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2 Naval Weapons Industrial Reserve Plant  
3 Calverton, New York  
4

5 Restoration Advisory Board  
6 Regular Meeting  
7 -----X  
8

7:00 P.M.

March 14, 2001

9  
10 Riverhead Masonic Lodge  
11 Riverhead, New York

12 P R E S E N T:

13 Judithanne Hare United States Navy  
14 Naval Air Systems Command  
15 Joe Kaminski United States Navy  
16 Naval Air Systems Command

17 Dave Brayack Tetra Tech NUS  
18 Judy Lamey

19 Jim Colter Northern Division, NAVFAC

20 Marsden Chen New York State DEC

21 RAB Members  
22  
23

24 FREELANCE L.I., INC. - Court Reporters  
25 259 Southfield Road  
Baiting Hollow, New York 11933  
Voice (516) 369-2912 Fax  
E-mail flli@aol.com

1 Proceedings  
 2 CO-CHAIR HARE: Ladies and gentlemen,  
 3 I think we'll call the meeting to order. I'm  
 4 delighted to see so many folks here tonight thank  
 5 you for coming on this cold, blustery night. I  
 6 understand you had a little bit of snow fall  
 7 recently like about 18 inches I was amazed when I  
 8 heard that. And you can still see a lot of it piled  
 9 up in the parking lots.  
 10 I'd like to say that this is our  
 11 little mascot for the night, I bought this, he's an  
 12 environmental bear and I bought him at your local  
 13 teddy bear factory which is just down the street.  
 14 That is a delightful shop, I met two great ladies,  
 15 one of them is a well-known bear artist. I happen  
 16 to be an avid collector, so I thought he was  
 17 appropriate. If you never have been in that little  
 18 shop, it is a great place to spend an hour or so  
 19 just looking at all the cute stuff in there.  
 20 I think we have one administrative  
 21 thing. We have the signature sheet for the RAB  
 22 members that we had passed around I think at the  
 23 last meeting and we are going to, because some folks  
 24 were not here, we are going to try to get those  
 25 signatures tonight. If you want to go ahead and  
 26 pass it around if you haven't signed it, please do

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 2 so.  
 3 Did everyone get the minutes, a copy  
 4 of the minutes? I guess at this point, then, I  
 5 will ask if there were any omissions other  
 6 corrections to the minutes? Hearing none, all  
 7 those in favor of approving the minutes signify by  
 8 saying aye?  
 9 (All ayes)  
 10 CO-CHAIR HARE: They're approved. At  
 11 this point in time, I have no other administrative  
 12 remarks. So I think I will turn the meeting over to  
 13 Jim Colter, and Jim will take us through.  
 14 CO-CHAIR JOHNSON: Actually do an  
 15 agenda review yet.  
 16 CO-CHAIR HARE: Does everybody have a  
 17 copy of the agenda?  
 18 We do have Jim Colter, who is going  
 19 to take us through a status of the activities at the  
 20 NWIRP, and what has been happening as of late. Of  
 21 course we always have the action item review and the  
 22 dates and discussion topics for the future meeting,  
 23 before we close. With this that, I will turn it  
 24 over to Jim at this time.  
 25 CO-CHAIR JOHNSON: I'm sorry. That

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 2 is why I brought it up. I was asked for some agenda  
 3 items and a couple of the folks sitting at the table  
 4 had given me items specifically. I'd like to make  
 5 sure that we are going to cover them tonight. Vinny  
 6 had asked to go over the findings on the Sportmen's  
 7 property. Is that going to be included in your  
 8 review.  
 9 MR. COLTER: What was that again.  
 10 CO-CHAIR JOHNSON: Vinny had asked to  
 11 go over the findings on the Sportsmen's findings,  
 12 specifically. Was that going to be part of the.  
 13 MR. COLTER: Remember we went over  
 14 that at the last meeting.  
 15 CO-CHAIR JOHNSON: No, we had a  
 16 letter of additional findings.  
 17 A MAN: We were looking for additional  
 18 information.  
 19 MR. COLTER: We were looking for  
 20 additional information but we didn't have additional  
 21 findings.  
 22 CO-CHAIR JOHNSON: According to me it  
 23 was additional findings, I don't know if anybody  
 24 else here thought it was also. Have you seen the  
 25 letter? I have some copies to pass out. If you

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 2 want it -- I'd like to since, you know, it was a  
 3 member, it was a request, I'd like at least to take  
 4 some time and go over that a little bit.  
 5 I'd also like to know if the TRC  
 6 meeting that you have, is that part of your update.  
 7 MR. COLTER: Yes. You did get the  
 8 minutes of the TRC meeting as part of the invite,  
 9 right?  
 10 CO-CHAIR JOHNSON: We did, yes. Very  
 11 good. Very good minutes, or at least -- also we'd  
 12 like to discuss the TAPP proposal tonight. We had  
 13 it on the agenda and we were supposed to prepare,  
 14 Jean is prepared at least some additional  
 15 introductory information so we can discuss it as a  
 16 group and see if we want to move forward on that.  
 17 CO-CHAIR HARE: Sure.  
 18 CO-CHAIR JOHNSON: If we can amend  
 19 the agenda to include those, I'd appreciate it.  
 20 CO-CHAIR HARE: Fine, fine. Okay, I  
 21 think probably what we'll do is go ahead and start  
 22 with the review and then as we go down the list  
 23 we'll hit those other items. Okay?  
 24 A MAN: Jim, just a minute. What are  
 25 we to do with these?

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2 CO-CHAIR HARE: If you had not signed  
3 it, we would ask you to just sign it.

4 CO-CHAIR HARE: What they gave you,  
5 this was the one that was at your place. That is  
6 just a copy of -- the overage is what's coming  
7 around for you to sign. The original. Did you get  
8 the original?

