

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

FORMER CHANUTE AIR FORCE BASE  
RESTORATION ADVISORY BOARD  
PUBLIC MEETING  
AUGUST 18, 2011  
12:00 P.M.

RANTOUL BUSINESS CENTER  
601 SOUTH CENTURY BOULEVARD  
RANTOUL, ILLINOIS

Reported and Transcribed By:

Jill Nicole Stevens, CSR # 084-004212  
Area Wide Reporting and Video Conferencing  
301 West White Street  
Champaign, Illinois 61820  
(800) 747-6789

1 12:05 p.m.

2 MR. CARROLL: I will go ahead and call  
3 this meeting to order. This is the Restoration  
4 Advisory Board for the former Chanute Air Force  
5 Base.

6 Today is August 18th. Dr. Wang is just  
7 now getting here, so I was hoping he would arrive.  
8 I would like to welcome everyone here today; looks  
9 like we have almost a full quorum and would like to  
10 introduce our new member, Denise Becnel. She was  
11 able to make it this time. Welcome aboard.

12 DR. ROKKE: Fantastic.

13 MR. CARROLL: RAB is growing. We like  
14 that. So, the first thing I would like to do is to  
15 go around the table with the RAB and let you guys  
16 introduce yourselves and then we'll go around the  
17 outside of the room and do that.

18 So, Amar is here presenting or helping  
19 present and running the slide show, but I'll start  
20 with Lorraine.

21 MS. WIRGES: Lorraine Wirges, RAB member.

22 MS. LEWIS: Helen Lewis, RAB member.

23 MS. BECNEL: Denise Becnel, RAB member.

24 DR. WANG: Ian Wang, RAB member.

1           MR. SANDAHL: Bruce Sandahl, RAB community  
2 co-chair, or so it says. We won't go down that road  
3 again.

4           DR. ROKKE: Doug Rokke, RAB member.

5           MS. RAWLINGS: Debra Rawlings, RAB member.

6           MR. HILL: Chris Hill from the Illinois  
7 Environmental Protection Agency.

8           MR. DANIELS: Matt Daniels with the  
9 Rantoul Press Newspaper.

10          MR. SPARROW: Howard Sparrow, Shaw  
11 Environmental.

12          DR. SCHNEIDER: Nick Schneider, Rapps  
13 Engineering & Applied Science.

14          MR. MCGINNIS: Pat McGinnis, Shaw  
15 Environmental.

16          MR. STRINGER: Jeff Stringer, Booz Allen  
17 Hamilton.

18          MR. HUSBANDS: Jim Husbands, also with  
19 Booz Allen Hamilton.

20          MR. HOLLY: Ted Holly, Air Force Center  
21 for Engineering and the Environment.

22          MR. STREFF: Michael Streff with FOTH  
23 Engineering and also a Chanute resident.

24          MR. PASSARELLI: Pete Passarelli from the

1 Village of Rantoul.

2 MR. PEREZ: Armando Perez, Public Affairs  
3 Officer for Air Force Real Property.

4 MR. CARROLL: Okay. We'll take this  
5 opportunity to introduce Dr. Schneider. Ted, would  
6 you give a brief introduction? Would you mind?

7 MR. HOLLY: He actually has a long vitae.  
8 I'll let him just take a couple minutes to  
9 introduce -- he's a local; he's been here for a good  
10 while. He has a lot of experience with public  
11 affairs, environmental affairs. He brings a lot of  
12 experience. I'll let him talk.

13 DR. SCHNEIDER: Maybe. After reading some  
14 of the documents and some of the minutes of the  
15 meeting, I'm just wondering, this is a very broad  
16 and complicated project that has so many parts and  
17 so many inputs that it will be -- it's a challenge  
18 and I hope that I can bring some clarity to the  
19 Board in handling that challenge.

20 Just a little bit about myself. Born and  
21 raised in Detroit, Michigan. Started out as a civil  
22 engineer, studying civil engineering at the  
23 University of Detroit, ended up in communications  
24 for God knows what reason, ended up spending about

1 20 years or a little less than that in broadcast  
2 media, television, commercials, worked for one of  
3 the national agencies doing commercials for  
4 Chevrolet and Marathon and Firestone and who knows.

5           And then eventually coming to the end of  
6 that tour, I said, you know, "I can't keep this up,"  
7 really couldn't, so I went back to school, picked up  
8 three more degrees, including a Ph.D. in geology,  
9 and as a result of that and my experience in the  
10 communication arts, I was hired by the State of  
11 Illinois, ostensibly by the Department of Energy and  
12 Natural Resources, which existed at that time, and  
13 its division, the Illinois State Geological Survey.

14           In order to assist them in the State's  
15 competition for what was then called the  
16 Superconducting Super Collider, the expansion  
17 Fermilab up outside of Chicago, a project that  
18 eventually went to Waco, Texas, I think -- actually  
19 it went to Texas -- I'm not sure it was Waco -- and  
20 just died on the vine there, kind of like the latest  
21 Department of Energy project that's here in  
22 Illinois.

23           But at any rate, I came here and I worked  
24 on that and then I headed up what we call the

1 Environmental Assessment Group, which consisted of  
2 looking at assessing environmental conditions around  
3 the state, ostensibly in part for the Department of  
4 Transportation, which at that time was trying to  
5 adhere to what was then the New Property Transfer  
6 Act, which said that you had to tell everybody the  
7 environmental condition of your property before you  
8 passed it on to them.

9           They needed some insight, so a colleague  
10 of mine, Bob Bauer, and I developed a procedure by  
11 which the Department of Transportation could  
12 evaluate these long strips of property they would  
13 acquire on the right-of-way and we also covered --  
14 my group also covered wetlands and rivers, so we  
15 also did DOT wetland things and my staff worked on  
16 Lake Michigan and some of the other rivers in town.

17           I then went on to private practice with a  
18 geological -- hydrogeologic company, ostensibly P.E.  
19 LaMoreaux & Associates, which got me into a lot of  
20 third-party kinds of evaluations where we would be  
21 hired to be the oversight party to look and see what  
22 was really being done or to agree or concur or not  
23 to concur with what was being done, so I worked on  
24 some big projects for Waste Management, Army Corps

1 of Engineers, ostensibly ended up doing the same  
2 thing for a group here in town called the  
3 Champaign-Urbana Solid Waste Disposal System and  
4 this is the group that's managing the old Urbana  
5 landfill on the east side of the Urbana complex and  
6 that is managed by the two cities, Champaign,  
7 Urbana, and to a lesser extent by the University of  
8 Illinois because they all poured trash into there at  
9 one point.

10           And there's an agreement with that  
11 consortium and the neighbors called -- which  
12 requires continual monitoring, even though there is  
13 no regulatory necessity for it. So, we monitor that  
14 old landfill consistently.

15           Then, eventually got called to help chair  
16 the City of Champaign's Environmental Task Force. I  
17 think, Mike, were you on that thing?

