. This response to comment document was prepared for the Army National Guard by AECOM Technical Services, Inc. in support of the RVAAP restoration program.

The Army requests the Ohio EPA review this document for approval. Please contact the undersigned at (703) 607-7955 or mark.s.leeper.civ@mail.mil if there are issues or concerns with the submission.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Leeper".

Mark Leeper
RVAAP Restoration Program Manager
Army National Guard Directorate

cc: Rod Beals, Ohio EPA, DERR-NEDO
Bob Princic, Ohio EPA, DERR-NEDO
Thomas Schneider, Ohio EPA, DERR
Katie Tait, OHARNG, Camp Ravenna
Kevin Sedlak, ARNG, Camp Ravenna
Bob Guthrie, Management Solutions, LLC
Gail Harris, Vista Sciences Corporation
Rebecca Haney, Vista Sciences Corporation

Comment Resolution Table

Installation: RVAAP/Camp Ravenna

Document: Draft Visual Assessment Survey Report for the Evaluation, Identification, and Management of Solid Waste Disposal Sites

Reviewer(s): Ohio EPA, Kevin Palombo

Date: 9 February 2017

Cmt. No.	Page or Sheet	Comment	Recommendation	Response
	Statement	<p>This document is the Draft Visual Assessment Survey Report on the Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites at Camp Ravenna. It details the current status of potential solid waste dump sites or disposal areas at 150 locations. The report does not define or categorize the waste that was identified according to Ohio EPA Solid Waste Rule terminology. Therefore, it appears to leave that determination to a subsequent document that will be prepared titled, Solid Waste Management Plan. Only selected sites (44) were identified out of the 150 to be included in this future report. Upon application of Rule citations provided, additional sites may be added to the list of sites that will be included in the Solid Waste Management Plan. Based on our review, Ohio EPA recommended that several additional sites be added to the Plan. Our recommendations should not limit the number of sites that are ultimately included in the Plan once a review of the definitions are considered. In addition to Ohio EPA's letter to the "Army Team," dated July 24, 2014, we refer you to following Rule citations:</p> <ul style="list-style-type: none"> • 3745-27-01(5)(23) "Solid waste" • 3745-400-01 (C)(2) "Construction and demolition debris" or "debris" • 3745-400-05 "Clean hard fill" • 3745-27-13 "Rule 13" Procedure to engage if filling, grading, excavating, building, drilling, or mining on land, where a hazardous waste facility or solid waste facility was operated 		<p><i>An in-person Clarification Meeting was held at the Ohio EPA on 18 April 2017 to discuss these Ohio EPA comments on the Draft Visual Assessment Survey Report (VASR). The goal was to clarify the project objectives and come to an agreement on appropriate responses. Mr. Kevin Palombo led the discussion of each Ohio EPA comment in this Comment Response Table. The following responses reflect collective decisions made at the meeting.</i></p> <p>It is agreed that the VASR does not define or categorize the waste identified according to Ohio EPA Solid Waste Rule terminologies. However, the definitions were considered when surveying each potential site and reviewing the information collected. The next document, the Solid Waste Management Plan (SWMP) to be prepared, will define and categorize solid waste sites according to the Ohio EPA Solid Waste Rule terminology.</p> <p>The portion of the comment that addresses adding several additional sites to the Solid Waste Management Plan is addressed in site-specific comments below.</p>
1	General	<p>Upon review of this Draft Visual Assessment Survey Report, Ohio EPA noted that only 44 of the 150 sites evaluated are recommended for inclusion in a Solid Waste Management Plan (SWMP) (Table ES-</p>		<p>A new section was added (between Sections 1.2 and 1.3) to the VASR summarizing the objectives stated in the Work Plan (WP). This new text describes each deliverable, and includes the rationale for</p>

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Installation: RVAAP/Camp Ravenna

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Reviewer(s): Ohio EPA, Kevin Palombo

