PROPOSED PLAN

FOR SOIL, SEDIMENT AND SURFACE WATER

AT RVAAP-48 ANCHOR TEST AREA

AND

RVAAP-13 BUILDING 1200

RAVENNA ARMY AMMUNITION PLANT RAVENNA, OHIO

ORIGINAL

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PUBLIC MEETING August 7, 2013

Paris Township Hall 9355 Newton Falls Road Ravenna, Ohio 44266

COURT REPORTERS INC 330-452-2400

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	1	Brett Merkel, Army National Guard	
	2	Andrew Kocher, Ohio EPA	
	3	Katie Tait, Ohio Army National Guard,	
	4	Camp Ravenna	
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1MS. TITTLE:Good evening,2everyone.Thanks for coming to the meeting this3evening.And I will get out of that light.

Welcome to the public meeting for the proposed plan for soil, sediment and surface water at RVAAP-48 Anchor Test Area and the proposed plan for soil, sediment and surface water at RVAAP-13 Building 1200.

Both areas of concern are at the former
Ravenna Army Ammunition Plant. And this public
meeting serves as one of several opportunities
for public comment.

13 My name is Barb Tittle and I am a private 14 citizen from Portage County. I am here tonight 15 to serve as the meeting facilitator. I am 16 responsible to ensure that everyone who wants to 17 make any comment about the proposed plans has an 18 opportunity to do so.

19 So before we get started, however, I would 20 like to inform you that the emergency exits are 21 on either side of the building. There is one and 22 there is the other back there. And the rest 23 rooms and water fountains are off the lobby where 24 you came in. So help yourself to the cookies and 25 the great coffee that they brought tonight. And

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1 then we will go on with the meeting.

2 Our speaker tonight is going to be Jed 3 Thomas from SAIC. He will give us a status 4 report on the proposed plans and then we will 5 open the floor for questions. But I also want to 6 make sure that you are aware of other places 7 where you can find the copies of the plan. If 8 you want to go to the Reed Memorial Library in 9 Ravenna at 167 East Main Street, or you can find 10 them at the Newton Falls Public Library on 204 11 South Canal Street in Newton Falls. So those are 12 where you can -- or you can also go to the web 13 site, which is www.rvaap.org.

So we will start off and I will give you Jed
 Thomas.

16 MR. THOMAS: All right. Thank 17 you, Barbara. My name is Jed Thomas. I work 18 with Science Applications International 19 Corporation. And I am here tonight to talk to 20 you about the proposed plan for soil, sediment 21 and surface water at Anchor Test Area and 22 Building 1200 areas of concern within the Ravenna 23 Army Ammunition Plant.

Tonight's presentation for each area of
 concern, both Anchor Test Area and Building 1200,

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we are going to go over the historical operations that were conducted. We are going to give a brief summary of previous investigations. We are going to discuss the scope and the role of the response actions at the AOC's. We are going to talk about the feasibility study and the evaluation of alternatives.

8 And then we are going to present the 9 preferred alternative, what the Army recommends 10 going forward to address potential contamination 11 at these areas of concern. And then we are going 12 to discuss your role, the public participation, 13 the decision-making and the input that you can 14 provide to the preferred alternative. And then 15 at the end, we will address any questions that 16 you may have.

Just as a quick note, I may reference Anchor Test Area as ATA, or you may see it as ATA in the slide presentation. And Building 1200 may be presented as B-1200 in the slide presentation.

As you have probably seen many times before, this is a facility map of the Ravenna Army Ammunition Plant. The location of the Anchor Test Area area of concern is at the south central portion of the facility, as you can see right here. And then the location of the Building 1200 area of concern is to the east. You can see it right here.

The Anchor Test Area area of concern also has a designation of RVAAP -- RVAAP-48, and the Building 1200 area of concern has the designation of RVAAP-13.

8 I am going to start off going over Anchor 9 Test Area. So Anchor Test Area, it is an area of 10 concern that is about a half acre in size. It is 11 heavily overgrown with trees and shrubs. You can 12 see from the photograph here. There are no 13 perennial surface water or drainage features at 14 the area of concern. There hasn't been any 15 sediment or surface water identified at ATA.

16 The historical operations -- it is 17 relatively limited, what historical operations 18 were performed at the Anchor Test Area. It is 19 understood that it was previously used for the 20 testing of explosives-driven soil anchoring 21 devices. Metal rods were driven into the ground 22 and attached with a cable. There are dirt mounds 23 that are located at Anchor Test Area. And those 24 were used as blast walls. And I will show you a 25 figure later in the presentation to show you

where about those -- those dirt mounds are
 located.

3 Three previous investigations were conducted 4 at Anchor Test Area. The first being the 1998 5 Relative Risk Site Evaluation. That was 6 performed to basically prioritize and classify 7 Anchor Test Area. There was some soil -- there 8 was soil and -- surface soil and subsurface soil 9 samples collected. And as a result, Anchor Test 10 Area was classified -- using those results, 11 Anchor Test Area was classified as a medium 12 priority area of concern. They also identified 13 potentially contaminated areas of surface soil at 14 ATA.

15 In addition, in 2004, there was a -- Anchor 16 Test Area was part of the Characterization of 14 17 Areas of Concern. Surface and subsurface soil 18 sampling, human health risk screening, ecological 19 risk screening was used to determine that metals 20 in the soil were identified as potential risks. 21 And the Characterization Report also recommended 22 a full assessment be performed at Anchor Test 23 Area.