18           MR. STREFF: Yes.

19           DR. SCHNEIDER: Mike was on that task  
20 force. We operated for about a year and just  
21 brought to the attention -- we evaluated some of the  
22 things we might be concerned about as a city, as a  
23 municipality in terms of environmental conditions  
24 and so forth. Members of that committee were the

1 fire chief and so forth -- you can imagine -- and we  
2 had an attorney, a number of folks that participated  
3 on that so we could come together and we formulated  
4 a report, which I think we published, at least gave  
5 over to the city at some point.

6           And from that point on, I've stayed on  
7 with the City of Champaign as a kind of -- as a  
8 consultant, but more as a technical advisor doing  
9 essentially what I hope to be doing here and that's  
10 trying to translate some very technical documents  
11 into language that the city could understand, lay  
12 people could understand.

13           And I guess that's about it. I had my own  
14 company for a while and then recently, about four or  
15 five years ago, decided to take my business -- I was  
16 slowly retiring myself -- but to take what work I  
17 was doing and combine it with a friend of mine who  
18 owns Rapps Engineering, Mike Rapps. Mike has served  
19 on the Nature of Illinois Foundation, which I was  
20 executive director of, and he's kind of -- he's an  
21 engineer that I trust.

22           And geology -- geologists and engineers  
23 sometimes go head to head because we really have two  
24 different focuses. The engineer is focusing on a

1 particular problem and the solution to that problem  
2 in that space; the geologist tends to look beyond  
3 that space and so sometimes the two heads kind of  
4 knock together.

5           But I'm combined with one now, so if any  
6 of the engineers here come up with a question that I  
7 have to say "I don't know" to the answer, I've  
8 got -- I've got a colleague that will do the  
9 answering for me. Any questions?

10           MS. LEWIS: I just have one.

11           DR. SCHNEIDER: Yes?

12           MS. LEWIS: I didn't get your name.

13           DR. SCHNEIDER: Oh. Well, I don't know if  
14 that's important, but I'll pass these out. It's  
15 Nick Schneider is the name.

16           MS. LEWIS: Okay.

17           MR. SCHNEIDER: And I've got -- I think  
18 there's enough cards so, Mr. Hill, if you could just  
19 pass those around, you can have one of those for  
20 your purse.

21           DR. WANG: Are you just a member or are  
22 you working for the City?

23           DR. SCHNEIDER: Oh, no, I am --

24           MR. SANDAHL: This is our technical

1 representative.

2 DR. SCHNEIDER: Right.

3 DR. WANG: I missed the beginning.

4 MR. SANDAHL: He's working for the RAB.

5 DR. WANG: Okay.

6 DR. SCHNEIDER: This is the assistance  
7 program that the Department of Defense has to allow  
8 you to have outside technical assistance to help you  
9 understand what the reports are, what's going on and  
10 to help you formulate questions to the same  
11 consultants.

12 DR. WANG: Okay. Thank you.

13 DR. SCHNEIDER: Is that it? And in order  
14 to avoid any conflict of interest, I know Mr. Rokke  
15 from many years ago.

16 MR. CARROLL: All right. Thank you,  
17 Dr. Schneider.

18 DR. SCHNEIDER: You're welcome.

19 MR. CARROLL: We have Dr. Schneider on  
20 board for a year at a time and we have a limitation  
21 of \$25,000 a year for this contract up to \$100,000  
22 at, you know, any four years I guess.

23 So, we look forward to working with you  
24 for at least a year and hopefully up to the maximum

1 or until we get significantly done with the  
2 environmental work here, so we're looking forward to  
3 that.

4 Kind of getting back to the agenda, we  
5 have action items from the last RAB. Of course, we  
6 always approve the transcripts from the previous  
7 meetings. So, the May 5th meeting, can we have a  
8 motion to approve those minutes? Or transcripts,  
9 I'm sorry.

10 DR. ROKKE: So moved.

11 MS. RAWLINGS: Second.

12 MR. CARROLL: Okay. Vote on approving?

13 THE BOARD: I.

14 MR. CARROLL: Okay, sounds good. We had  
15 committed to having a group site location map and  
16 that's right there; Shaw has produced that. And  
17 there's an overview of environmental restoration  
18 that we were asked to produce and we are working on  
19 that; it's actually been drafted, just about  
20 essentially done.

21 I was a little slow getting it through the  
22 staff, through my agency. I didn't think it was  
23 going to have to go through 15 people before it got  
24 here, but it's got to go through a few more people.

1 What we'll do -- what we'll do is as soon as we get  
2 it approved by my agency, I'll get it shipped out to  
3 everyone, which should be a matter of a few days.

4 And Number 4 is the potential TAPP  
5 contract. You all heard that that's good. Provide  
6 a FOST example to the RAB members, did you all get  
7 your copy of a finding of suitability to transfer  
8 after the last RAB?

9 MS. WIRGES: (Shakes.)

10 MR. CARROLL: Lorraine, you don't remember  
11 getting it?

12 MS. WIRGES: No.

13 MR. CARROLL: Okay. We'll be sure that  
14 you get a copy of that.

15 MS. WIRGES: Okay. I didn't get the  
16 minutes either.

17 MR. CARROLL: You didn't get the minutes?

18 MS. WIRGES: Huh-uh.

19 MR. CARROLL: Okay. Did everyone else get  
20 them?

21 THE BOARD: Yes.

22 MR. SPARROW: Did you all get them by  
23 mail, direct mail?

24 MS. LEWIS: I got mine by mail and

1 probably by internet too, but I didn't go on and  
2 look at it.

3 MR. SPARROW: We'll be sure to check.

4 MS. WIRGES: Thank you.

5 MR. CARROLL: Okay. All right. Okay,  
6 next slide. Property transfer update, I wanted to  
7 give everyone a quick update on where we are on  
8 property transfer. And one more slide, Amar.

9 A few things that we've been doing over  
10 the past few months is we've been working with the  
11 Village on getting a good look at this  
12 infrastructure, getting an assessment of the  
13 infrastructure.

14 We provided \$500,000 to the Office of  
15 Economic Adjustment, which helps BRAC bases  
16 basically, BRAC communities be able to redevelop  
17 their properties and to understand what's going on  
18 with these bases. That -- we gave them that money  
19 to approve a grant and the grant was approved in  
20 July.

21 The bullet here says work will begin in  
22 mid-August, but the work I think is already well  
23 underway, so that started pretty much right away  
24 once that grant was approved. And so that work is

1 scheduled to be I guess completed sometime after the  
2 first of the year in 2012.

3           And kind of what follows from that is once  
4 we get that assessment, the Village will be able to  
5 submit an Economic Development Conveyance  
6 application to us, which will clear the way for the  
7 majority of the remainder of the property that's not  
8 already designated for the FAA public airport  
9 transfer. So, we're looking forward to all of that  
10 happening. Once we get the EDC application  
11 approved, we're ready to transfer 200 acres right  
12 off the bat that are clean, clean property, ready to  
13 go.

14           One thing we had just done and was just  
15 accepted on the 11th of August is a 20-acre parcel  
16 to the Lincoln's Challenge campus, so that property  
17 transfer has been done and that clears the way for  
18 building of that campus. And I think that  
19 engineering work has started and there's really no  
20 more hindrance to that project going on, Bruce,  
21 right?