Date: 9 February 2017

		1) that will be prepared in the future. The Draft Visual Assessment Survey Report does not provide a full description of what will be included in the SWMP, or what rationale was used to include or not include a site in a SWMP. A new section should be added to the introduction of the Draft Visual Assessment Survey Report (Section 1) that fully describes this rationale and specifically what will be included in the plan.		<p>moving sites from the VASR to the SWMP.</p> <p>In addition, “de minimis waste sites” (i.e., where debris appeared to be surficial and was recommended in the VASR to be picked up and properly disposed as part of future training site construction projects) were originally recommended to not proceed to the SWMP. It was agreed that these sites will now be combined and moved forward to the SWMP as one site called “Troop labor sites.” These sites will be managed when troops are available and as time allows.</p> <p>Given this change, the following rationale was added to the document: “Sites with identified solid waste will be included in the SWMP; sites that do not have solid waste will not be included.”</p>
2	ES-2, para 2	After the next phase of the field investigation is complete, a SWMP will be prepared." This next phase of field work needs to be described and defined in the Introduction of the document (Section 1). What will be included in the next stage of field work, and which sites will be included?		In the new section (between what was Section 1.2 and Section 1.3), all the deliverables are described including field investigation phases. Details are provided in the WP, so a reference to the WP was also included in this new text.
3	Tables ES-1 and 3-1	Table ES-1 and Table 3-1 lists each of the 150 sites evaluated. Only 2 of 150 sites have been determined to need further geophysical or intrusive investigation. Based on some of the site descriptions, it would appear that additional sites would need further evaluation. These will be noted in the specific comments that follow.		The need for additional sites is addressed with each specific comment.
4	General	A certain number area of concern (AOC) descriptions/summaries include this statement, "No additional site surveys or geophysical investigations are needed. The solid waste observed during the visual assessment will be picked up and properly disposed as part of future training site construction projects. This site will not be discussed in the SWMP." Who will track this additional work? Under what authority or mechanism will this activity be conducted? This discussion should also be included		These sites will be combined as one “site” and listed in the SWMP. See response to Comment #1.

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Reviewer(s): Ohio EPA, Kevin Palombo

Date: 9 February 2017

		in Section 1. Ohio EPA does understand that some of the solid waste/debris is insignificant, but some is not, and should be clearly tracked.		
5	Tables ES-1 and 3-1	Table ES-1 and Table 3-1 include a column that states "Visual Survey Conducted." Of the 150 sites, 7 state NA, or not applicable. Unless the reviewers missed it in the document, please refer the reader to this section, or explain why these sites did not have a visual survey conducted.		The rationale for not conducting visual surveys at these locations are given in the text for each site. When possible, the sections were updated to clarify this rationale.
6	TOC	The page numbers for all Chapter 4 figures need to be adjusted. The page numbers for all Chapter 5 figures need to be adjusted. The page numbers for all Chapter 6 figures need to be adjusted.		The page numbers were adjusted.
7	Page 2-4, Sect 2.2, para 2	Last sentence states that "...the field team included an unexploded ordnance (sic) (UXO) technician for munitions and explosives of concern (MEC) avoidance during visual surveys." Were UXO surveys done for each AOC? Where surveys done of the entire footprint of the AOC, just the areas where metal debris was found, or are their surveys done according to another plan? Was any record kept of the results of their surveys? Ohio EPA believes that the results of these surveys might be useful in a determination of whether further geophysical evaluations need to be conducted at particular AOCs.		The UXO technician was present for MEC avoidance only. As we discussed at the meeting, the UXO technician was present for the field staff's safety only. No UXO surveys were done and there are no data to provide.
8	Sect 2.1.2, page 2-3, para 1	"Of the 150 locations, 18 were selected based on the appearance of grading marks, visible potential fill, or scars adjacent to previously mapped Military Munitions Response Program (MMRP) areas. These 18 locations are identified on Figure 2-1 and are numbered from Site O to Site 17." A review of Figure 2-1 shows the location of 18 sites labeled Aerial Review Sites, but provides no additional information. What is their size? What specific AOCs are they near? The section does not mention where or how these particular sites were finally evaluated.		Aerial photographs were reviewed to find any indication of non-AOC locations that could possibly have been used for solid waste disposal. Any of these locations that move to the SWMP will be more clearly defined in that document (acreage, etc).