Then in 2010 our Remedial Investigation was
 conducted. Additional surface soil and

1 subsurface soil samples were collected. These 2 samples were used to add to the previously 3 collected sample data set that we had. Part of this Remedial Investigation was human health risk 4 5 assessment was performed, an ecological risk 6 assessment was performed. And basically the 7 sampling was determined to characterize the 8 entire area of concern.

9 The human health risk assessment that was 10 performed identified Arsenic as the chemical of 11 concern in subsurface -- or in surface soil, 12 which is in the zero to one foot strata. There 13 were no chemicals of concern within the 14 subsurface. So everything below one --15 everything below one foot was determined to not 16 have a chemical of concern.

There were no ecological -- there were no concerns for the ecology environment, which it was determined that there were no actions needed to be protective of the environment. And as I mentioned before, no further sampling was needed to characterize Anchor Test Area.

23 So going forward, as I mentioned, Arsenic 24 was identified as a chemical of concern in the 25 surface soil, the zero to one foot interval. So going forward, the Army wants to implement a remedy to make sure that the Ohio Army National Guard can, in the future, conduct military training at this area of concern.

5 The proposed remedy will basically be three 6 objectives. One is that it will be -- it will 7 prevent National Guard training exposure to 8 identified COCs, or Arsenic in the surface soil. 9 It will make sure that there are no adverse 10 ecological effects from the chemical 11 concentrations in the soil, and that there won't 12 be any negative impacts to groundwater.

13 So as I mentioned, Arsenic was previously 14 identified as a chemical of concern in the 15 surface soil. The Feasibility Study was 16 developed and established the cleanup goal for 17 Arsenic of 15.4 milligrams per kilogram. And the 18 15.4 milligrams per kilogram is also the 19 background concentration at Ravenna, which means 20 that once the area -- that areas above that 21 concentration are removed, we will not only 22 obtain protectiveness of the National Guard 23 trainee, but we will also be protective of -- if 24 a resident farmer wanted to go in and use the 25 area of concern.

1 So with that, in the Feasibility Study, 2 there are two alternatives developed to 3 obtain -- there were two alternatives developed. One was a No Action alternative. So a No Action 4 5 alternative is an assessment of what if the Army 6 does nothing -- what happens at that area of 7 concern if the Army doesn't do anything to 8 address this chemical of concern.

9 The second alternative is identified -- was 10 named Attain Unrestricted Land Use. And that 11 alternative includes the removal of soil 12 contamination. And as I mentioned, we will 13 remove the soil contamination to that 15.4 14 milligrams per kilogram, which is the background 15concentration. As that meets a residential 16 farming scenario, there will be no land use 17 controls required by the Army, and no 18 restrictions will be put for -- put in place at 19 the Anchor Test Area.

20 So the Army's preferred alternative going 21 forward is to implement Alternative 2, again 22 named Attain Unrestricted Land Use. The 23 alternative includes the excavation and removal 24 of an estimated 14 cubic yards of soil -- surface 25 soil from the zero to one foot depth. Once that soil is removed, it is going to be tested and
 disposed at a licensed disposal facility.

3 Upon the removal of the areas with the 4 contamination, there will be footprints that we 5 are going to go and we are going to sample to 6 make sure that all of the contamination has been 7 removed.

8 And then once it is confirmed that we have 9 met those cleanup goals, and all the 10 contamination has been removed, we are going to 11 bring in some clean soil and reseed the area so 12 that vegetation reestablishes.

13 Here is a graphical depiction of what we are 14 talking about. So this is Anchor Test Area area 15 of concern. You see some areas -- some boxes 16 highlighted in gray. Those are some previously 17 sampled areas. And then this area in orange, if 18 you can see, that is what we are recommending 19 requires removal. So that is the area that 20 exceeds that Arsenic concentration, that cleanup 21 goal of 15.4 milligrams per kilogram.

And as I mentioned before, there is a dirt mound that exists. This is the dirt mound that used to serve as the blast wall here in previous activities. So the implementation of the preferred alternative is to remove this area,
 this orange area, until we attain that Arsenic
 cleanup goal of 15.4 milligrams per kilogram.

4 And Building 1200, the previous activities 5 that were performed at Building 1200, it was 6 The designated as an Ammunition Sectioning Area. 7 area of concern used to contain three buildings, 8 one called Building 1200. There was also two 9 Buildings S-4605 and T-4602. These three 10 buildings served as a quality assurance 11 inspection station for production line munitions. 12 They would bring munitions to the area. Thev 13 would disassemble them and inspect them. And 14 some of the -- if there was explosive residue on 15 the munitions, they were -- they went through a 16 steam melt-down process to remove the explosive 17 residue on the munitions prior to the disposal of 18 those munitions.

The Building 1200 area of concern, it is approximately eight acres in size. The three buildings that I mentioned before, they have been demolished in 2004 and 2005. Those buildings were removed.

As you will see here in a second, the area that the buildings used to be located, it is bare. And where the building footprints are, that is surrounded by a heavily vegetated area. And there is a ditch that connects -- there is a half acre unlined settling pond connected by a ditch line, where the front -- where the building footprints were. You will see that here in a second.