22           MR. SANDAHL: That is correct. In fact,  
23 the State Supreme Court ruled that the capital  
24 spending plan was good the way it was, so Lincoln's

1 Challenge campus will get built.

2 MR. CARROLL: That's a big step we've been  
3 working toward for a couple years now. Okay.

4 There's a little piece of property on the southwest  
5 corner that's impacted by some groundwater that will  
6 still transfer in a couple of years once we get the  
7 groundwater on its way to cleanup, but that's not  
8 going to impede any of the work that they're doing  
9 in that campus. Dr. Wang?

10 DR. WANG: The Lincoln's Challenge, if  
11 everything goes as planned, what's the status of  
12 that laundry building? Would it save money or would  
13 we wait for them to demolish it?

14 MR. CARROLL: I think I'll let Howard  
15 answer that. He's been dealing with the Illinois --

16 MR. SPARROW: Yeah, we've had discussions  
17 with Lincoln's Challenge. Lincoln's Challenge is  
18 building on their campus their own laundry facility,  
19 so then that facility will be demolished.

20 DR. WANG: Right, so you don't need to  
21 clean it now?

22 MR. SPARROW: Well, we are going to  
23 proceed forward with cleaning; we're going to  
24 continue forward; we're going to -- and I can go

1 into a little bit more detail later on, but yeah, we  
2 are moving forward.

3 DR. WANG: Okay.

4 MR. SPARROW: In the end, the entire  
5 building will be demolished.

6 DR. WANG: Okay. Thank you.

7 MR. CARROLL: Okay. Any further questions  
8 before I let Howard take over? Okay. Howard, go  
9 ahead.

10 MR. SPARROW: Thank you, Paul. Again, my  
11 name is Howard Sparrow. I'm the Project Manager for  
12 Shaw Environmental. I wanted to mention a couple of  
13 things before we got started into my presentation  
14 here today.

15 I hope everybody picked up one of these  
16 large sheets that has the group sites on there  
17 because we frequently refer to a group of sites and  
18 these are color-coded so you can hopefully more  
19 easily identify the sites and the areas that we're  
20 talking about. And if you don't, we can hand some  
21 more out. We've got some more available.

22 That was part of the thing we talked about  
23 last time was to be able to put together information  
24 that's maybe a little bit more clear and easy to

1 understand. Anybody else?

2 MS. LEWIS: Everybody got one?

3 MR. SPARROW: One other thing I wanted to  
4 mention, I don't know if you noticed, on the agenda  
5 that was sent out, there was an invite at the end of  
6 that to do a site tour for Landfill 4.

7 We will have a van out front of the office  
8 here for anybody that wants to go out and take a  
9 look. Sometimes seeing is believing, so you can go  
10 out and physically look at what's there. You can  
11 see part of it. It's almost completely covered over  
12 right now but, you know, it's a lot of dirt and  
13 equipment. But still, being there and being able to  
14 see what was done and the progress that we're making  
15 I think is a good kind of community outreach.

16 So, if you're interested, immediately  
17 following this, we'll take a quick tour out there.  
18 It should be no more than about 30 minutes of your  
19 time if you want to do that.

20 Just to try to give you again the status  
21 of our update since our last RAB meeting, there is a  
22 chart here that shows our progress that we've been  
23 making. The most important thing that I get from  
24 this chart -- hopefully you get from it too -- is

1 the green areas here. You can see the front-end  
2 part of the work; the studies, the development of  
3 documents, the approvals through the agencies is  
4 progressing. We've just got a few more sites to  
5 finish off there.

6 More important to me are the ones that are  
7 at the end because that's where we really -- the  
8 rubber meets the road, we get the remediation  
9 complete. These are the remedial actions. And I'll  
10 give you a little bit of an update on the remedial  
11 actions. There's quite a bit of work that's been  
12 going on since the last RAB meeting here.

13 And then this chart right here is all red,  
14 you can notice, which means we haven't gotten  
15 started with that. This is one that we're going to  
16 start attacking very quickly. There's five sites  
17 that are covered by this chart here that are  
18 regulated under the state regulation programs.  
19 We're going to start attacking this one, too,  
20 because I want this chart to start turning green  
21 like the other chart as well.

22 Since the last RAB meeting, we have made  
23 significant inroads both in documents reviewed and  
24 approved by the agencies as well as actions in the

1 field. We have 15 sites for which the regulatory  
2 agencies have approved the final Record of  
3 Decision for. Let me make sure that's correct.  
4 Right, Amar?

5 MR. BUMB: Yes.

6 MR. SPARROW: That's correct, 15 sites for  
7 which we have final Record of Decisions approved  
8 for. And -- let's see. The design work plans, we  
9 did get approval for nine additional sites for the  
10 remedial action work plans.

11 Most important to me, as you notice,  
12 Group 6 and Group 10 that's on that particular list  
13 there, Group 6 is nine sites for which we've already  
14 started work on. We are actually -- we have done  
15 some sampling, both soil and groundwater, on those  
16 sites and we actually started excavations on those  
17 sites this week and we'll start some groundwater  
18 injections on there next week, starting next week.

19 The biggest ticket item that we've been  
20 working on is Group 10, Landfill 4. And, again,  
21 we'll give you a little bit more detail here on both  
22 some slides and we do have a short video. I'm going  
23 to save the video until the end of the presentation.  
24 If there's enough time, I can give you again a

1 little bit of video so you can kind of visualize  
2 what's been going on out there.

3           So, we have ten sites with ongoing  
4 remediation right now. Our plan for this year is to  
5 get to seven more sites that are out there. You  
6 asked about the group -- the laundromat site. That  
7 is Group 5, so that is in our plan to start remedial  
8 actions this year. The other one is Group 4; we are  
9 planning to start those remedial actions in  
10 September and October. So, quite a bit of work  
11 going on all over the base.

12           I want to talk a little bit about  
13 Landfill 4, again the progress that we're making. I  
14 did put a chart in here that kind of shows a  
15 cross-sectional area of Landfill 4 and the  
16 construction of that.

17           When you go out and look at it, you don't  
18 really see -- you just see the soil cover over  
19 there. But just as a quick reference, there's a  
20 very large confining clay layer that's naturally  
21 present beneath that landfill; there's the waste  
22 contents that are within the landfill. On top of  
23 that, we put a grading layer to slope the landfill  
24 so that water will be able to run off smoothly from

1 that. And then there is a foundation layer, a  
2 compacted clay foundation layer that is specially  
3 designed to be able to withstand the pressures of  
4 the clay liner or the liner material that goes on.

5           And then there's a composite -- there's a  
6 little detail right here, but I have an actual  
7 sample I'll pass around. This is -- if you would,  
8 this layer right here, you can see the materials  
9 that were placed down. On the bottom layer here,  
10 there is a vent layer under the landfill. The vent  
11 layer allows any gases that build up to be able to  
12 escape. Those vent layers go to pipes that vent out  
13 of the landfill. And then on top of that, there is  
14 a composite bentonite and membrane liner.