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		This section needs to provide additional information on these sites.		
9	Sect 2.1.3, page 2-4, para 2	This paragraph describes interviews that were held with personnel familiar with historical activities at Camp Ravenna. Figure 2-2 identifies the location of "potential unidentified solid waste disposal sites" (A-U), based on the interviews. It was noted in the sections where they are described, an aerial estimate was not provided. Area G appears to cover approximately 200 acres or more. Size estimates should be provided on the table		Size estimates will be included in the SWMP. They were intentionally not included at this stage because many of the potential sites that were investigated will not move forward, or, in the case of Site G, only a portion of it will move forward. Site G was quite large, but the visual survey revealed that only a small portion of it has any debris and a small portion is used for storage.
10	Sect 4.1, page 4-4, para 4	It should be noted in this section that the Ramsdell Quarry Landfill currently undergoes routine inspections by Camp Ravenna personnel as well as representatives from the Portage County Health Department.		The text was changed as suggested.
11	Sect 4.2	This section discussed Erie Burning Grounds. Ohio EPA is aware of the potential for considerable amounts of solid waste to be present at this AOC. We are not comfortable with the recommendation for no additional geophysical surveys at this AOC. The fact that the area is currently flooded does not eliminate the need of further investigation of solid waste at this AOC. Ohio EPA believes the limits of buried or flooded MC or MEC should be identified. If limits of all potential waste is already known based on historical surveys, then the location of the waste should be defined and included as part of the SWMP.		MC and MEC are not solid waste and are outside of the scope of this project. This project is not scoped for MEC/MC removal or delineation. The area was thoroughly investigated under MMRP and there have been no signs or evidence of MEC. Also, the site is a category 3 wetland and will remain that way.
12	Figure 4-1	The legend should more clearly state that the blue numbers on the Figure 4-1 refer to the figure numbers of the enlarged area maps that follow.		The legend was changed as suggested.
13	Sect 4.1.4, page 4-13 through 4-15	This section describes the Sand Creek Disposal Road Landfill. Ohio EPA will require that if debris is washed out of this former landfill, it will be managed properly and proper cover will be maintained. We want to assure that the Solid Waste Management Plan for this site considers these possibilities. Since the Remedial Investigation Report for this AOC was recently completed, Ohio EPA anticipates a Feasibility Study will be prepared that will address		A Feasibility Study will be done for this site. As this is a landfill, it will be included in the SWMP and these concerns will be considered and addressed there. The exposed debris was observed in 2003, this was clarified in the text.

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		<p>many of these concerns.</p> <p>Page 4-14, paragraph 3 is unclear as it states during a 2007 document review, it was determined that exposed debris (drums and containers) was entering Sand Creek due to erosion. The review found that an Interim Removal Action was conducted in 2004. The timing is not clear in this description, what year was the waste encountered, and when was it removed? Please clarify this paragraph</p>		
14	Sect 4.18, page 4-18, para 5	<p>This section describes the visual survey that took place in April 2016 of the Group 8 Munitions Response Site (MRS). This site was a 2.6-acre vehicle staging area that may have been used for debris and rubbish burning. The site also has a history of the presence of munitions debris. A 2015 document was quoted as saying, "...the site has a moderate potential explosive hazard condition..." Also, during the April 2016 survey, the UXO specialist identified a metallic signal that indicated a buried object. Based on these facts Ohio EPA believes this site should undergo an additional site survey, including a geophysical survey.</p>		<p>Due to the potential explosive hazard, this site will not undergo a geophysical investigation as part of the VASR but the site will be included in the SWMP. A geophysical survey (magnetometer and metal detector survey) was performed at this site under the MMRP in 2008. It is still being managed under MMRP and is slated for a Removal Action. The VASR text was updated to reflect this.</p>
15	Sect 4.33, page 4-23	<p>Site G. This site was identified during interviews with Camp Ravenna representatives by AECOM. This site covers a large area. No estimate was provided in this section, but Ohio EPA estimates the area to be approximately 240 acres. The description states that Site G is the located in the "Smokeless Powder Area." The area is densely overgrown and many storage buildings are present. Various solid waste debris was observed including several rusted metal drums which appeared to be empty. Due to the size of this parcel, and the amount of debris identified, Ohio EPA believes this site should be included in the Solid Waste Management Plan.</p>		<p>The potential area was initially quite large, but the visual survey revealed that debris is scattered in a small portion of the area. Some of the solid waste identified in this small portion of Site G is actually known OHARNG storage. The text has been changed to read: "Various solid waste debris was observed at the site, including empty metal drums, metal banding, railroad ties, plastic bins, wooden pallets, and cultural debris (e.g., disposable coffee cups, plastic water bottle) (Figure 4-24). Some portions of the site are used as storage by OHARNG (e.g., piles of barbed wire). Debris is scattered in small amounts throughout the small portion of Site G. All debris appeared to be surficial. No additional site surveys or geophysical investigations are needed. The solid waste observed during the visual assessment will be</p>