8 So here is the graphical depiction of 9 Building 1200 area of concern. So here is 10 the -- where the buildings used to be located. 11 The current building footprints. And you can 12 see -- if you can see in this photograph, but it 13 is basically pretty bare here. There are three 14 monitoring wells in the immediate area where the 15 buildings used to be located.

16 There is a ditch -- this is the ditch line 17 running to the former settling pond. Again, the 18 settling pond is about a half acre in size. And 19 as you can see, it is pretty heavily vegetated 20 itself. There is water there from time to time, 21 but usually not much more than I would say a 22 foot, but it also can be dry.

So at the Building 1200 area of concern,
 there have been five investigations performed.
 In 1989, there was the RCRA Facility Assessment

that basically made a further recommendation that soil, sediment and surface water of the ditch and the settling pond was required.

And in 1996, there was a Preliminary
Assessment that was conducted. And out of this
Preliminary Assessment, it identified the
Building 1200 area of concern as a high priority.
And it identified explosives and metals as
potential contaminants at the AOC.

10 In 1996, there was sampling conducted as 11 part of the Phase I Remedial Investigation. 12 There were surface soil samples, subsurface soil 13 samples, sediment and groundwater samples 14 collected. The determination coming out of that 15 Phase I RI was that there was no widespread 16 contamination detected in the soil. And it 17 reclassified the Building 1200 area of concern as 18 a medium priority.

The Building 1200 area of concern is also part of the previously mentioned Characterization 14 Areas of Concern. Surface soil, subsurface soil, sediment, geotechnical and groundwater samples were collected. And out of that assessment, there were numerous chemicals identified as potential risks to human health and the environment. And there was a recommendation to go forward with a full risk assessment for that area of concern.

And then in 2010, there was another Remedial 4 5 Investigation conducted where surface soil, 6 subsurface soil, sediment and surface water 7 samples were collected. Again, this fed into the 8 previously collected data at the area of 9 concern. And out of that, there was a human 10 health risk assessment and an ecological risk 11 assessment performed. And that the ecological 12 risk assessment did not identify any chemicals 13 that provided a risk to the environment. So no 14further actions were needed to address ecological 15 resources.

But the human health risk assessment did identify Manganese as a chemical of concern in the surface soil. So, again, in the zero to one foot interval. And there were no chemicals of concern in the subsurface soil.

So going forward, as I mentioned very similar to Anchor Test Area, the Army's intent is basically to remediate the Building 1200 area of concern, so that the Ohio Army National Guard can conduct military training in the future at this AOC.

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2 As I mentioned, Manganese in surface soil 3 was identified as a chemical of concern. So the 4 objectives going in to addressing the Manganese 5 chemical of concern is to make sure that we are 6 preventing the National Guard training exposure 7 to Manganese, to the COC, to make sure that there 8 are no adverse ecological effects at the area of 9 concern, make sure there are no impacts from 10 soil, sediment or surface water to the 11 groundwater.

12 The Feasibility Study that was conducted, it 13 identified -- or it presented a cleanup goal of 14 Manganese of 1,450 milligrams per kilogram, 15 which, again, is similar to the Anchor Test 16 Area. That is the background concentration for 17 Manganese at the facility.

18 So attainment, remediate to that cleanup goal not only protects the National Guard 19 20 trainee, but it also protects the resident 21 farmer. So it is basically saying, you know, 22 that a residential scenario would be achieved in 23 implementing a remedy to that cleanup goal. 24 The Feasibility Study assessed two 25 alternatives. The No Action alternative. Aqain,

1 what happens if the Army doesn't do anything? 2 What are the impacts if the Army doesn't do 3 anything? And then the second alternative named 4 Attain Unrestricted Land Use, where we would go 5 out, remove all of the soil that is contaminated 6 and -- to that cleanup goal, that 1,450 7 milligrams per kilogram cleanup goal. And with 8 that, as I mentioned, since we would attain 9 unrestricted land use, there would be no land use 10 controls. The Army wouldn't have to put any 11 restrictions on the site going forward.

12 So the preferred alternative by the Army is 13 to implement alternative 2, Attain Unrestricted 14 The alternative right now that -- the Land Use. 15 estimated volume would be 225 cubic yards of 16 surface soil, so that zero to one foot ground 17 surface would be removed. There is three 18 different areas -- I will show you in a second --19 that will require removal. We are going to 20 excavate the soil. We are going to test and make 21 sure we are properly disposing it at a licensed 22 disposal facility.

And we are going to go out. We are going to sample the areas that have been excavated to make sure that we have attained that cleanup goal so we can determine if additional excavation is needed to get to that cleanup goal for Manganese, or if we have met the cleanup goal and the site can be completed and restored.

5 In addition, part of the Remedial 6 Investigation, we implemented a survey of 7 asbestos-contained material, because as I 8 mentioned before, there were three buildings that 9 were demolished. And what we did is we sent out 10 a licensed professional to see if there was any 11 asbestos-containing material at the area of 12 concern. We did not find any. But there is a 13 mound that we just wanted to further investigate 14 as part of the remedial action to make sure there 15 is no asbestos-containing material in the mound. 16 You will see here in a second. If there is, we 17 will remove it. And that will be part of -- like 18 I said, that is basically -- that inspection and 19 the potential removal, if the asbestos-containing 20 material is found, is part of the remedy here.