15           You can see the white material in here.  
16 That's the bentonite material. Bentonite has a  
17 special property of being able to swell and seal  
18 whenever it gets wet, so that becomes a layer that  
19 prevents infiltration of water into the landfill.

20           On top of that, there's a membrane liner  
21 on top of that. Again, a hard, thick plastic  
22 material that's virtually impermeable to water. And  
23 then on top of that, there's a drainage layer. So  
24 this top piece here is the drainage layer material.

1 So, if you want to pass those around, you can take a  
2 quick look at that detail of the landfill cover.

3 On top of the landfill cover, there's a  
4 two-and-a-half-foot-thick root zone and then on top  
5 of that will be placed a six-inch topsoil material  
6 for vegetation to grow. Right now we are putting  
7 this two-and-a-half-foot layer onto the landfill, so  
8 that's the current progress here.

9 MS. RAWLINGS: Can I ask a couple  
10 questions?

11 DR. ROKKE: Hey, Howard, will you guys be  
12 monitoring the samples for any --

13 MR. CARROLL: Debra asked a question  
14 first. Sorry.

15 MS. RAWLINGS: What is the grading layer  
16 composed of?

17 MR. SPARROW: The grading layer was the --  
18 and I've got some photos. Some of the areas outside  
19 of the landfill we consolidated into the middle and  
20 then we put soil basically --

21 MS. RAWLINGS: Okay, so --

22 MR. SPARROW: It's the same soil that goes  
23 into the compacted clay layer. So, the grading  
24 layer is just a filling layer to be able to get the

1 slope, but that's basically some of the waste that  
2 we consolidated as well as the soils that we got  
3 from our borrow source.

4 MS. RAWLINGS: Okay. And then when you're  
5 talking about the root zone, what is that made of?

6 MR. SPARROW: The root zone is basically  
7 a -- it's the soil that would be from like  
8 zero to ten feet deep out here. So, that is just  
9 again natural --

10 MS. RAWLINGS: Substrate?

11 MR. SPARROW: -- present soil, right, and  
12 then on top of that is the really nice blacktop soil  
13 on top of that.

14 DR. ROKKE: Will you be monitoring any of  
15 the gases coming out?

16 MR. SPARROW: We do. We're actually  
17 monitoring Landfills 1, 2 and 3. I think they're  
18 monitored semiannually as we go through, so --

19 DR. ROKKE: Are we seeing anything at all?

20 MR. SPARROW: I'm going to try to  
21 summarize it briefly from my recollections.  
22 Landfill 1 has very little coming out of that.  
23 Landfill 2 has a little bit of methane gas coming  
24 out of that. Landfill 3 is still breathing some

1 methane gas.

2           So, any organics that are within the  
3 landfill break down, primarily forming methane gas.  
4 It's small, very small quantities. I mean, it's not  
5 a large quantity, but we do monitor that until the  
6 methane levels get down to a low level.

7           DR. ROKKE: So we don't have any real  
8 nasty stuff coming out of it then?

9           MR. SPARROW: No, we don't. A series of  
10 photos here again on Landfill 4 construction. I'll  
11 just kind of march through these and explain the  
12 photos as we go through.

13           Before we started the landfill, we had to  
14 compact the natural material that's there, so we  
15 went through with roller compactors, heavy  
16 equipment, bulldozers and other equipment to be able  
17 to compact the surface here.

18           You know, it doesn't look like it, but  
19 once that tractor runs across and vibrates, that's  
20 the same way that you do a roadbed, so it's just  
21 like building a roadbed across there. He vibrates  
22 and compacts that material.

23           I talked about the consolidation of the  
24 areas outside of the landfill. There's a photo very

1 typical of showing the consolidation areas. There  
2 definitely was waste material in the areas that we  
3 had identified, exactly in the areas that we had  
4 identified.

5 Overall, there was 38,000 cubic yards of  
6 material that were excavated from around the  
7 peripheral of the landfill. That material was  
8 placed into the center area and then the grading  
9 layer completed along with the foundation layers and  
10 the other layers on top of that.

11 This photo is a little bit dark in this  
12 one. Hopefully your printout is a little bit  
13 better, but once --

14 (Mr. Bumb turns off the lights.)

15 MR. SPARROW: There you go, that's a lot  
16 better, Amar. As we removed the material from the  
17 landfill or from the consolidation areas, we placed  
18 it into the middle of the landfill. So, this is the  
19 material that's starting to form the initial grading  
20 layer and compaction layer. It consists of both the  
21 waste material here as well as soil and dirt that's  
22 brought in on top of that.

23 You can kind of see the waste material  
24 here. Again, this is still the grading layer that's

1 being placed and you can kind of see the profile of  
2 the grading layer and then dirt is being brought in  
3 on top of that waste material that was placed.

4           Most of the waste material we found was  
5 obviously household waste or typical garbage-type  
6 waste. We did find some building debris, some  
7 looked like old lumber and stuff that was in there.  
8 So, that was the typical materials found in the  
9 landfill there.

10           MR. BUMB: There was no drums or anything?

11           MR. SPARROW: No drums of any material  
12 were ever found or identified in there. I think  
13 there was some tires. We did find some tires from  
14 automobiles in there.

15           MS. RAWLINGS: Remind me one more time,  
16 how old is this waste probably? Is it well before  
17 the closing of the base or do we even know?

18           MR. SPARROW: I think this one was '75.

19           MR. BUMB: Yeah.

20           MR. SPARROW: I think it started in '75  
21 until 19 -- when did it -- do you recall --

22           MR. BUMB: '82 or something like that.

23           MR. CARROLL: Only four or five years, I  
24 think.

1 MR. SPARROW: Four or five years, yeah.

2 MR. BUMB: It got closed before '82.

3 MR. SPARROW: Yeah, it's kind of amazing,  
4 materials placed in a landfill, you know, you would  
5 think that it would have deteriorated a lot, but it  
6 really doesn't deteriorate nearly as fast.

7 There was some books or something, you  
8 could open them up and read the books and it's --  
9 yeah, yeah, it really doesn't deteriorate as fast as  
10 you may think, so.

11 MS. LEWIS: That's interesting.

12 MS. RAWLINGS: Uh-huh.

13 MR. SPARROW: This is a good picture of  
14 the placing of that one-foot-thick clay foundation  
15 layer. As you can see, all these dots in here are  
16 actually where the roller compactors went across and  
17 compacted that to a really tight foundation layer.  
18 Again, that would be pretty comparable to what you  
19 would get for highway construction there.

20 MS. LEWIS: Just out of curiosity, where  
21 is the dirt being hauled from?

22 MR. SPARROW: I don't know if you know  
23 Mr. Specchio. He has the --

24 MS. LEWIS: I do.

1           MR. SPARROW: -- property right over to  
2 the corner off of Landfill 4.

3           MS. LEWIS: Okay, yes.

4           MR. SPARROW: So, if you notice, the  
5 borrow source is actually right over in here and our  
6 trucks all came across down the field and then just  
7 across the road right in here, so there's one road  
8 crossing that we made.