9 CO-CHAIR HARE: It was passed around.  
10 I'm not sure where it is at.

11 CO-CHAIR HARE: Okay. It is the  
12 original we need to sign.

13 MR. COLTER: Are we going to go now.

14 CO-CHAIR HARE: Yes. Proceed.

15 MR. COLTER: I'd like to bring  
16 everybody up to speed on the activities that the  
17 Navy has been conducting since we last meet, the  
18 last RAB meeting back in October. As you did  
19 receive as part of the invite, we did have a  
20 Technical Review Committee meeting with the New York  
21 State DEC and Suffolk County Department of Health  
22 back in of 8th. And what I'll do is kind of go  
23 through the highlights of those minutes and at the  
24 same time, give a status on the site by site basis  
25 with where we are at.

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2 Basically, at the technical meeting,  
3 we just represented the presentations that were  
4 given at the October RAB meeting. They included a  
5 discussion of the Site 1 bank stabilization project,  
6 we updated them on Site 2, fire training activities,  
7 the air sparge system and the product recovery. The  
8 monitored natural attenuation study we were doing at  
9 Site 7. And we gave them the Southern Area Site 6 A  
10 presentation that we gave at the October RAB  
11 meeting.

12 Regarding the Site 1 bank  
13 stabilization project, we did start discussing the  
14 concept of a full landfill excavation versus capping  
15 and bank stabilization. This came up as a request  
16 at this RAB and also during a peer review that we  
17 conducted from our office, other RPMs also have  
18 landfill sites on their activities, and it was  
19 thought that because of the size, relatively small  
20 size, of this landfill, that it might be although a  
21 little more expensive, it still certainly would be  
22 practical to excavated out the entire landfill there  
23 by eliminating all future Navy liability and  
24 monitoring requirements.

25 So we decided to do, as you all

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2 recall, we did have a minimum I Feasibility Study  
3 for different bank stabilization alternatives that  
4 we were about to finalize. We are going to hold off  
5 on that report. We are going to incorporate it into  
6 a combined R I and F S report for Site 1. Currently  
7 that plan is to have that draft report to the  
8 regulators on 30 July. What that will do, is that  
9 will update all the field work activities that have  
10 been done in the past at the landfill, and there's  
11 be a separate section in there discussing the full  
12 landfill alternative versus the capping and bank  
13 stabilization alternative and the no action  
14 alternative. Based on regulatory input and RAB  
15 input, we'll see if we can't make a good decision  
16 whether we should pursue full excavation or maybe it  
17 is better just to cap it and stabilize it. You'll  
18 be seeing that, depending on how the next RAB  
19 meeting falls, it will be close to that time frame.

20 CO-CHAIR JOHNSON: Is that something,  
21 Jim, we'll be able to comment on or is that just  
22 going to be a draft at that time?

23 MR. COLTER: The July 30th date is a  
24 draft to the regulators.

25 CO-CHAIR JOHNSON: And there will be

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2 a comment period.

3 MR. COLTER: That is why I'm not sure  
4 it will coincide with the next RAB meeting or not.  
5 We may have just submitted it by the next RAB  
6 meeting.

7 A MAN: Jim, in your discussion or in  
8 our assessment of total removal, please keep in mind  
9 we have something called the Long Island landfill  
10 law. You'll be prohibited from sending it any  
11 landfill on the island. You'll have to send it off  
12 the island. So you got to keep that in mind in your  
13 assessment and your pricing.

14 MR. COLTER: That is very  
15 significant. Because as you know, the biggest cost  
16 out here is transportation costs to get it all the  
17 way around the island. So that's very significant.

18 MR. BRAYACK: That is specific to the  
19 hazardous waste, correct.

20 MR. CHEN: Hazardous waste and I have  
21 to research the non-hazardous part of it.  
22 Specifically hazardous, yes. The other part like  
23 solid waste I'm not too sure of that.

24 A RAB MEMBER: I don't think you can.

25 MR. CHEN: What is that Vinny.

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 2 A RAB MEMBER: I don't think you can  
 3 put anything in the landfill.  
 4 MR. CHEN: I tend to agree.  
 5 A MAN: What is the character?  
 6 MR. BRAYACK: It is mixed. There is  
 7 metal debris in there. There is probably a lot of  
 8 marginally contaminated soils, petroleum.  
 9 A MAN: Giving more for a clean  
 10 ticket than you have got.  
 11 MR. COLTER: Regarding the Fire  
 12 Training Area, since the last meeting, we've shut  
 13 down the small air sparging soil vapor extraction  
 14 system that we operate every summer. An annual  
 15 report on that latest operation is due out at the  
 16 end of this month. We also completed the free  
 17 product recovery for the season out at Site 2.  
 18 Again, we are awaiting the annual report on that.  
 19 Both those reports, at least a free product recovery  
 20 record will evaluate how we did and if it is worth  
 21 continuing.  
 22 At the technical board it was  
 23 recommended that maybe we dig a couple of test pits  
 24 near our highest historic areas of fuel recovery, to  
 25 see maybe what's left on the water table and maybe

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 2 at that point, it's more viable to excavate what's  
 3 left versus trying to recover it through passive  
 4 efforts with soaking pillows and whatnot. So when  
 5 the next time we remobilize into the field at Site  
 6 2, we are going to try to incorporate some of these  
 7 test pits into our field work.  
 8 Speaking of --  
 9 CO-CHAIR JOHNSON: Do you have a time  
 10 frame on that.  
 11 MR. COLTER: Probably when we go out  
 12 to the monitoring natural attenuation parameters.  
 13 CO-CHAIR JOHNSON: This year?  
 14 MR. COLTER: No, FY 02.  
 15 If you look at the schedule of  
 16 documents for Site 2, we did send out the final R I  
 17 report in earlier this month, I believe everyone  
 18 hopefully got a copy of that? Okay? And you'll  
 19 see there, that our work plan to go back out there  
 20 and basically do we did at Site 7 is due to the  
 21 regulators this December of 2000 and one. So over  
 22 the winter, we will be finalizing a work plan and  
 23 then next construction season we'll good out there,  
 24 take some monitoring natural attenuation parameters  
 25 do some test pitting for the fuel and things like