And for any areas that have been excavated and restored and confirmed meets all of the cleanup goals, we are going to bring in clean soil, we are going to reseed the area and reestablish the vegetation. So here is a site map of the Building 1200 area of concern that we saw a few minutes ago. Again, the gray areas indicate areas that were sampled during the previous investigations. We have some -- the areas in orange are the areas that we are recommending for removal.

So we are recommending removal of this discharge area from this former settling pond. So here is the former settling pond, that half acre former settling pond. The discharge area, this ditch line exceeds the cleanup goal for Manganese, so are going to remove that -- we are going to remove the surface soil there.

There are also two locations here that are adjacent, but these are two separate locations that we are going to remove soil, until we attain that Manganese cleanup goal.

18 Also as I mentioned, here is the dirt 19 It is right next to Building T-4602. mound. 20 Here is a picture. It is a pretty short mound. 21 It is less than four feet high. And that is 22 where we are going to do some further 23 investigation just to make sure there is no 24 asbestos-containing material. Or if there is, we 25 are going to remove it.

So with that, the public participation and your input to this whole decision-making process is very important. The Army would like to get any input that you may have to the two preferred alternatives that I have presented.

6 We have -- we will address any questions here at the end of this slide presentation. And 7 8 there is also a public comment period -- a 30-day 9 public comment period that extends until August 10 13, 2013. So if you do have any comments or any 11 questions, you know, we can address them here, or 12 there are ways to provide comments -- written 13 comments to the Army going forward.

MS. TITTLE: Thanks, Jed. And before we go any further, a comment from the Ohio EPA, please?

17MR. KOCHER:Yes. I would just18like to say that the Ohio EPA concurs with the19alternatives that were selected in these proposed20plans.

21MS. TITTLE:Thank you.22MR. KOCHER:Sure.23MS. TITTLE:So does anyone24have any questions?This is your opportunity.25Seeing no questions -- one more time if

	22
1	anyone has any questions? Or you can do written
2	comments. You can make written comments/
3	questions. It is outlined in the information
4	that is available. And Vickie can help you with
5	the comment cards if you think of something
6	later. And certainly let the Army know. And we
7	will go from there.
8	Otherwise, enjoy the cookies and drink
9	coffee. Thank you.
10	(Thereupon, the public meeting was
11	concluded at 6:52 p.m.)
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23 1 CERTIFICATE 2 3 STATE OF OHIO,) SS:) 4 SUMMIT COUNTY,) 5 I, Jerri Lynn Wheat, a Stenographic 6 Reporter and Notary Public within and for the State of Ohio, duly commissioned and gualified, 7 do hereby certify that these proceedings were taken by me and reduced to Stenotype, afterwards 8 prepared and produced by means of Computer-Aided Transcription and that the foregoing is a true 9 and correct transcription of the proceedings so taken as aforesaid. 10 I do further certify that these proceedings were taken at the time and place in the foregoing 11 caption specified, and were completed without 12 adjournment. 13 I do further certify that I am not a relative, employee of or attorney for any party or counsel, or otherwise financially interested 14 in this action. 15 I do further certify that I am not, nor is 16 the court reporting firm with which I am affiliated, under a contract as defined in Civil 17 Rule 28(D). IN WITNESS WHEREOF, I have hereunto set my 18 hand and affixed my seal of office at Akron, Ohio on this 20th day of August, 2013. 19 20 21 Jenri Lynn Wheat, Stenographic 22 Reporter and Notary Public in and for the State of Ohio. 23 24 My commission expires April 9, 2018. 25

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18:3,12,13,14	17:8,16 19:11	18:4,8,13	bring
alternatives	19:24 20:2,8	20:16	12:11 13:12
6:7 11:2,3 17:25	20:10	attained	19:23
21:5,19	areas	18:25	brought
Ammunition	4:9 5:22 6:11	attainment	4:25
1:10 4:10 5:23	8:13,17 10:20	17:18	building
6:23 13:6	12:3,15,17	attorney	1:8 4:8,21 5:22
Anchor	15:21 18:18,24	23:13	5:25 6:19 7:1,6
1:6 4:6 5:21,25	19:21 20:3,3,5	August	13:4,5,8,19
6:17,23 7:4,8,9	20:5	1:15 21:9 23:19	14:1,5,9,11,23
7:18,23 8:4,7,9	Army	available	15:7,17,19
8:11,15,22	1:10 3:1,3 4:10	22:4	16:23 20:1,19
9:22 11:19	5:23 6:9,22	aware	buildings
12:14 16:22	10:1,2 11:5,7	5:6	13:7,9,10,21,22
17:15	11:17 16:24		13:25 14:10,15
anchoring	18:1,2,10,12	<u>B</u>	19:8
7:20	21:3,13 22:6	B-1200	
Andrew	Army's	6:20	<u> </u>
3:2	11:20 16:22	back	С
AOC	Arsenic	4:22	23:1,1
15:9 17:1	9:10,23 10:8,13	background	cable
AOC's	10:17 12:20	10:19 11:14	7:22
6:5	13:2	17:16	called
APPEARANC		Barb	13:8
	asbestos-conta	4·13	Camn