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Date: 9 February 2017

				picked up and properly disposed as part of future training site construction projects. The small portion of the site with solid waste present will be included in the SWMP under the "Troop Labor Sites" category."
16	Figures in Sect 4, 5, and 6	It was noticed in the Figures for Sections 4, 5 and 6 that areas on the maps are defined with the letters "TA", i.e., TA50 and TA53. Please explain to what the TA notation is referring		TA has been defined on the figures. These are training areas that are used internally by the OHARNG to identify areas of the installation.
17	Sect 5.3, page 5-5	This section discusses several areas of concern including Winklepeck Burning Grounds (RVAAP-05). This Section did not describe the current soil remediation and solid waste (MC and MEG) collection activities that are currently (2016-2017) taking place at Winklepeck Burning Grounds. Ohio EPA wants to be assured that the solid waste collected at this AOC is disposed of properly, and that any additional debris found in the future is handled properly. Based on the known debris that is present at this site, RVAAP-05 should be included in the SWMP.		MC and MEC collection activities were not reported on because they are outside the scope of the solid waste project. Since it is an active range, it is being managed under Army regulations for operational ranges. Information related to the Remedial Action (RA) that relates to Material Potentially Presenting an Explosive Hazard (MPPEH) will be included in the RA Completion Report for Winklepeck. Solid waste was identified during the RA and during the visual surveys; therefore, as indicated in the text and tables, a portion of RVAAP-05 (where the solid waste is present) will be included in the SWMP.
18	Sect 5.4, pages 5-7 and 5-8	This section discusses Load Line 6 Evaporation Unit (RVAAP- 14), Load Line 6 Treatment Plant (RVAAP-15), Load Line 6 (RVAAP-33), and Firestone Test Facility (RVAAP-033-R-01). A description of Load Line 6 (RVAAP-33) described the presence of a large mound approximately 170 feet long by 50 feet wide by 10 feet high that appeared to consist of brick, metal, and terra cotta. Also, brick, metal, and wood are scattered around the base of the mound. This mound appears to be consistent with the definition of clean hard fill and; therefore, may be subject to OAC 3745-400-05.		This pile is residual demolition debris. Further discussion of this and any applicable regulations will be included in the SWMP.
19	Sect 5.6 pages 5-10 and 5-11	This section discusses the Landfill North of Winklepeck. (RVAAP-19) and (RVAAP-019-R-01). Based on the description of this landfill, whatever cap was installed in 1978 appears to be compromised and materials are eroding out. In recent surveys conducted in 2015 and 2016 the slope of the landfill was littered with, metal debris, including a 55-gallon		The management of this site will be described in the SWMP. The site is being managed under IRP. The RI/FS for RVAAP-19 is forthcoming, which will describe management of the surficial debris and the landfill cap.