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 2 that.  
 3 Regarding Site 7, which is basically  
 4 the site that is farthest down the road. We  
 5 submitted the draft Feasibility Study back on  
 6 January 10th. We requested comments by March 2nd.  
 7 During the -- I will mention this: That we had a  
 8 phone conference with the DEC on March 8th, about a  
 9 week and a half ago, basically just to get an update  
 10 on how they're doing with reviewing the documents we  
 11 sent them and if they had any comments or concerns  
 12 that we needed to address. Regarding the Site 7  
 13 report, they basically -- we made a recommendation  
 14 in the report to pursue air sparging soil vapor  
 15 extraction and they had no adverse comments  
 16 regarding that.  
 17 Based on that phone call, I began  
 18 writing the decision document for -- to conduct air  
 19 sparging soil vapor extraction at Site 7. I'm  
 20 shooting to have a draft to the regulators for  
 21 review May 4th. The report basically, it is called  
 22 the Preferred Remedial Action Plan, a PRAP if, you  
 23 will, it will include air sparging soil vapor  
 24 extraction for the entire plume, versus source area  
 25 removal, because there is no difference between the

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 2 size of the source area and the overall outer extent  
 3 of the plume. So there won't be any additional  
 4 cost, maybe an extra well or two to encase the whole  
 5 plume. We'll run that for as many years as we have  
 6 to, to try to reach our remedial goals or until we  
 7 determine that it is running in an inefficient  
 8 manner it is costing more than what we are removing.  
 9 Then we'll go out with the regulators and look at  
 10 monitored natural attenuation as a polish or final  
 11 action. But all those will be in this PRAP. It is  
 12 similar to the Feasibility Study that you have. It  
 13 its just a summary of that and kind of boiled down.  
 14 But it also is the basis for the record of decision,  
 15 which ties the Navy to carry out on the action.  
 16 If all goes well, and I'm not sure  
 17 how the length of time of the regulatory review is  
 18 on this, or issuance of a ROD, but we should be  
 19 close to a record of decision time in August of this  
 20 year. One of the requirements will be to that we  
 21 have a public meeting to announce it to the  
 22 community. And we can maybe, if the board okays it,  
 23 at the next RAB meeting if it coincides with the  
 24 public comment period, in lieu of a RAB meeting have  
 25 the public meeting for the Site 7 recommendation

<p style="text-align: right;">Page 14</p> <p>1                   Proceedings</p> <p>2 something to think about.</p> <p>3                   The last site of concern was the Fuel</p> <p>4 Calibration Area, Site 6 A and the associated</p> <p>5 Southern Area. Again, we made the same field work</p> <p>6 presentation that you all saw at the last RAB</p> <p>7 meeting we gave it to the regulators. And got no</p> <p>8 adverse comments on our findings. We also mentioned</p> <p>9 that we had to then take that data and that</p> <p>10 presentation and put it into an R I report. We are</p> <p>11 still pulling together that R I report and a draft</p> <p>12 is due out to the regulators and the RAB April 13th.</p> <p>13                   Basically, the report will conclude</p> <p>14 that the nature and extent of the Site 6 A and the</p> <p>15 Southern Area groundwater contamination has been</p> <p>16 adequately defined although there are some vertical</p> <p>17 extent questions but we believe that when we start</p> <p>18 evaluating remedial alternatives and designing a</p> <p>19 remedial alternative, that the predesign field work</p> <p>20 that we have to do to verify our design can collect</p> <p>21 that data at that time.</p> <p>22                   Again, we'll after we finalize the</p> <p>23 remedial investigation, we'll move on to maybe the</p> <p>24 Feasibility Study where we'll evaluate different</p> <p>25 alternatives there's be a different remedy for Site</p>	<p style="text-align: right;">Page 16</p> <p>1                   Proceedings</p> <p>2 there was for adverse comments from the regulators</p> <p>3 regarding those findings.</p> <p>4                   Because it was a site investigation</p> <p>5 phase, we can basically close that site out with no</p> <p>6 further documentation.</p> <p>7                   The only other documentation that</p> <p>8 will be done on this site, it will be when we</p> <p>9 transfer the property to the Town of Riverhead we'll</p> <p>10 do one of those findings of suitability to transfer</p> <p>11 which will summarize all the activities and all the</p> <p>12 results again to form the basis that the Navy says</p> <p>13 that this land is suitable to transfer.</p> <p>14                   So upcoming reports, again: These</p> <p>15 dates I've already mentioned, the Site 2 air sparge</p> <p>16 annual report at the end of this month. The draft</p> <p>17 Southern Area remedial investigation, 13 of April.</p> <p>18 The decision document for Site 7 May 4th, and the</p> <p>19 combined RIFS for the Northeast Pond July 30th.</p> <p>20                   That is pretty much it as far as the</p> <p>21 status update of what we've done or have done since</p> <p>22 our last meeting. Any questions?</p> <p>23                   CO-CHAIR JOHNSON: Yes, I have one.</p> <p>24                   MR. COLTER: Okay.</p> <p>25                   CO-CHAIR JOHNSON: In regard to 6-A</p>
<p style="text-align: right;">Page 15</p> <p>1                   Proceedings</p> <p>2 6 A than there may be for the Southern Area, because</p> <p>3 of the levels of contamination. But both will</p> <p>4 include the monitor natural attenuation evaluation</p> <p>5 of which we collected that data in the summer of</p> <p>6 2000 field work.</p> <p>7                   As far as the March 8th conference</p> <p>8 call went with the DEC, we went over again all the</p> <p>9 items that I just mentioned. We also submitted to</p> <p>10 them an extended site investigation report for the</p> <p>11 electronic counter measures site, site nine up in</p> <p>12 the northeast corner, which you will recall we had</p> <p>13 low level V O C contamination in the groundwater at</p> <p>14 the fence line and we were asked to go off-site and</p> <p>15 see how far it extended. We were denied access for</p> <p>16 about two years until last summer. We collected we</p> <p>17 went out two rounds of -- went out in the field</p> <p>18 twice to collect groundwater samples at how many</p> <p>19 locations.</p> <p>20                   MR. BRAYACK: Approximately ten or</p> <p>21 12.</p> <p>22                   MR. COLTER: Ten or 12 locations and</p> <p>23 all of them came back non detect. We put that data</p> <p>24 in the report that was sent out to everybody</p> <p>25 including the regulators. As of the phone call</p>	<p style="text-align: right;">Page 17</p> <p>1                   Proceedings</p> <p>2 and 10 B, DEC questioned the dry wells and the floor</p> <p>3 drains in the paint shop. It says the</p> <p>4 Navy -- there's some response here from the Navy, I</p> <p>5 guess. And then it was discussed that this unknown</p> <p>6 encourages the desire for more sampling. Is that</p> <p>7 your opinion, that because it is unknown there</p> <p>8 should be more sampling there?</p> <p>9                   MR. COLTER: We did go upgradient</p> <p>10 between the paint shop and the Jet Fuel</p> <p>11 Systems -- Fuel Calibration Area to address that</p> <p>12 exact question. We went to see in between, we have</p> <p>13 an upgradient well, was part of the 2000 field work,</p> <p>14 to see if since the Fuel Calibration Area is</p> <p>15 downgradient of the paint shops, that we would</p> <p>16 expected to have seen groundwater contamination in</p> <p>17 between, which we did not.</p> <p>18                   CO-CHAIR JOHNSON: Is that what you</p> <p>19 had indicated? Because I know we have raised that</p> <p>20 issue.</p> <p>21                   A MAN: You want to take a look at --</p> <p>22 the drains.</p> <p>23                   MR. COLTER: The physical look at the</p> <p>24 drains sampling was conducted by Northrop Grumman as</p> <p>25 part of their close out report that was sent to Stan</p>