7.10 14.4,10	1 10 4 10 5 00	0.10.10.10.00	17.10	
20:10	1:10 4:10 5:23	8:13,17 10:20	17:18	building
acres	6:23 13:6	12:3,15,17	attorney	1:8 4:8,21 5:22
13:20	Anchor	15:21 18:18,24	23:13	5:25 6:19 7:1,6
action	1:6 4:6 5:21,25	19:21 20:3,3,5	August	13:4,5,8,19
11:4,4 17:25	6:17,23 7:4,8,9	20:5	1:15 21:9 23:19	14:1,5,9,11,23
19:14 23:14	7:18,23 8:4,7,9	Army	available	15:7,17,19
actions	8:11,15,22	1:10 3:1,3 4:10	22:4	16:23 20:1,19
6:5 9:19 16:14	9:22 11:19	5:23 6:9,22	aware	buildings
activities	12:14 16:22	10:1,2 11:5,7	5:6	13:7,9,10,21,22
12:25 13:4	17:15	11:17 16:24		13:25 14:10,15
add	anchoring	18:1,2,10,12	<u> </u>	19:8
9:2	7:20	21:3,13 22:6	B-1200	
addition	Andrew	Army's	6:20	<u> </u>
8:15 19:5	3:2	11:20 16:22	back	С
additional	AOC	Arsenic	4:22	23:1,1
8:25 19:1	15:9 17:1	9:10,23 10:8,13	background	cable
address	AOC's	10:17 12:20	10:19 11:14	7:22
6:10,15 11:8	6:5	13:2	17:16	called
16:14 21:6,11	APPEARANC	asbestos-conta	Barb	13:8
addressing	2:1	19:7	4:13	Camp
17:4	Applications	asbestos-conta	Barbara	3:4
adjacent	2:6,17 5:18	19:11,15,19	2:3 5:17	Canal
20:15	approximately	20:24	bare	5:11
adjournment	13:20	assessed	14:1,13	caption
23:12	April	17:24	basically	23:11
adverse	23:24	assessment	8:6 9:6 10:5	cards
10:9 17:8	area	8:22 9:5,6,9	14:13 15:1	22:5
affiliated	1:6 4:6 5:21,24	11:5 14:25	16:23 17:21	central
23:16	5:25 6:18,24	15:5,6,24 16:2	19:18	6:24
affixed	6:24 7:2,4,4,6	16:10,11,12,16	blast	certainly
23:18	7:9,9,9,14,18	Assistant	7:24 12:24	22:6
aforesaid	7:23 8:4,7,10	2:8	Boulevard	certify
23:9	8:11,12,16,23	assurance	2:19	23:7,10,13,15
ago	9:8,22 10:4,20	13:10	Box	Characterizati
20:2	10:25 11:6,19	ATA	2:12	8:16,21 15:20
Akron	12:11,14,14,17	6:18,18 7:15	boxes	characterize
23:18	12:19 13:1,2,6	8:14	12:15	9:7,22
alternative	13:7,12,19,24	attached	Brett	chemical
6:9,14 11:4,5,9	14:2,9,14,23	7:22	3:1	9:10,16,24 10:10
11:11,20,21,23	15:7,17,19	attain	brief	10:14 11:8
13:1 17:25	16:3,8,22,23	11:10,22 13:2	6:3	16:17 17:3,5
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7:10 14:4,18

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Page 25

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chemicals	concentration	contract	determine	5:9 7:2
9:13 15:24	10:19,21 11:15	23:16	8:19 19:1	ecological
16:12,19	12:20 17:16	controls	determined	8:18 9:5,17
citizen	concentrations	11:17 18:10	9:7,15,19	10:10 16:10,11
4:14	10:11	cookies	developed	16:14 17:8
Civil	concern	4:24 22:8	10:16 11:2,3	ecology
23:16	4:9 5:22,25 6:11	copies	devices	9:18
classified	6:24 7:2,4,6,10	5:7	7:21	effects
8:10,11	7:14 8:12,17	Corporation	different	10:10 17:8
classify	9:8,11,13,16	2:7.18 5:19	18:18	eight
8:6	9:24 10:4,14	correct	dirt	13:20
clean	10:25 11:7,8	23:9	7:22 8:1 12:22	either
12:11 19:23	12:15 13:7,19	counsel	12:23 20:18	4:21
cleanup	14:9,23 15:7	23:14	disassemble	emergency
10:16 12:9,20	15:17,19,21	County	13:13	4:20
13:3 17:13,18	16:3,9,17,20	4:14 23:4	discharge	employee
17:23 18:6,7	16:24 17:3,5,9	court	20:8,10	23:13
18:25 19:2,3	19:12 20:2	23:16	discuss	Engineering
19:23 20:11,17	concerns	cubic	6:4,12	2:10
COC	9:18	11:24 18:15	disposal	enjoy
17:7	concluded	current	12:2 13:17	22:8
COCs	22:11	14:11	18:22	ensure
10:8	concurs		disposed	4:16
coffee	21:18	D	12:2	entire
4:25 22:9	conduct	data	disposing	9:8
collected	10:3 16:25	9:3 16:8	18:21	environment
8:9 9:1,3 15:14	conducted	day	ditch	9:18,20 16:1,13
15:23 16:7,8	6:2 8:3,25 15:5	23:19	14:3,5,16,16	EPA
coming	15:10 16:5	decision-making	15:2 20:11	3:2 21:16,18
4:2 15:14	17:12	6:13 21:2	drainage	established
comment	confirmed	defined	7:13	10:16
4:12,17 21:8,9	12:8 19:22	23:16	drink	estimated
21:15 22:5	connected	demolished	22:8	11:24 18:15
comments	14:4	13:22 19:9	Drive	evaluation
21:10,12,13 22:2	connects	depiction	2:11	6:7 8:5
22:2	14:3	12:13 14:8	driven	evening
commission	contain	depth	7:21	4:1,3
23:24	13:7	11:25	dry	excavate
commissioned	contaminants	designated	14:22	18:20
23:6	15:9	13:6	duly	excavated
Commons	contaminated	designation	23:6	18:24 19:21
2:19	8:13 18:5	7:5,6		excavation
completed	contamination	detected	E	11:23 19:1
19:4 23:11	6:10 11:12,13	15:16	E	exceeds
Computer-Aid	12:4,6,10	determination	23:1,1	12:20 20:11
23:8	15:16	15:14	east	exists
1				