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Reviewer(s): Ohio EPA, Kevin Palombo

Date: 9 February 2017

		drum, rusted cans and buckets. This unlined landfill reportedly contains general plant refuse, explosive waste residue, and open burn waste from Winklepeck Burning Grounds. This landfill does not appear to be properly managed or maintained and Ohio EPA wants to be assured that the exposed debris will be removed and properly disposed, and that the cap will be properly maintained. Please describe in the SWMP how this landfill will be addressed. It is also our understanding that this site is in the initial stages of investigation under the Installation Restoration Program (IRP)		
20	Sect 5.14, pages 5-15 and 5-16	This section discusses the NACA Test Area (RVAAP-38). This 45.62-acre area was in operation from 1947 to 1953. Airplanes were fueled and propelled along a monorail and filmed as they crashed into a concrete barrier to assess fuel spillage and crash behavior. It is reported that the majority of the damaged aircraft were removed from the site following testing, but some were bulldozed into an area at the northeast end of the test area and buried. Metal debris was identified on the eastern portion of the site in April 2016. The report does not recommend additional geophysical evaluation of the area. Ohio EPA has concerns that the full extent of the burial area is not known, it is not properly capped or marked. Ohio EPA understands that this site is undergoing further evaluation under the Installation Restoration Program. These additional activities should be clarified in this section		This site is currently being investigated under IRP and is at the RI/FS stage. After the RI and FS are complete, further analysis may be necessary in terms of solid waste. However, for now, this site will be documented in the SWMP and will not be further investigated under the solid waste project.
21	Sect 5.20, page 5-20	Load Line 11 (RVAAP-44). The visual survey that was conducted in April 2016 identified a "large mound" in the location of a former building. The section states that management of the solid waste observed will not be discussed in the SWMP. Ohio EPA believes that the large mound on the AOC needs to be properly characterized and managed appropriately. Was this mound evaluated by the UXO technician? Please include this information in Section 5.20. Due to the presence of this large		This mound is in the location where an earthen barricade was previously located around the historic building. The text has been changed to reflect this. Also, per the discussion at the 18 April 2017 Clarification Meeting, the VASR was revised with additional site history and generator knowledge information in regards to mounds observed at RVAAP-10 and RVAAP-49.

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Reviewer(s): Ohio EPA, Kevin Palombo

Date: 9 February 2017

		mound, this site should be included in the SWMP.		
22	Sect 5.21, page 5-20	Wet Storage Area (RVAAP-45). Paragraph 2, sentences 2 and 3 are unclear. Please clarify.		The text was updated as follows: “Remnant infrastructure consists of refurbished igloos in the eastern portion of WSA and four earthen, explosive-safety barricades that historically backed igloos, which have now been demolished, in the western part. Tim Morgan stated during onsite interviews that the WSA is used for storage and that debris at the site is unlikely.”
23	Figure 6-8	Two photographs were distorted, images of debris are not clear, please replace.		Photographs were fixed so that the images are clear.



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

June 20, 2017

Mr. Mark Leeper
Army National Guard Directorate
ARNGD-ILE Clean Up
111 South George Mason Drive
Arlington, VA 22204

**Re: US Army Ammunition Plt RVAAP
Remediation Response
Project Records
Remedial Response
Portage County
267000859230**

Subject: Ravenna Army Ammunition Plant, Portage/Trumbull Counties. Response to Ohio EPA Comments on the “Draft Visual Assessment Survey Report for Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites” at the Former Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio, Dated May 10, 2017

Dear Mr. Leeper:

The Ohio Environmental Protection Agency (Ohio EPA) has received and reviewed the response to Ohio EPA comments on the “Draft Visual Assessment Survey Report for Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites” at the former Ravenna Army Ammunition Plant, Portage and Trumbull Counties, Ohio. This response document was received at Ohio EPA’s Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR), on May 11, 2017. The response was prepared for the Army National Guard by AECOM Technical Services, Inc., under Contract Number W9133L-14-D-0001.

Ohio EPA met with the consultant, AECOM, and representatives of the Army National Guard (ANG), and National Guard Bureau on April 18, 2017, at Ohio EPA’s NEDO to discuss the response to Ohio EPA comments submitted in a letter dated February 9, 2017. The Army submitted the written response on May 11, 2017. Below you will find our comments on the responses to our Draft Report comments.