9           We basically kept all our equipment and  
10 all our truck traffic off of any of the roads except  
11 that one little crossing that we will come back and  
12 repair once we're complete.

13           This is a quick photo showing the  
14 compaction of the surface. After we put that  
15 one-foot clay layer down, compacted it, we come back  
16 with a smooth drum roller. Essentially after you  
17 see them laying asphalt down on a highway, they come  
18 back with a smooth drum roller to smooth that out.

19           We want to smooth it out as smooth as  
20 possible so that when we lay the liner down, it's  
21 going to lay nice and flat and smooth onto the  
22 surface there. And that was the roller compaction  
23 of that final surface before placing the landfill  
24 liner material.

1           As I mentioned, there's a venting system.  
2 This is a photo showing the venting system here  
3 that's underneath the cap itself. It has various  
4 vent pipes that are throughout the landfill cap.  
5 You will see those both on Landfills 1, 2 and 3.  
6 You can see the vent cap sticking out on Landfill 4  
7 there. So, any landfill gases would vent into this  
8 area and then out of this pipe. That's the pipe  
9 that they're monitored at, in that pipe.

10           This is placement of the GCL material.  
11 Crews came in. That material is just pulled out  
12 like a roll, comes in like a roll of carpet if you  
13 would and it's pulled out, laid out flat and then  
14 the seams are overlap seams just like your shingles  
15 on your house or roofing material on your house.

16           MS. LEWIS: Do they adhere?

17           MR. SPARROW: Pardon me?

18           MS. LEWIS: Do they adhere or are they  
19 just laying there?

20           MR. SPARROW: The bentonite layer is the  
21 layer that makes the seal, so the bentonite seals  
22 those two joints together. There is a toe drain; we  
23 put a drain all the way around the landfill so that  
24 the water that runs off of this goes into that toe

1 drain and then that toe drain runs into the  
2 collection system, the surface collection system, so  
3 all that water would drain back into the storm ponds  
4 that were constructed for the landfill.

5           This is a little bit better view of  
6 material that's been placed, the GCL materials.  
7 They leave sandbags on it until the cover -- until  
8 the drainage net is put on top and then until the  
9 soils are put on top of that to keep it in place.

10           MR. BUMB: This one does have the Geonet  
11 on it.

12           MR. SPARROW: This one does not have the  
13 Geonet, no. This is the GCL material there.

14           MR. BUMB: Oh.

15           MR. SPARROW: This one shows the drainage  
16 net here, so you can see the geo composite, that  
17 bentonite and poly material that's over here, and  
18 then the drainage net comes on top, goes into the  
19 trench so that all the water would drain down into  
20 that trench and then it can be taken offsite.

21           Again, this is a photo showing the  
22 backfilling of the soils on top. If you go out,  
23 that's basically what you will see right now is  
24 they're still completing that backfill on the very

1 far end. We will probably be done with that either  
2 late this week or early next week on that backfill.

3 MS. LEWIS: Another question.

4 MR. SPARROW: Yes?

5 MS. LEWIS: Did we use local truckers for  
6 this hauling or did we contract --

7 MR. SPARROW: The contractor for the  
8 landfill work is out of Michigan.

9 MS. LEWIS: Okay.

10 DR. ROKKE: Now, are you installing --  
11 you've got peripheral monitoring all the way around  
12 the landfill?

13 MR. SPARROW: There will be. Those  
14 haven't been installed yet.

15 DR. ROKKE: Yeah.

16 MR. SPARROW: As a matter of fact, there  
17 were a few wells that were around that. Those wells  
18 had to be taken out and abandoned and then we'll put  
19 new wells back in. Just the heavy truck traffic and  
20 all that would have ripped everything up. So, after  
21 we've completed the cap, we will install those.  
22 Those should go in in September and then we'll do  
23 the first round of monitoring this fall on those.

24 I want to mention a couple other sites.

1 We talked about the Group 4 sites. There's six  
2 sites for which we are planning to start  
3 remediation. We would like to get these completed.

4           The initial in-situ bioremediation started  
5 this year on those. These have not gone through  
6 final agency approvals for the RODs yet. The RODs  
7 have been approved, but not the work plans, so we're  
8 getting the final work plan in place. We will start  
9 installing some wells for sampling those. We go in  
10 and do some baseline monitoring before we start  
11 that. And these sites here we would anticipate  
12 starting remedial actions this fall on.

13           DR. ROKKE: No restrictions, right?

14           MR. BUMB: That is true.

15           MR. SPARROW: That is true. This is the  
16 laundromat site that you asked about, Dr. Wang. We  
17 do plan on -- we've talked about that one  
18 previously. There's a partial building demolition  
19 we want to do this fall along with some excavation  
20 of soils and then the in-situ bioremediation will  
21 start next week on that -- or next year on that  
22 site.

23           The Group 6 sites, we have actively  
24 started on these sites. There's quite a bit of work

1 ongoing right now for these sites. They're mostly  
2 down in the area we call OU-2, along in the  
3 industrial area of the plant.

4           We started -- we installed some monitoring  
5 wells in those back probably in June. We collected  
6 samples; we went out and did baseline samples on  
7 those wells to make sure that plumes haven't moved.  
8 We've gone through the assessment to make sure. The  
9 good news from that is the plumes did not move.  
10 They're basically identically where they were  
11 determined previously. The tight soil is just --  
12 the plumes just do not migrate very quickly around  
13 here.

14           And we plan on starting the in-situ  
15 bioremediation. I've got a quick re-primer. We did  
16 a presentation on that about a year, maybe two years  
17 ago to the RAB. I'll go through that here in just a  
18 second, but that in-situ bioremediation is going to  
19 start next week. So, we're all prepped and ready to  
20 go to start getting rid of -- this is our first real  
21 efforts at getting rid of chlorinated solvents that  
22 are in shallow groundwater. So, it's based on some  
23 other test results that were done on site, so we're  
24 pretty positive we're going to get some good results

1 from this.

2 DR. ROKKE: Go back there for a moment.

3 MR. SPARROW: Sure.

4 DR. ROKKE: What did you find there on the  
5 engine test cells? They're in the bottom.

6 MR. SPARROW: This one over here back in  
7 this area right in here?

8 DR. ROKKE: Yeah, bingo.

9 MR. SPARROW: That area right in there  
10 does have fairly high levels of chlorinated  
11 solvents; it does.

12 DR. ROKKE: Are we going to dig that out  
13 and then do in-situ remediation or --

14 MR. SPARROW: It's in-situ bioremediation  
15 for the groundwater. There was some soils over  
16 there. Actually, those excavations were done  
17 yesterday.

18 DR. ROKKE: Thank you.

19 MR. SPARROW: I think the Air Force --

20 DR. ROKKE: So you got the nasty stuff  
21 already removed?

22 MR. SPARROW: We went to the nasty stuff  
23 and got that out.

24 DR. ROKKE: Thank you.

1           MR. SPARROW: There were some drains where  
2 apparently they had drained some material in. All  
3 the drains, all that was taken out and the soil  
4 surrounding that was taken out, so.