		·····	,	
12:23	firm	go	1:17	important
exits	23:16	5:1,8,12 6:1	hand	21:3
4:20	first	10:24 12:5	23:18	includes
expires	8:4	16:2 18:4,23	happens	11:11,23
23:24	five	21:15 22:7	11:6 18:1	indicate
explosive	14:24	goal	health	20:3
13:14,16	floor	10:16 12:21	8:18 9:4,9 15:25	inform
explosives	5:5	13:3 17:13,19	16:10,16	4:20
15:8	foot	17:23 18:6,7	heavily	information
explosives-dri	9:12,15,25 11:25	18:25 19:2,3	7:11 14:2,19	22:3
7:20	14:22 16:19	20:11,17	help	Infrastructure
exposure	18:16	goals	4:24 22:4	2:10
10:7 17:6	footprints	12:9 19:23	hereunto	input
extends	12:4 14:1,6,11	going	23:18	6:13 21:2,4
21:9	foregoing	5:2 6:1,2,4,5,8	high	inspect
	23:8,11	6:10,11 7:8,8	15:7 20:21	13:13
F	former	9:23 10:1	highlighted	inspection
F	4:9 14:17 20:8,9	11:20 12:1,5,5	12:16	13:11 19:18
23:1	20:10	12:10 16:21	historical	intent
facilitator	forward	17:4 18:11,19	6:1 7:16,17	16:22
2:3 4:15	6:10 9:23 10:1	18:20,23,23	human	interested
facility	11:21 16:2,21	19:23,24 20:12	8:18 9:4,9 15:25	23:14
6:22,25 12:2	18:11 21:13	20:13,16,22,25	16:9,16	International
14:25 17:17	found	21:13		2:6,17 5:18
18:22	19:20	Good	<u> </u>	interval
Falls	fountains	4:1	identified	9:25 16:19
1:18 5:10,11	4:23	graphical	7:15 8:12,20	investigate
farmer	four	12:13 14:8	9:10,24 10:8	19:13
10:24 17:21	20:21	gray	10:14 11:9	investigation
farming	front	12:16 20:3	15:6,8,25 17:3	8:24 9:4 15:11
11:16	14:5	great	17:13	16:5 19:6
feasibility	full	4:25	identify	20:23
6:6 10:15 11:1	8:22 16:2	ground	16:12,17	investigations
17:12,24	further	7:21 18:16	immediate	6:3 8:3 14:24
features	9:21 15:1 16:14	groundwater	14:14	20:4
7:13	19:13 20:22	10:12 15:13,22	impacts	-
fed	21:15 23:10,13	17:11	10:12 17:9 18:2	J
16:7	23:15	Guard	implement	Jago
feet	future	3:1,3 10:3,7,22	10:1 11:21	2:5
20:21	10:3 16:25	16:24 17:6,19	18:13	Jed
figure			implementation	2:16 5:2,14,17
7:25	G	H	12:25	21:14
financially	geotechnical	half	implemented	Jerri
23:14	15:22	7:10 14:4,18	19:6	23:5,21
find	give	20:9	implementing	
5:7,9 19:12	5:3,14 6:2	Hall	17:23	K
				Katie
			1	