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and his group and subsequently approved and they did ring their buildings upgradient, downgradient, side gradient with monitoring wells, if I recall they didn't find anything of significance in the groundwater.

And then in addition to that, we put another upgradient well between our fuel calibration and the paint shops just for a second verification of that last summer.

A WOMAN:

CO-CHAIR JOHNSON: Satisfies that pretty much?

MR. CHEN: You caught me I don't have an answer to that.

A MAN: Gets back to the issue we had. Where there was document being submitted to Stan and we weren't in the loop and couple of areas we thought might not have been investigated properly, it turns out probably going to be at point, where we asked, and.

A MAN: Those are reports raised by my unit. And I don't think anything was raised. I didn't personally. It was never raised with the dry wells. They were looked into. Should have been

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coming out in April.

A RAB MEMBER: Jim, just bear with me because you just lost me. I -- maybe it is time of the night. Can you explain all that in layman's terms. All of that date, we have for impacts to worry about to the Peconic River system or its tributary.

MR. COLTER: I didn't say that. I'm saying the groundwater will express itself. Any contaminants that may be in the groundwater will not go underneath and continuing migrating further south they will come up to the surface water of the Peconic River but again they're low level volatile organic compounds to begin with. We don't expect any adverse impacts to the Peconic River from those low level chlorinated solvents.

We have in the past sampled sediments and surface water at the river and have not found volatile organic compounds or anything in the sediments or surface water.

A RAB MEMBER: So they won't flow down.

MR. COLTER: They won't go past the river.

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entered.

CO-CHAIR JOHNSON: Should have been.

A MAN: I was going to ask you about this site the Southern Area where it talks about the Sportsmen's Club, and that they can no longer use the well they are using bottled water. Are you going to address that further? It also says that it shows that the groundwater that is emanating from the Calverton source will go into the Peconic River. How are you going to address this.

MR. COLTER: Well, that's going to, if you recall the last presentation, that data was presented about the findings on the gun club, a hydraulic study we did for the Peconic River showing basically that it is a surface expression of groundwater and that groundwater basically flows up and comes out at actually is what feeds the Peconic River. And therefore, that acting as a hydraulic barrier for this area. We won't expect any groundwater contamination to go underneath the river as it will express itself at the river's surface water.

All that interpretation and everything will be part of that R I report that is

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MR. COLTER: The groundwater actually rises in that area. It won't be able to go underneath and further downgradient beyond the river.

A MAN: Can you remind us what concentrations you were finding and how far away that is.

MR. COLTER: Do you want to do that.

MR. BRAYACK: As a lot of these questions are pointing out, this is a very complex issue and this is one of the biggest reasons why the report, it wasn't issued basically a couple of months ago.

Some of these you've seen and some of these we have been continuing to work on. I have handouts here for everyone on this.

Just for orientation for everyone once again, I'll point this out just because it was mentioned, the new paint shop is in this area here. As part of the program last summer, we actually put a well right between the paint shop and where we are finding contamination at what we are calling the Fuel Calibration Area, that is Site 6. We did a vertical profile boring, meaning we collected

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2 samples on the way down to 200 feet below the ground  
3 surface.