5           DR. ROKKE: Thank you.

6           MR. SPARROW: Sure. Next, Amar. A quick  
7 re-primer on in-situ bioremediation because you hear  
8 me talking about that for Group 6, Group 4, Group 5.  
9 That's going to be kind of the bulk of the work that  
10 we're going to be doing for the next several years.

11           In-situ bioremediation, it's basically a  
12 natural degradation of materials, chlorinated  
13 solvents in place. There's a couple keys to being  
14 able to degrade chlorinated solvents. They have  
15 obviously been there for 10, 15 or 20 years and they  
16 haven't gone anywhere.

17           What's different now in how we're going to  
18 make those chlorinated solvents disappear, if you  
19 would, or be degraded? A couple of key things is  
20 that we're going to add some substrate into the  
21 groundwater. It's basically a lactate material, if  
22 you would, a complex sugar that's going to be there.  
23 That will give food for the microorganisms. We are  
24 going to add some microorganisms into the ground.

1 Those microorganisms with that food will eat the  
2 chlorinated solvents, so that will be their food.  
3 We use a fancy term called an electron donor, but  
4 they will degrade these chlorinated solvents.

5           The byproducts of chloride are similar to,  
6 if you would, table salt and then carbon dioxide.  
7 So, we will monitor. We've done baseline monitoring  
8 to see what's there right now. We'll do performance  
9 monitoring throughout the injection phase to make  
10 sure that it's working properly. And then at the  
11 end, we have to come back and do a final  
12 verification monitoring, if you would, to make sure  
13 that it's all gone and it's not going to come back  
14 and we took care of the problem.

15           We talk about -- this is maybe a little  
16 bit more detailed, but chlorinated solvents degrade  
17 in a step-wise fashion. They degrade -- most of the  
18 chlorinated solvents we have are trichloroethylene  
19 (TCE). The trichloroethylene breaks down into a  
20 dichloroethylene (DCE), then a vinyl chloride and  
21 then an ethene. And so this is kind of the  
22 breakdown products.

23           We'll actually monitor all of these steps  
24 to see what's going on on site. A typical

1 biodegradation, you will see the TCE drop off very  
2 quickly. It will actually form more DCE, so it's  
3 breaking down into DCE, then on into vinyl chloride  
4 and then into ethene. So, we will be monitoring  
5 these curves to make sure that's what we're seeing  
6 out there.

7 DR. ROKKE: Any time estimates on that?  
8 Two to three years? Four years?

9 MR. SPARROW: The less concentrated ones,  
10 about a year to two years. The more concentrated,  
11 maybe more like four years. So, the test cells will  
12 probably be more like four years.

13 The substrates, we talked about adding  
14 substrates in there to make the biodegradation work  
15 properly. The substrate that we're using is a  
16 lactate polymer. The advantage of these materials,  
17 they're nontoxic, they're food-grade. Lactate is  
18 added into foods. They're biodegradable, so they  
19 will degrade. And they just decompose to carbon  
20 dioxide and water.

21 So, we're not adding something that's  
22 going to be left in the ground when we're done.  
23 We're not making another problem by what we're  
24 injecting . All this material will degrade.

1           This is a typical setup here. There's  
2 some tanks here for injection. We have those tanks  
3 already on site, ready to mobilize them next week.

4           They're typical injection wells. So,  
5 there's a well here and basically you mix these  
6 products and then you just pump them into the  
7 ground. You monitor obviously how much you're  
8 pumping and where you're pumping and there's a lot  
9 of detail to that, but we'll do that 600 times. So,  
10 it's every-20-foot spacing. We've got to be able to  
11 get the material dispersed so it's in a very tight  
12 grid to make sure we can inject and get to where the  
13 chlorinated solvents are in the groundwater.

14           This is actually some of the  
15 performance testing that was done on base several  
16 years ago, I think about five years ago. We went  
17 back into this exact same area. You can see the  
18 level; this was the level of TCE that dropped off  
19 very quickly, very nicely. The DCE went up, as we  
20 kind of projected or would expect. And then vinyl  
21 chloride over a period of time would come up and  
22 drop off as well.

23           We went back into these wells that were  
24 done for that test work, sampled those wells and

1 most of the materials are already at drinking water  
2 standards in these wells, so it is working out  
3 there. The tests were successful in our opinion.

4 DR. ROKKE: A comment you made earlier,  
5 because the plumes aren't moving because of the type  
6 of soil, can we then adjust the spacing for the  
7 injections to ensure that we're getting that  
8 movement?

9 MR. SPARROW: We actually went out this  
10 spring and did some -- put some injection points and  
11 some monitoring points to see how far -- when we  
12 inject how far that goes and how quickly that goes  
13 and then the spacing was done based on that.

14 DR. ROKKE: So you got that all done?

15 MR. SPARROW: Right.

16 DR. ROKKE: Bingo.

17 MR. SPARROW: Right.

18 DR. ROKKE: Thank you.

19 MR. SPARROW: Sure.

20 MR. PASSARELLI: What is the drinking  
21 water standard for those items, the TCE and the --

22 MR. BUMB: TCE is five micrograms per  
23 liter; DCE is 70 micrograms per liter and vinyl  
24 chloride is two micrograms per liter.

1 DR. ROKKE: We've got to go back and  
2 relook at that again, what we're finding.

3 MR. SPARROW: Pardon me?

4 DR. ROKKE: I said we might want to think  
5 and go back and relook at what the, you know -- and,  
6 again, that's out of your realm, but whoever does  
7 that, what are the safe limits based on what we're  
8 finding with the TCE in the drinking water. That 70  
9 might be way, way too high.

10 MR. SPARROW: One other point on the  
11 in-situ injections is that we have to maintain  
12 flexibility. You know, this is not a perfect world  
13 out there and when we start the injection process,  
14 we may find out we've got to do more efforts out  
15 there.

16 Again, our monitoring will be the results.  
17 So, we'll be monitoring throughout the injection  
18 phase to make sure that, you know, we are getting  
19 the dispersion, we're getting the material, we're  
20 getting the breakdown product. It is possible that  
21 we have to come back out and do some more injections  
22 out there in some of those areas.

23 And then there are two other items I  
24 wanted to mention because if you remember on our

1 chart way back when, there were a few items for  
2 which we still have some reports and some documents  
3 to produce.

4           These are the two, Group 8, which is the  
5 fire training area we will be working on and  
6 producing the feasibility study -- we've already  
7 produced a feasibility study for Group 8. It will  
8 be going for agency review.

9           And then Group 2, there are just two small  
10 sites that are in there. Those sites will be going  
11 to no further action. There's no further action  
12 required, but we need to go through the feasibility  
13 study and evaluate all the alternatives and make  
14 sure that it's not appropriate to take action on  
15 those.