C

ĺ

			•	N
3:3	16:17 17:2,4,7	mound	12:8	11:18 23:11
Kevin	17:14,17 19:2	12:23,23 19:13	open	places
2:5	20:12,17	19:15 20:19,20	5:5	5:6
kilogram	map	mounds	operations	plan
10:17,18 11:14	6:22 20:1	7:22 8:1	6:1 7:16,17	1:4 4:5,7 5:7,20
12:21 13:3	material	munitions	opportunities	plans
17:14 18:7	19:7,11,15,20	13:11,12,15,17	4:11	4:17 5:4 21:20
know	20:24	13:18	opportunity	Plant
17:21 21:11	means	·	4:18 21:24	1:10 4:10 5:23
22:6	10:19 23:8	N	orange	6:23
Kocher	medium	name	12:17 13:2 20:5	please
3:2 21:17,22	8:11 15:18	4:13 5:17	outlined	21:16
	meeting	named	22:3	pond
L	1:14 4:2,4,11,15	11:10,22 18:3	overgrown	14:4,17,18 15:3
Lafayette	5:1 22:10	National	7:11	20:8,9,10
2:11	meets	3:1,3 10:2,7,22		Portage
land	11:15 19:22	16:24 17:6,19	Р	4:14
11:10,16,22 18:4	melt-down	needed	P.G	portion
18:9,9,14	13:16	9:19,21 16:14	2:5	6:25
Library	Memorial	19:2	p.m	Post
5:8,10	5:8	negative	22:11	2:12
licensed	mentioned	10:12	Paris	potential
12:2 18:21	9:21,23 10:13	Newton	1:17	6:10 8:20 15:9
19:10	11:12 12:22	1:18 5:10,11	part	15:25 19:19
light	13:21 15:20	Notary	8:16 9:3 15:11	potentially
4:3	16:21 17:2	23:6,22	15:20 19:5,14	8:13
limited	18:8 19:8	note	19:17,20	preferred
7:17	20:18	6:17	participation	6:9,14 11:20
line	Merkel	numerous	6:12 21:1	13:1 18:12
13:11 14:5,16	3:1	15:24	party	21:4
20:11	met	10.2.	23:13	Preliminary
lobby	12:9 19:3	0	perennial	
4:23	12.9 19.5 Metal	Oak	7:13	15:4,6
located	7:21	2:13	performed	prepared 23:8
7:23 8:2 13:25	metals	objectives	7:18 8:6,22 9:5	
14:10,15	8:19 15:8	10:6 17:4	9:6,10 13:5	present 2:24 6:8
location	military	obtain	14:24 16:11	
6:23 7:1	10:3 16:25	10:22 11:3	period	presentation
locations		office	21:8,9	5:24 6:19,20
20:14,15	milligrams	2:12 23:18	Phase	7:25 21:7
Lynn	10:17,18 11:14 12:21 13:3	Ohio	15:11,15	presented 6:20 17:13 21:5
23:5,21		1:11,19 2:21 3:2	photograph	
	17:14 18:7	3:3 10:2 16:24	7:12 14:12	President 2:8
M	minutes 20:2	21:15,18 23:3	picture	
Main		23:6,18,22	20:20	pretty
5:9	monitoring 14:14	once	place	14:13,19 20:20
Manganese	14.14	10:20 11:25	Pince	prevent
0				

(

10:7	public	reestablishes	13:14,17	RVAAP-48
preventing	1:14 4:4,10,12	12:12	resources	1:6 4:6 7:5
17:6	5:10 6:12 21:1	reference	16:15	
previous	21:8,9 22:10	6:17	response	<u> </u>
6:3 8:3 12:24	23:6,22	relative	6:5	S-4605
13:4 20:4	put	8:5 23:13	responsible	13:9
previously	11:18,18 18:10	relatively	4:16	SAIC
7:19 9:2 10:13		7:17	rest	2:25 5:3
12:16 15:20	Q	remedial	4:22	sample
16:8	qualified	8:24 9:4 15:11	restored	9:3 12:5 18:24
prior	23:6	16:4 19:5,14	19:4,22	sampled
13:17	quality	remediate	restrictions	12:17 20:4
prioritize	13:10	16:23 17:18	11:18 18:11	samples
8:6	questions	remedy	result	8:9 9:1,2 15:12
priority	5:5 6:15 21:6,11	10:2,5 17:23	8:9	15:13,13,23
8:12 15:7,18	21:24,25 22:1	19:20	results	16:7
private	22:3	removal	8:10	sampling
4:13	quick	11:11,23 12:3,19	RI	8:18 9:7,21
probably	6:17	18:19 19:19	15:15	15:10
6:21		20:6,7	Ridge	saw
proceedings	$\frac{R}{r}$	remove	2:13	20:2
23:7,9,10	R	11:13 13:1,16	right	saying
process	23:1	18:5 19:17	5:16 6:25 7:3	17:21
13:16 21:2	Ravenna	20:12,13,16,25	18:14 20:19	scenario
produced	1:10,11,19 3:4	removed	risk	11:16 17:22
23:8	4:10 5:9,22	10:21 12:1,7,10	8:5,18,19 9:4,5,9	Science
production	6:22 10:19	13:23 18:17	16:2,10,10,12	2:6,17 5:18
13:11	RCRA	report	16:13,16	Scientist
professional	14:25	5:4 8:21	risks	2:9
19:10	reclassified	Reporter	8:20 15:25	scope
properly	15:17	23:6,22	Road	6:4
18:21	recommendati	reporting	1:18	screening
proposed	15:1 16:1	23:16	rods	8:18,19
1:4 4:5,7,17 5:4	recommended	require	7:21	seal
5:20 10:5	8:21	18:19	role	23:18
21:19	recommending	required	6:4,12	second
protective	12:18 20:6,7	11:17 15:3	rooms	11:9 13:24 14:7
9:20 10:23	recommends	requires	4:23	18:3,18 19:16
protectiveness	6:9	12:19	Rule	Sectioning
10:22	Reddick	reseed	23:17	13:6
protects	2:25	12:11 19:24	running	sediment
17:19,20	reduced	resident	14:17	1:5 4:5,7 5:20
provide	23:7	10:24 17:20	RVAAP	7:15 15:2,13
6:14 21:12	Reed	residential	7:5	15:22 16:6
provided	5:8	11:15 17:22	RVAAP-13	17:10
16:13	reestablish	residue	1:8 4:8 7:7	see
	19:25			
	-	-	- '	-