4 This area here we know we have  
5 groundwater contamination. In this area here, it is  
6 in the range of a thousand plus parts per billion  
7 for comparison drinking water standards are about  
8 five.

9 We have a second piece of  
10 contamination over here. That's -- we originally  
11 associated that with the Engine Test House. The  
12 chemicals we were finding were really more related  
13 to these chemicals. When we talk about Site 6, 6-A  
14 and 10 B, we really think as far as the groundwater  
15 is concerned, they are really the same site.

16 What we know from along Grumman  
17 boulevard here, we installed a series of  
18 piezometers --

19 A MAN: Asking what these  
20 contaminants were.

21 MR. BRAYACK: Chlorinated solvents.

22 A RAB MEMBER: All of them.

23 MR. BRAYACK: Yes.

24 A MAN: No TCA, or anything like that  
25 in there.

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2 MR. BRAYACK: TCA is a chlorinated  
3 solvent.

4 A RAB MEMBER: Okay.

5 MR. BRAYACK: 1,1,1-TCA, 1,1-DCA, and  
6 in some cases chlorethene. There are a couple of  
7 stray hits of freon. Those are the primary. There  
8 is a couple others in, mixed in there. But they're  
9 all chlorinated solvents.

10 Up to Site 6, BTEX compound, xylene,  
11 toluene, ethylbenzene. Couple stray hits of benzene  
12 in there as well. Several order of magnitude lower.

13 Site 10B, former underground storage  
14 tank, small BTEX plume associated with that, smaller  
15 than the size of this room. But also there is a  
16 much larger chlorinated solvent plume. That is why  
17 we don't think they're really related.

18 We put piezometers in last summer and  
19 what we do know, what we call temporary well 111,  
20 these are piezometers. Piezometers are basically  
21 temporary well, temporary well 112, 113. 112 and  
22 113 were drilled on the Peconic Sportsmen's club.  
23 This here is the Peconic River that runs through  
24 here. As near as we could tell, the groundwater  
25 from this whole area will ultimately make it into

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2 the Peconic River. The question is, whether or not  
3 the contaminants that are associated with it, they  
4 don't move at the same rate. Will also. What's  
5 more is what concentration if they do.

6 Like I said, we have sampled the  
7 Peconic River a few times here and have not found  
8 it.

9 These piezometers right at the river  
10 turned up clean. We have another piezometer over  
11 here that turned up clean. And we also did a  
12 piezometer over here. Which would be well on the  
13 far side of it and that turned up clean, as well.

14 And with we know is from a depth of  
15 about 80 to 100 feet below the ground surface this  
16 is an upward gradient of five feet, which is pretty  
17 significant. That is what.

18 MR. COLTER: Was saying about it not  
19 flowing under.

20 When you see these areas, what it  
21 usually means is one or more wells did have some  
22 level of chlorinated solvents in it. We also have  
23 approximately half to two-thirds of the wells  
24 throughout there had nothing detected in it. So  
25 even though we are showing this kind as a continuous

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2 plume there's not. There is more non detects in  
3 this area than there are detections.

4 But what we are doing is we are just  
5 indentifying this whole area as problematic.

6 The only other thing I wanted to  
7 point out are these green arrows, those are culverts  
8 that run underneath the roads. We think a lot of  
9 migration of the contamination is associated with  
10 over land transport, meaning contaminated  
11 groundwater raised up into the ditches and flowed  
12 much quicker because it is much further out than you  
13 would just expect from the groundwater flow  
14 velocities.

15 A MAN: How fast is the groundwater  
16 move in this area different.

17 MR. BRAYACK: Dave it is variable.

18 A MAN: What is the range.

19 MR. BRAYACK: It is in the range of  
20 100 feet a year, maybe 200 feet a year.

21 A RAB MEMBER: Faster toward the  
22 river and slower away from the river is that  
23 generally how it is or it depends on the material.

24 MR. BRAYACK: It depends on the  
25 gradients and the material.

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2 Like I said this is really a very  
3 complex scenario. Much of the work we have been  
4 doing since then has been on the geology and the  
5 hydrogeology.

6 I hope you could read this better  
7 than I can.

8 Because by the way, this  
9 cross-section is what's shown on the previous slide  
10 if you want to match the wells up.

11 Once again, here is -- is Site 6.  
12 That the hangar is also what is the paint shop it is  
13 upgradient. This here is the Peconic River. This  
14 green is the Peconic Sportsmen's club, there is one  
15 mistake on there. There is one number that is  
16 listed as 20. It should list it as 120. You see on  
17 T W 113?

18 So the question was what was the  
19 maximum off-site, the 2/20, was near the corner of  
20 the property. The one 20 was the maximum detected  
21 on the Peconic Sportsmen's club.

22 MR. COLTER: Let me interrupt Dave,  
23 real quick. The data that's gone into  
24 generalization of this cross-section is from our GIS  
25 computer model and as you recall, one of our early

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2 A MAN: Looking at this map it seems  
3 to me that there's the reserve. Groundwater flow is  
4 dipping to the south but you say there is a five  
5 foot upward gradient. Could you reflect a little  
6 bit on that for me. It seems with the five foot  
7 gradient there is a ton of water coming -- five foot  
8 upward gradient, large volume should be coming out  
9 of the aquifer.

10 MR. BRAYACK: That's correct.

11 MR. CHEN: Can you explain to me  
12 how to measure it. Based on the drawing here, I see  
13 it is tipping.

14 MR. BRAYACK: Let me get to that in  
15 one second.

16 MR. CHEN: Okay.

17 MR. BRAYACK: If you want to look at  
18 this map, here. What this line, here reflects is  
19 the groundwater table. The shallow groundwater is  
20 flowing into the Peconic River and into the Peconic  
21 River, okay.