General Comment

1. Based on the discussions held with Army National Guard and the National Guard Bureau, and their consultant on April 18, most of Ohio EPA's comments were addressed satisfactorily. A significant understanding of that meeting and subsequent discussions is that a Solid Waste Management Plan (SWMP) will be created which will define and characterize a subset of all the solid waste sites identified in the Survey. Ohio EPA wants to be assured that all sites identified in the survey with their specific locations and dates will be maintained in the appendices of the SWMP. This catalogue of sites will assist the Army National Guard and act as the baseline source of all identified disposal areas as of the date of the Survey. It is also understood that this SWMP will accompany, or be made part of the Property Management Plan for Camp Ravenna.

Specific Comments

1. Ohio EPA Comment 11. Ohio EPA's comment did not intend to highlight the possible presence of MD or MEC, it is understood that the focus of this Survey is the identification and management of potential solid waste. However, Section 4.2 discusses the history of the Erie Burning Grounds which indicates long term (10 years) activity associated with the open burning of explosives and related materials. It was an active area with significant amounts of material being processed. Materials not consumed in the burning likely remain on the property and it is not clear if they were ever removed. From the descriptions in Section 4.2 of the document, it is understood that the Feasibility Study for this MRS is in progress. It also states in this Section that solid waste identified at the Erie Burning Grounds will be included in the Solid Waste Management Plan. Section 4.2, page 4-5, paragraph 2 describes a magnetometer and metal detector assisted UXO survey that was conducted in 2008 and identified subsurface anomalies. So, there are remaining questions on the type, amount, and distribution of waste that will remain unidentified without an additional survey. The response to our comment should acknowledge the inclusion of the Erie Burning Grounds in the SWMP and that the Feasibility Study is in progress.
2. Ohio EPA Comment 20. Ohio EPA understands that the IRP RI/FS is still in progress. Our concern remains the precise identification of the potential disposal (burial) area described in historical documentation of the NACA Test Area. Until the results of that work is completed, this site will remain an open, unresolved issue. Ohio EPA also understands based on the National Guard Bureau's response to

Comment 20, and other discussions that "...further analysis may be necessary in terms of solid waste" when the RI/FS is completed.

3. Ohio EPA Comment 22. Please provide Tim Morgan's title in this paragraph.
4. After reviewing descriptions of the areas evaluated as part of this Visual Assessment Survey in Sections 1 and 2, Ohio EPA did not see any specific reference to the igloo areas. Were these included in the Survey?

The response to Ohio EPA comments on the "Draft Visual Assessment Survey Report for Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites" was reviewed by personnel from Ohio EPA DERR, and DMWM.

Additional information is necessary to approve the document. If you have questions, or would like to set up a meeting to discuss these comments, please call me at (330) 963-1292.

Sincerely,



Kevin M. Palombo
Environmental Specialist
Division of Environmental Response and Revitalization

KP/nvr

cc: Rebecca Shreffler/Gail Harris, VISTA Sciences Corp.

ec: Bob Princic, Ohio EPA, NEDO DERR
Rodney Beals, Ohio EPA NEDO DERR
Thomas Schneider, Ohio EPA, CO DERR
Carrie Rasik, Ohio EPA, CO DERR
Josh Adams, Ohio EPA, NEDO DMWM
Katie Tait, OHARNG RTLS
Kevin Sedlak, ARNG



NATIONAL GUARD BUREAU
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June 27, 2017

Ohio Environmental Protection Agency
DERR-NEDO
Attn: Kevin Palombo
2110 East Aurora Road
Twinsburg, OH 44087-1924

Subject: Former Ravenna Army Ammunition Plant/Camp Ravenna Joint Military Training Center, Portage/Trumbull Counties, *Evaluation, Identification, and Management of Potential Solid Waste Sites, Response to Ohio EPA Comment Letter (dated June 20, 2017) on the Draft Visual Assessment Survey Report, Ohio EPA ID # 267-000859-230*

Dear Mr. Palombo:

This letter is in response to the Ohio Environmental Protection Agency (EPA) letter dated June 20, 2017, which provided additional comments on the Draft Visual Assessment Survey Report. The comments are included below and are followed by the Army National Guard responses.