ĺ

[1 450 27
6:18,25 7:2,12	1:5 4:5,7 5:20	15:12,21 16:6	8:11,16,22	Twinsburg
12:15,18 13:24	7:20 8:7,8,8,8	16:20	9:22 11:19	2:21
14:6,12,12,19	8:13,17,20,25	Suite	12:14 16:22	two
19:10,16	9:1,11,25 10:8	2:20	17:15 18:20	11:2,3 13:8
Seeing	10:11,15 11:11	summary	tested	17:24 20:14,15
21:25	11:13,24,25	6:3	12:1	21:4
seen	12:1,11 15:2	SUMMIT	testing	21.7
6:21	15:12,12,16,21	23:4	7:20	U
selected	15:22 16:5,6	sure	Thank	understood
21:19	16:18,20 17:2	5:6 10:2,9 12:6	5:16 21:21 22:9	7:19
Senior	17:10 18:5,16	17:5,7,9 18:21	Thanks	unlined
2:9	18:20 19:24	18:25 19:14	4:2 21:14	14:4
sent	20:13,16	20:23 21:22	think	unrestricted
19:9	south	surface	22:5	11:10,22 18:4,9
separate	5:11 6:24	1:5 4:5,7 5:21	Thomas	18:13
20:15	speaker	7:13,15 8:8,13	2:16 5:3,15,16	use
serve	5:2	8:17,25 9:11	5:17	10:24 11:10,16
4:15 12:24	specified	9:25 10:8,15	three	11:22 18:4,9,9
served	23:11	11:24 15:2,12	8:3 10:5 13:7,9	18:14
13:10	SS	15:21 16:5,6	13:20 14:13	usually
serves	23:3	16:18 17:2,10	18:17 19:8	14:21
4:11	start	18:16,17 20:13	time	
set	5:14 7:8	surrounded	14:20,20 21:25	V
9:3 23:18	started	14:2	23:11	vegetated
settling	4:19	survey	times	14:2,19
14:4,17,18 15:3	State	19:6	6:21	vegetation
20:8,9,10	23:3,6,22		Tittle	12:12 19:25
short	station	T	2:3 4:1,13 21:14	Vice
20:20	13:11	Т	21:21,23	2:8
show	status	23:1,1	tonight	Vickie
7:24,25 18:18	5:3	T-4602	4:14,25 5:2,19	2:25 22:4
shrubs	steam	13:9 20:19	Tonight's	volume
7:11	13:16	Tait	5:24	18:15
side	Stenographic	3:3	Township	W
4:21	23:5,21	taken	1:17	W
similar	Stenotype	23:7,9,11	trainee	2:5
16:22 17:15	23:7	talk	10:23 17:20	
site	strata	5:19 6:6	training	wall 12:24
5:13 8:5 18:11	9:12	talking	10:4,7 16:25	walls
19:3 20:1	Street	12:14	17:6	wans 7:24
size	5:9,11	Tennessee	transcription	
7:10 13:20	study	2:13	23:8,9	want 5:5,8
14:18	6:6 10:15 11:1	test	trees	vanted
slide	17:12,24	1:6 4:6 5:21,25	7:11	10:24 19:13
6:19,20 21:7	subsurface	6:18,24 7:4,9,9	true	wants
soil	8:8,17 9:1,11,14	7:18,23 8:4,7,9	23:8	4:16 10:1
				7.10 10.1

C

Ĺ

Page	30
- ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	20

		· · · · · · · · · · · · · · · · · · ·		
water	17:14 18:6	23:19		
1:5 4:6,8,23	1200	225		
5:21 7:13,15	1:8 4:8 5:22,25	18:15		8
14:20 15:2	6:19 7:1,6 13:4	2501		
16:6 17:10	13:5,8,19 14:9	2:12		
ways	14:23 15:7,17	28(D)		
21:12	15:19 16:23	23:17		
web	20:1			
5:12	13	3		
Welcome	21:10	30-day		s.
4:4	14	21:8		
wells	8:16 11:24	330/405-9810		
14:14	15:21	2:22		
	15.21 15.4	37831		
went	-	2:13		
13:15	10:17,18 11:13	<u> </u>		
Wheat	12:21 13:3	4		
23:5,21	151	44087		
WHEREOF	2:11	2:21		
23:18	167	44266		
widespread	5:9	1:19		
15:15	1989	1.1/	:	
WITNESS	14:25	5		
23:18	1996			
work	15:4,10	6		
5:17	1998	6:52		
wouldn't	8:4	22:11		
18:10				
written	2	7		
21:12 22:1,2	2	7		
www.rvaap.org	11:21 18:13	1:15		
5:13	2004			
	8:15 13:22	8		
X	2005	865/481-4614		
	13:22	2:14		
Y	201	8866		
yards	2:20	2:19		
11:24 18:15	2010			
	8:24 16:4	9		
Z	2013	9		
zero	1:15 21:10	23:24		
9:12,25 11:25	23:19	9355		
16:18 18:16	2018	1:18		
	23:24	· · · ·		
0	204			
1	5:10			
X	20th	2 3		
1,450	20th			

0