22 A, we are finding I mentioned this  
23 five foot upward gradient. What we are doing we had  
24 piezometers installed shallow, intermediate and  
25 deep, and we had staff gauges on the river. What we

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2 actions when the RAB first got established was  
3 incorporating all of the Northrop Grumman  
4 groundwater data that they collect as part of the  
5 their closure effort into our database. So if there  
6 were detections of groundwater contamination in and  
7 around the paint shop they would have shown up in  
8 this evaluation.

9 MR. BRAYACK: Okay. Similarly  
10 throughout this here you'll see this dashed yellow.  
11 These are all areas that are in the flow path. That  
12 these are all areas where on a hit and miss basis we  
13 believe we would find some level of contamination.  
14 The little number beside each of the points are what  
15 we actually detected there. So when you see this  
16 plume, it's not truly continuous. The green areas  
17 are where it has definitely been found. The yellow  
18 areas in many cases are just suspected. And I'm  
19 going to flip back to the previous one. I just want  
20 to point out this PZ 101, and T W 113. Because  
21 those are the two points that are off-site that have  
22 the higher levels.

23 Here's the P. Z 101 location. Here's  
24 the TW 113. So looks to be part of the concerned  
25 area.

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2 are looking at is the difference between the deep  
3 piezometer, which is in essence a monitoring well,  
4 and the river itself. And then we saw the same  
5 approach over here. Had -- one of our primary  
6 concerns was the possibility that the contamination  
7 was flowing or had the potential to flow underneath  
8 the Peconic River. With that type of upward  
9 gradient, we were pretty much convinced that that is  
10 not a possibility.

11 A MAN: So you're pretty confident  
12 that that upward gradient originates at the clay  
13 layer underneath, that is showing underneath the  
14 Peconic on that drawing.

15 MR. BRAYACK: Yeah, what we have.  
16 And there is some interpretation in this: But what  
17 we have are really two silty clay units. They are  
18 not completely impermeable. What they do, is they  
19 have a tendency any downward migration and we have  
20 this one here and we have a second one deeper down.

21 This is the source area. This deep  
22 contamination here, we've chased it four times  
23 downward now. We know it is a problem, that it has  
24 not completely been defined vertically. This was  
25 what Jim was mentioning, to let us pick a remedy on

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 2 that and further delineate it doing predesign  
 3 activities, get out of the study phase and move into  
 4 the remediation phase.  
 5 This clay unit here, we had a couple  
 6 of relatively low hits here but we also had other  
 7 wells along here that weren't finding anything. So  
 8 there is probably contamination here. What we do  
 9 know is that the shallow aquifer, the groundwater is  
 10 much more coarse, the groundwater flows through it  
 11 much quicker. When I was saying 100 to 200 feet per  
 12 year, I was talking about this upper portion here.  
 13 This stuff here is just much tighter. That it might  
 14 be in the range of 10 or 20 feet a year.  
 15 So one of our concepts with the  
 16 majority of the contamination and there's some  
 17 unknowns here, is that it would flow along here,  
 18 here's a couple of ponds that I was mentioning. The  
 19 over land transport that would reintroduce the  
 20 contamination, for the most part it was staying  
 21 above this unit. And once we got into here, there  
 22 was an upward gradient, you know, we see we have  
 23 deeper ones right here. We have confidence it is  
 24 not flowing down here. We have some other wells,  
 25 relatively deep, suggesting that the contamination

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 2 MR. BRAYACK: The top one is ground  
 3 surface. The one with the little arrows on it are  
 4 the water table.  
 5 MR. CHEN: Okay.  
 6 MR. BRAYACK: This looks much better  
 7 on the big maps.  
 8 A MAN: Dave, you're showing some  
 9 discontinuity in the clay layers. Is that because  
 10 you don't have data.  
 11 MR. BRAYACK: Yeah. We don't -- we  
 12 want to go back on the Sportsmen's Club property and  
 13 drill deeper here. We want to do a technique called  
 14 gamma-ray logging. It maps out all these clay unit  
 15 as we go down. We don't have any information here,  
 16 the clay may or may not be present. But we do want  
 17 to get back onto their property and drill this in  
 18 particular deeper and fill in this gap, here.  
 19 Does this -- there's a possibility  
 20 that this clay unit here, there is a gap which would  
 21 give an opportunity for it to split, that is a  
 22 possibility. We are not saying that that happens.  
 23 But we really want to get back in there and try  
 24 that.  
 25 A MAN: Do you have any concerns on

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 2 is staying shallow.  
 3 We have one exception to that, and  
 4 that is on the Peconic Sportsmen's Club property.  
 5 There was a question on this letter that was issued.  
 6 This letter was specifically to request information  
 7 from the Sportsmen's Club on how many wells they  
 8 have, where the wells are, what depth, what pumping  
 9 rate they are.  
 10 We believe that where we put this one  
 11 well, that there was a groundwater pumping well  
 12 there. And that it may have helped pull the  
 13 contamination deeper than what we would have  
 14 expected.  
 15 Like I said, because it is deep, what  
 16 we did do is go back out and install wells down,  
 17 further downgradient.  
 18 MR. CHEN: Dave, explain the  
 19 elevation at P.S. 1030. Is that some.  
 20 MR. BRAYACK: This one?  
 21 MR. CHEN: In relationship to the  
 22 rest of the elevation.  
 23 MR. BRAYACK: That is just the ground  
 24 surface elevation.  
 25 MR. CHEN: That is ground surface.