16           DR. ROKKE: A suggestion on the fire  
17 training area. Chief Cunnington just died, but I  
18 think Chief Dan Smith, who did run this at one  
19 time -- now he works for the State and FEMA, I  
20 think -- was in charge out there, might be a good  
21 contact for what they did out there. Daniel Smith.  
22 I think he still lives in Thomasboro.

23           MR. SPARROW: Did you get that? Can you  
24 write that name down?

1 DR. ROKKE: He works for the State  
2 Emergency Services now, doesn't he, Helen? I think  
3 so.

4 MS. LEWIS: I'm not sure where he works,  
5 but yes, he's still in Thomasboro.

6 DR. ROKKE: But Cunnington just died about  
7 a month ago, so we've lost that resource.

8 MR. SPARROW: We do have a short video,  
9 Amar, if you want to try to bring that up. It's  
10 about five minutes long.

11 MS. LEWIS: Howard, can I ask a question  
12 first?

13 MR. SPARROW: Sure.

14 MS. LEWIS: Given the fact that our  
15 economy is in the tank and when they discuss budget  
16 cuts and so forth, military keeps coming up. How is  
17 this going to affect this project? Is it going to?

18 MR. SPARROW: This contract -- you know,  
19 the government funds money. Once the money is  
20 funded, it's available and, you know, it's committed  
21 at that point.

22 We are fully -- we are funded \$36 million  
23 on this contract already, so the money is already  
24 basically there with the Air Force. Our contract is

1 in place. We have a performance-based contract to  
2 get the work done, so we have to complete that work.  
3 I don't think there's any risk of that money being  
4 pulled. That's already pre-funded money.

5 MS. LEWIS: Okay.

6 MR. SPARROW: Now, future money is  
7 different, but this has already been funded, this  
8 entire work effort.

9 DR. ROKKE: So, \$36 million for you is  
10 totally allocated and transferred over?

11 MR. CARROLL: Right. And we've got the  
12 other -- in our spend plan for this next year, the  
13 last payment we have in our spend plan, we have the  
14 money now for it, you know. Pending nothing drastic  
15 from Congress within the next two to three months,  
16 we will get that, too.

17 MR. SPARROW: If you want to run the  
18 video, I'll kind of narrate through this a little  
19 bit.

20 This is the typical operations for the  
21 consolidation efforts. There was a long -- they  
22 placed the materials in trenches. This is one of  
23 the trenches that we are excavating the waste  
24 materials. You can see the waste materials here.

1 We did extensive work on testing the sides around to  
2 make sure that there's no material left. You can  
3 see all the areas around here are all clean.

4           After we've done the consolidation, we  
5 would backfill those areas. That's the soil that  
6 came from the Specchio property into there and then  
7 that material was placed and compacted back in those  
8 excavation trenches.

9           We followed the compaction right behind  
10 the excavation as close as we could to keep from  
11 having large, open areas of the landfill. We  
12 basically went around the entire landfill perimeter  
13 with these excavations, so it went and it kept going  
14 around and around. Some areas went as deep as  
15 probably 18 feet deep around there.

16           DR. ROKKE: So you kept going out and out  
17 until you got it clean?

18           MR. SPARROW: Right, exactly.

19           DR. ROKKE: Thank you.

20           MS. RAWLINGS: So, how much were you able  
21 to compact the landfill?

22           MR. SPARROW: The problem was there were  
23 like that one area -- you want to freeze that, Amar,  
24 and I'll explain that. Right here. Just pause

1 right there, yep.

2           The problem was that it was an odd shape  
3 and trying to put the liner onto an odd shape with  
4 little fingers and little pieces, we wanted to bring  
5 that in. If we had to cap it completely as  
6 original, I think this would have been like 20 --

7           MR. BUMB: 21.3.

8           MR. SPARROW: -- 21 acres to cap. The  
9 final landfill cap was about 15 acres of that, so --

10          MS. RAWLINGS: That's a big difference.

11          MR. SPARROW: Yeah, it helped, but we  
12 needed to get it away from the road, away from the  
13 fence lines, bring it back in and make it where it's  
14 not -- you're not going to have a problem with  
15 materials getting off site from there.

16                 This is a video of the liner material that  
17 we passed around here. Again, it's just brought out  
18 in large rolls. I think we had 400 rolls. I think  
19 it was 192 rolls of liner material and about the  
20 same of the Geonet that goes on top of this. Quite  
21 a few truckloads of material came in, maybe over 50  
22 or 60 truckloads of material placed on top.

23                 You'd think these guys really don't know  
24 what they're doing; they're kind of standing around,

1 but if you watch a little bit, all of the sudden  
2 they all jump to it and they all know -- they must  
3 have been doing this for 20 or 50 years together, I  
4 don't know. They're very experienced and know how  
5 to work together.

6           They do pull it out. If you notice, when  
7 it's pulled out, it gets very wrinkled, so it's got  
8 a lot of wrinkles. It's not laid down very tight.  
9 They come back and stretch that tight. One of the  
10 photos in the morning, particularly when the  
11 temperatures drop a little bit, it gets nice and  
12 tight across the entire landfill surface there. So,  
13 it's simply rolled out --

14           MS. LEWIS: Question again.

15           MR. SPARROW: Sure.

16           MS. LEWIS: Is that protective gear that  
17 some of them have on or is it just because of the  
18 heat they have coverings on their head? There's  
19 several -- the guy that's riding on the little  
20 tractor --

21           MR. SPARROW: We all wear hard hats; we  
22 all wear safety vests, every one of us. I do,  
23 anybody that's there. Hearing protection --

24           MS. LEWIS: Okay.

1 MR. SPARROW: -- gloves.

2 MS. LEWIS: My question was if two or  
3 three were wearing protective gear, why wasn't  
4 everybody, but okay.

5 MR. SPARROW: I'm not sure. Everybody  
6 should have been wearing that. They should all have  
7 hard hats and safety glasses.

8 MS. LEWIS: I wasn't talking actually  
9 about the hats, but it looked like white gear  
10 like --

11 MR. SPARROW: There was one lady that had  
12 a face mask on.

13 MS. LEWIS: Yeah, okay.

14 MR. SPARROW: I think she had sensitive  
15 skin to sunlight.

16 MR. BUMB: Right, that one.

17 MR. SPARROW: This lady right here, she  
18 wore that all the time. And if you notice, there's  
19 an overlap here. Each number is pieced and  
20 numbered, tracked and logged so that we know exactly  
21 where every piece has been placed. And then these  
22 workers work very quickly together. They go down,  
23 stretch it, pull it tight. There's the overlap of  
24 the material. They mark to make sure everywhere the

1 material is properly overlapped and then a quick tug  
2 and pull and stretch it tight.

3           This is the backfill on top of the liner  
4 itself after the liner has been put down. They are  
5 still doing this. If you go out today, that's  
6 typical of what you will see.

7           The drainage net has already been placed  
8 here. You can see the drainage net in place.  
9 Trucks back onto it, carefully drop material on  
10 there and then the soil cover is placed.

11           A lot of kids would probably love to see  
12 the trucks and equipment going around, you know.  
13 There was over 10,000 truckloads of material coming  
14 in and out, in and out, in and out, so it's quite  
15 a -- after a while, it gets pretty boring to watch  
16 trucks moving back and forth.