Ohio EPA General Comment 1:

Based on the discussions held with Army National Guard and the National Guard Bureau, and their consultant on April 18, most of Ohio EPA's comments were addressed satisfactorily. A significant understanding of that meeting and subsequent discussions is that a Solid Waste Management Plan (SWMP) will be created which will define and characterize a subset of all the solid waste sites identified in the Survey. Ohio EPA wants to be assured that all sites identified in the survey with their specific locations and dates will be maintained in the appendices of the SWMP. This catalogue of sites will assist the Army National Guard and act as the baseline source of all identified disposal areas as of the date of the Survey. It is also understood that this SWMP will accompany, or be made part of the Property Management Plan for Camp Ravenna.

Army Response:

All sites that have been identified as having solid waste present will be captured in the SWMP. However, to clarify, this will not be all the areas discussed in the Visual Assessment Survey Report, as this report gave details of all areas or AOCs that were inspected across the entire installation. Where it was determined that solid waste was not present, those areas will not be included in the SWMP. For the sites where solid waste was identified based on the visual assessment survey, details will be included in the Solid Waste Management Plan with their specific locations and dates. However, as agreed upon at the April 18, 2017 meeting, the sites with de minimis amounts of waste will be listed as one "site." This is meant to track these areas for planning purposes of removing the de minimis waste during future troop labor activities or OHARNG construction projects. Full details of these individual areas with de minimis waste will not be included in the Solid Waste Management Plan, rather one combined list will be provided for tracking purposes.

Ohio EPA Specific Comment 1:

Ohio EPA Comment 11. Ohio EPA's comment did not intend to highlight the possible presence of MD or MEC, it is understood that the focus of this Survey is the identification and management of potential solid waste. However, Section 4.2 discusses the history of the Erie Burning Grounds which indicates long term

(10 years) activity associated with the open burning of explosives and related materials. It was an active area with significant amounts of material being processed. Materials not consumed in the burning likely remain on the property and it is not clear if they were ever removed. From the descriptions in Section 4.2 of the document, it is understood that the Feasibility Study for this MRS is in progress. It also states in this Section that solid waste identified at the Erie Burning Grounds will be included in the Solid Waste Management Plan. Section 4.2, page 4-5, paragraph 2 describes a magnetometer and metal detector assisted UXO survey that was conducted in 2008 and identified subsurface anomalies. So, there are remaining questions on the type, amount, and distribution of waste that will remain unidentified without an additional survey. The response to our comment should acknowledge the inclusion of the Erie Burning Grounds in the SWMP and that the Feasibility Study is in progress.

Army Response:

During the visual assessment there was no evidence of “materials not consumed by burning.” The solid waste identified during the visual survey included rail ties and other items found along the path surrounding the wetland area. The subsurface anomalies identified in the 2008 UXO survey will be addressed under the MMRP Feasibility Study. The MMRP will assess if additional geophysical surveys are needed. It is acknowledged that the Erie Burning Grounds will be included in the SWMP and that the MMRP Feasibility Study is in progress. The response to comment 11 will be changed to state that an MMRP Feasibility Study is in progress.

Ohio EPA Specific Comment 2:

Ohio EPA Comment 20. Ohio EPA understands that the IRP RI/FS is still in progress. Our concern remains the precise identification of the potential disposal (burial) area described in historical documentation of the NACA Test Area. Until the results of that work is completed, this site will remain an open, unresolved issue. Ohio EPA also understands based on the National Guard Bureau's response to Comment 20, and other discussions that "...further analysis may be necessary in terms of solid waste" when the RI/FS is completed.

Army Response:

The Solid Waste Management Plan will present the most recent information possible about the NACA Test Area (i.e., which stage of the CERCLA process the site is in). It can be updated if the solid waste status changes based on the results from the RI.

Ohio EPA Specific Comment 3:

Ohio EPA Comment 22. Please provide Tim Morgan's title in this paragraph.

Army Response:

For clarification, Tim Morgan's title (State Environmental Supervisor) will be added throughout the document.