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 2 TW-113 that you didn't get down to a non-detect at  
 3 your deepest monitoring point? Could that point be  
 4 deeper?  
 5 MR. BRAYACK: Yeah. This is the one  
 6 we want to go back and go deeper on.  
 7 A MAN: Yeah, that's it.  
 8 MR. COLTER: We had tried to contact  
 9 the gun club on several occasions to go back out and  
 10 go deeper and we couldn't hook up with them and we  
 11 didn't want to go back on unannounced. That was  
 12 kind of the rationale.  
 13 A MAN: They have guns.  
 14 MR. BRAYACK: That was part of the  
 15 decision, too.  
 16 A MAN: Well TW-113 since you do  
 17 have deeper contamination there, obviously, you  
 18 still don't think there would be a possibility of  
 19 there's deeper contamination to spread underneath  
 20 and beyond the Peconic River?  
 21 MR. BRAYACK: When we found this,  
 22 okay, when we originally did this, we only went to  
 23 100 feet here and we went to 100 feet here. When we  
 24 found this contamination, we tried to get right back  
 25 on the property. As Jim said, we just couldn't

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connect. There was -- we just couldn't connect.

What we were able to do, though, because we already had access to this, we hopped right back out to this location, here, and drilled down to this depth, here. Had the contamination been here and flowing, then -- and already flowing under or whatever, then we would have expected to see it, here. So that's pretty much why we did that.

A MAN: You also said the deeper level flows slower than the upper levels. Maybe it has not gotten that far yet.

MR. BRAYACK: Yes. This site is very complex, like I said. Especially with these chlorinated solvents, and they're doing three or four different things here, and that's what we are working on right here.

A MAN: I'd be more concerned about TW-04, 04, where you got contamination -- well, either you don't understand the silty clay layer up there, or it isn't terribly, isn't much of a barrier. Go to your cross-section map, you'll see what I'm talking about to the left. In fact, you haven't really well defined the bottom of that

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rather strange plume which is extreme vertically, and not much horizontal.

MR. BRAYACK: We have redrilled this spot five times now.

A MAN: Have you seen clay and are you punching through and taking.

MR. BRAYACK: We are checking soil samples. We select soil samples on 10 or 20 foot samples. We do the gamma-ray log and correlate the date to make -- this silty clay is definitely here. One of our initial concerns, because we had very contaminated groundwater here, as well as free product, is that as we were drilling, we were pulling it down with us. And then we went back and we actually cased off to about 50 or 60 feet, and drilled through the casing. This is -- this has been an ongoing bafflement.

What we did do, though, we -- you could see these wells, this is about 100 feet, I believe. We put wells on either side upgradient and downgradient. To see if there was some big plume coming down from the paint shop. We didn't find anything there. We did get a couple stray hits downgradient, so, yes, there is some horizontal

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migration on it. But that's definitely a gap that we identified and Jim mentioned that earlier.

A MAN: The problem is that silty clay, if you're counting on it to block anything, it apparently doesn't.

MR. BRAYACK: It probably doesn't block everything.

A MAN: From much.

A MAN: I wonder if there's some holes in it. There may be some areas where it is not present.

A MAN: That is an actually thick area not to have holes on it. Generally speaking, for Long Island. I have some idea where the clay lays here.

MR. BRAYACK: We have not come up with a good explanation on that one. When we look at remedy, the remedy would take that uncertainty into account.

A MAN: This is my first time here. I assume you dragged USGS into this.

MR. BRAYACK: No.

A MAN: You ought to.

A MAN: They have done an awful lot of

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hole punching especially around landfills on Long Island.

A MAN: As you said, this is a very complicated and therefore difficult plume. I think there is going to be a lot more definition needed before you know for sure what to do.

I have a couple of questions and one that has been asked, you don't have any hypotheses how you have deep contamination at that site where there is no upstream source. You, at this point, you can't speculate as to how it got down that deep, right.

MR. BRAYACK: (Nodding)

A MAN: That is fair. I can't, either. But I think somehow we need to try and find the answer to that question.

The second one is, and this is what the other people were alluding to, too. We don't have any other potential upstream source to think of, except the paint shop, and that's the big suspect. But there's still and always has been the mystery of why we have not found any significant contamination right in the vicinity of the paint shop and associated facilities. And the question

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 2 is, maybe it's time to go back and pull out the  
 3 reports and carefully review all the work that was  
 4 done around those buildings, with a fresh view, and  
 5 analyze everything that has already been done and  
 6 see if in fact there are any holes and what was  
 7 done? And if so do some other detailed looking  
 8 around that building.  
 9 Because part of the problem is even  
 10 if you succeeded in cleaning up or addressing the  
 11 in-place contamination here, you have to be sure you  
 12 solve the problem of whether there is still  
 13 remaining somewhere a concentrated source.  
 14 MR. BRAYACK: Two things: One is  
 15 the paint shop is another version. Meaning that it  
 16 was built with all the secondary containment units.  
 17 A MAN: Yes, I know. But there's  
 18 the old paint shop, too.  
 19 MR. BRAYACK: The second point,  
 20 though, is that we did put a well upgradient of  
 21 there.  
 22 A MAN: Yes, I know.  
 23 MR. BRAYACK: And, you know, it was  
 24 clean.  
 25 A MAN: I know. But what you have

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 2 so far still is a lot of mystery. And some  
 3 information that doesn't give you complete answers.  
 4 It just adds to the mystery. So I think you still  
 5 have to keep pursuing the mystery until you get some  
 6 answers or else you may end up walking away still  
 7 leaving significant problems in place and not  
 8 knowing it.  
 9 A MAN: Since I represent those 458  
 10 gun toting concerned citizens, I can tell you pretty  
 11 much what they're going to ask me. What are you  
 12 proposing to put on gun club property?  
 13 MR. COLTER: At this point we are  
 14 just proposing to go back and redrill in that area,  
 15 a little deeper. I don't know what you mean by "put  
 16 on the gun club property"?  
 17 A MAN: They are going to know what  
 18 the up side is, you're going to drill 200 feet, 300  
 19 feet. You want to take samples every 10, 20 feet.  
 20 MR. COLTER: We have to evaluate that  
 21 with DEC and Suffolk County. We need to go deeper  
 22 certainly.  
 23 A MAN: Time out. Three times you  
 24 made reference to the fact that you were stonewalled  
 25 at the door -- at the gate of the gun club.