17           MS. BECNEL: As a matter of fact, I was  
18 just wondering, how accessible is all of this to the  
19 general public? In particular, you mentioned the  
20 methane gas pipes.

21           MR. SPARROW: Right.

22           MS. BECNEL: Are those labeled and is the  
23 area that you're talking about, is it accessible for  
24 kids, people just wandering around?

1           MR. SPARROW: There's a fence, secure  
2 fence around all of the landfills that are locked.

3           MS. BECNEL: Oh, okay.

4           MR. SPARROW: The amount of methane gas  
5 that would ever go out of there would never be  
6 detected outside of that fence line, so. But they  
7 are secured. There's other safety hazards that you  
8 wouldn't want small children to get around. But  
9 they all are locked, secured and monitored, so.

10          MS. BECNEL: And then just one other  
11 question.

12          MR. SPARROW: Sure.

13          MS. BECNEL: On this update, there's a  
14 point here that mentions something about relatively  
15 impermeable soil. You probably already mentioned  
16 that, but what exactly is that? Is that the clay?

17          MR. SPARROW: The clay material, right.

18          MS. BECNEL: Oh, is that the bentonite  
19 clay?

20          MR. SPARROW: There's the compacted  
21 foundation layer that is clay --

22          MS. BECNEL: Uh-huh.

23          MR. SPARROW: -- that's on there; then  
24 there's the bentonite. Bentonite is a clay

1 material, so that is actually a different type of  
2 specialty clay material. And then, of course, the  
3 membrane goes on top of that.

4 MS. BECNEL: Okay. But you say  
5 impermeable soil. So, the impermeable soil is a  
6 type of clay?

7 MR. SPARROW: It's a type of clay, right.

8 MS. BECNEL: And that means no water can  
9 seep through or very little water?

10 MR. SPARROW: We actually run tests on it  
11 to determine -- a sandy material would let water  
12 through pretty fast. A clay would prevent that  
13 water -- it would go much, much slower. We do some  
14 relative numbers on there. This is one times ten to  
15 the minus eight permeability, which means it's very,  
16 very tight. You could -- you could basically make a  
17 clay bowl and put water in there and it wouldn't  
18 leak out of this. That's just typical of the soils  
19 that are in this area.

20 MS. BECNEL: Thank you.

21 MR. SPARROW: Sure. And I think, again,  
22 the placing of the materials on here, there's one  
23 other overview that you can kind of see. This is  
24 again placing materials onto the landfill. This is

1 where we've already placed. These are the vent  
2 pipes that are coming out that you asked about  
3 there.

4 Our borrow source is right over in the  
5 field area back over here, so I'm not sure if you  
6 see it in that view there, but it's right off in  
7 that area there.

8 And then these are the areas -- this area  
9 in here has the Geonet on it and then this was the  
10 area with just the composite clay liner here and  
11 then the Geonet is all in this area there. So, just  
12 a quick video of it. Any questions? Are we on time  
13 or did I take up too much time?

14 MR. BUMB: Pretty much on time.

15 MR. SPARROW: Again, we should have a van  
16 right out front. If you want to go out, you're more  
17 than welcome to go out and take a look and see.

18 MR. PASSARELLI: What kind of seed mix are  
19 you putting on there and how are you guys -- is  
20 there supplemental watering you do to make sure that  
21 gets established?

22 MR. SPARROW: Yeah, that's going to be a  
23 challenge to water that entire area. If we don't  
24 get some natural rainwater, we will actually have to

1 get out there and irrigate that surface out there,  
2 so. But it will be hydromulched, so we're going to  
3 use a hydromulch on that and there's a specification  
4 for the seed.

5 MR. PASSARELLI: I mean, it's not just  
6 regular grass that's going on there? It's similar  
7 to what you have on the other land?

8 MR. SPARROW: Right, right.

9 MR. BUMB: Similar to other landfills.

10 MR. CARROLL: Before we go jump in the  
11 van, let's finish this; let's wrap up real quick.

12 Action items, does anyone have any  
13 recommendations? Did we have any action items from  
14 this meeting we needed to cover before the next  
15 meeting?

16 I think besides the environmental brochure  
17 that we should get out in the next week or so, I  
18 know we'll do that, we'll write that down as an  
19 action item, but anything else?

20 DR. SCHNEIDER: I would ask the Board to  
21 consider getting together sometime soon with me and  
22 the board members that are going to be available.  
23 So, if somebody could coordinate that, I can make  
24 myself basically available just about any time.

1 MR. SANDAHL: I will do that.

2 MR. SPARROW: One second. I wanted to  
3 introduce Travis Wubker. Travis is our on-site  
4 construction manager here, so Travis is responsible  
5 for all the work and progress that you have all been  
6 seeing here, so. And he will be able to give us a  
7 ride down to the landfill.

8 MR. CARROLL: Okay. Agenda items for next  
9 meeting?

10 MS. LEWIS: Just don't bring snow.

11 MR. CARROLL: I will try my best.

12 MS. LEWIS: Because it's November 17th.  
13 We don't want it.

14 MR. SPARROW: The week before  
15 Thanksgiving.

16 MS. RAWLINGS: But if we have some, we'll  
17 send it with you.

18 MR. CARROLL: Okay, I'll take it. I'll  
19 take any moisture. So, that week is okay, the week  
20 before Thanksgiving?

21 MR. SANDAHL: Uh-huh.

22 MR. CARROLL: Okay. November 17th at  
23 noon, same place. We'll cover pretty much the same  
24 things we've been covering, typically environmental

1 updates and hopefully we'll keep making the same  
2 progress.

3           In between, Dr. Schneider will work with  
4 the RAB; Ted will be involved in that and we'll get  
5 your action items going. And we may have some  
6 update from you at the next RAB, too.

7           DR. SCHNEIDER: Hope so, yes.

8           MR. CARROLL: Okay. Good deal. Move to  
9 adjourn?

10          MS. LEWIS: So moved.

11          MR. CARROLL: All right.

12          MS. RAWLINGS: Second.

13          MR. CARROLL: Okay. We're adjourned.  
14 Thank you all very much.

15          (The meeting was adjourned at 1:05 p.m.)

16

17

18

19

20

21

22

23

24

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24

CERTIFICATION

I, JILL NICOLE STEVENS, Certified Shorthand Reporter and Registered Professional Reporter, do hereby certify that the above-entitled RAB meeting was had before me on the 18th day of August, 2011.

I do further certify that I did take stenographic notes of said meeting and that said notes were reduced to typewritten form under my direction and supervision.

I do further certify that the attached and foregoing is a true, correct and complete copy of my notes and is now herewith returned. I do further certify that said RAB meeting was taken at the Rantoul Business Center, 601 South Century Boulevard, Rantoul, Illinois.

I do further certify that I am not related in any way to any of the parties involved in this action and have no interest in the outcome thereof. Dated at Villa Grove, Illinois, October 26, 2011.

---

Jill Nicole Stevens, Reporter