Ohio EPA Specific Comment 4:

After reviewing descriptions of the areas evaluated as part of this Visual Assessment Survey in Sections 1 and 2, Ohio EPA did not see any specific reference to the igloo areas. Were these included in the Survey?

Ohio Environmental Protection Agency
June 27, 2017

Army Response:

The visual survey looked at the entire facility, including the igloo areas. They are not presented as one comprehensive site or individual sites (i.e., A Block, B Block etc), but they were included as part of the survey.

The Army requests the Ohio EPA review this document for approval. Please contact the undersigned at (703) 607-7955 or mark.s.leeper.civ@mail.mil if there are issues or concerns with the submission.

Sincerely,



Mark Leeper
RVAAP Restoration Program Manager
Army National Guard Directorate

cc: Rod Beals, Ohio EPA, DERR-NEDO
Bob Princic, Ohio EPA, DERR-NEDO
Tom Schneider, Ohio EPA, SWDO
Katie Tait, OHARNG, Camp Ravenna
Kevin Sedlak, ARNG, Camp Ravenna
Bob Guthrie, Management Solutions, LLC
Gail Harris, Vista Sciences Corporation
Rebecca Shreffler, Vista Sciences Corporation
Sarah Gettier, AECOM



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

July 17, 2017

Mr. Mark Leeper
Army National Guard Directorate
ARNGD-ILE Clean Up
111 South George Mason Drive
Arlington, VA 22204

**Re: US Army Ammunition Plt RVAAP
Remediation Response
Project Records
Remedial Response
Portage
267000859230**

Subject: Ravenna Army Ammunition Plant, Portage/Trumbull Counties. Response to Ohio EPA's June 20, 2017 Comment Letter on the Draft Visual Assessment Survey Report for the Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites, former Ravenna Army Ammunition Plant/Camp Ravenna Joint Military Training Center, Dated June 27, 2017. Ohio EPA ID # 267-000859-230

Dear Mr. Leeper:

The response to the Ohio Environmental Protection Agency's (Ohio EPA's) June 20, 2017 comments on the "Draft Visual Assessment Survey Report for the Evaluation, Identification and Management of Potential Solid Waste Disposal Sites", at the former Ravenna Army Ammunition Plant/Camp Ravenna Joint Military Training Center was received at Ohio EPA's Northeast District Office (NEDO), Division of Environmental Response and Revitalization (DERR), on June 29, 2017. The report was prepared for the Army National Guard by AECOM Technical Services, Inc. under Contract Number W9133L-14-D-0001.

We found the response to our comments satisfactory. Ohio EPA did want to clarify our understanding of the Army's Response to Ohio EPA's General Comment 1. The Army intends to capture all sites that have been identified as having solid waste in the Solid Waste Management Plan (SWMP). The sites that were evaluated, but did not identify solid waste will be included in a list as an appendix of the SWMP. Also, the Property Management Plan (PMP) for the former Ravenna Army Ammunition Plant RVAAP will include a section that identifies the SWMP, so that it is considered during any new development on the property.

MR. MARK LEEPER
ARMY NATIONAL GUARD DIRECTORATE
JULY 17, 2017
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Based on the agreements made at our meeting of April 18, 2017, in correspondence from the Army dated May 10, 2017, and June 27, 2017, in response to Ohio EPA comments, the "Draft Visual Assessment Survey Report for the Evaluation, Identification, and Management of Potential Solid Waste Disposal Sites" can be finalized.

Outstanding issues, such as Ohio EPA's position regarding the need for characterization of the disposal area at RVAAP-38 NACA Test Area along with Buildings 15 and 16, along with the status of certain areas of concern containing waste identified on property, will require further discussion, to be scheduled at a later date.

If you have any questions, please call me at (330) 963-1292.

Sincerely,



Kevin M. Palombo
Environmental Specialist
Division of Environmental Response and Revitalization

KP/nvr

cc: Rebecca Shreffler/Gail Harris, VISTA Sciences Corp.

ec: Rodney Beals, Ohio EPA NEDO DERR
Bob Princic, Ohio EPA NEDO DERR
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