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 2 Nobody's heard any suggestion about what you're  
 3 going to do. They're going to ask me. I'm going to  
 4 go back to the meeting and they're going to say what  
 5 do they want to do.  
 6 MR. COLTER: Drill deeper in that  
 7 area.  
 8 A MAN: And sample.  
 9 MR. COLTER: Yes.  
 10 A MAN: For.  
 11 MR. COLTER: Volatile organic  
 12 compounds, just like the first time around, exact  
 13 same thing as the first time around. A work plan  
 14 was submitted.  
 15 A MAN: That hasn't been conveyed.  
 16 MR. BRAYACK: We would like  
 17 information on all the wells on the gun club  
 18 property.  
 19 A MAN: The two wells that exist  
 20 here, are glacial aquifer, and I couldn't imagine  
 21 them over pumping the aquifer.  
 22 A MAN: Is it for domestic purposes,  
 23 watering the lawns.  
 24 A MAN: No, it's for the gamekeeper  
 25 there. He doesn't drink a whole lot of water, if

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 2 you know what I mean.  
 3 A MAN: It is a glacial aquifer.  
 4 MR. BRAYACK: One of the wells is  
 5 located within 50 feet.  
 6 A MAN: Of the pistol range.  
 7 MR. BRAYACK: How deep is that well.  
 8 A MAN: Somewhere between 35 and 50  
 9 feet.  
 10 MR. BRAYACK: That is as deep as it  
 11 is.  
 12 A MAN: They are small diameter,  
 13 domestic wells. That's all that is there.  
 14 A MAN: Dave, the first time you  
 15 drilled, and you didn't go deep enough, what did you  
 16 do? Did you sample every 10 feet? What was the  
 17 procedure?  
 18 MR. BRAYACK: On 20 foot centers.  
 19 MR. CHEN: Maybe that is what you  
 20 need to tell the gentleman so he could go back, and  
 21 you know, get --  
 22 MR. COLTER: What happened was, when  
 23 we drilled down we took our samples and sent them  
 24 off to the lab for analysis. While it was at the  
 25 lab, I don't know what the turnaround on it was, it

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 2 wasn't quick turnaround. It wasn't 48 hours. We  
 3 left the property, drilled the rest of the program.  
 4 When we got the analysis back and found it was  
 5 contaminated, we wanted to go back on and go deeper  
 6 on another 20 foot center, but that is where we had  
 7 the disconnect.  
 8 So, you know, that is what we are  
 9 trying to do, is to get back on and go further. We  
 10 didn't want to have a lag. But you didn't want to  
 11 pay our driller standby for all these months,  
 12 either.  
 13 A MAN: That time lapse is more like a  
 14 couple of months, if I recall.  
 15 MR. COLTER: I'm not sure of the time  
 16 frame. I know Dave is trying diligently to contact.  
 17 A MAN: The way you're saying it,  
 18 you're going to put the rig in reverse and back up.  
 19 It was a couple of months.  
 20 MR. BRAYACK: Right, we were drilling  
 21 on site. When we were drilling, we were actually  
 22 drilling at about five or six different sites on  
 23 Calverton. And when we, you know, we drilled these,  
 24 we drilled a series of others and we were chasing  
 25 plumes basically. We got the results in and then

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 2 during this time, we demobilized, and we brought the  
 3 rig out a second time. And that was why we were  
 4 trying to get on.  
 5 A MAN: They'll give you permission to  
 6 drill on there, with the provision that we split  
 7 samples.  
 8 MR. COLTER: That's fine. It's no  
 9 different than the work plan we submitted the first  
 10 time around, that's all. Same exact procedures.  
 11 A MAN: Come on a day when there's  
 12 no shooting, though.  
 13 CO-CHAIR HARE: We'll take that under  
 14 advisement.  
 15 A MAN: Can we bring our own guns.  
 16 A MAN: Sure.  
 17 MR. CHEN: Can I make a suggestion,  
 18 Jim?  
 19 If the club gives you permission to  
 20 go back, could you take a series of deep samples.  
 21 We don't know what is in the samples, and take a  
 22 series of them. In other words, do it in one  
 23 drilling session rather than having to go back time  
 24 and time again. Is that a possibility?  
 25 MR. COLTER: Yes, more like a

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 2 vertical profile boring.  
 3 MR. CHEN: Right.  
 4 MR. COLTER: It is not a problem  
 5 doing that, but it is coordinating the result,  
 6 getting the results back versus continuing to drill  
 7 and take samples, you know.  
 8 MR. CHEN: That is what I'm saying.  
 9 MR. COLTER: Maybe we need to agree  
 10 if we get three consecutive non-detects, that we can  
 11 stop. Or four consecutive non-detects, something  
 12 like that.  
 13 MR. CHEN: I'm not talking about  
 14 that. I'm talking about the fact that when you go  
 15 back and take samples and wait for the results to  
 16 come back it is time-consuming. To bypass that,  
 17 you could go back and take a series of five samples  
 18 and see what you get out of that. If you have to go  
 19 back --  
 20 MR. BRAYACK: That is what we did the  
 21 first time. We took samples at 20, 40, 60, 80 and  
 22 100 and submitted them.  
 23 MR. CHEN: Okay. So you're ahead of  
 24 the game.  
 25 MR. BRAYACK: Getting back to John.

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 2 You said there was one well right near the pistol  
 3 range, is that correct.  
 4 A MAN: Yes.  
 5 MR. BRAYACK: That was about 35 feet  
 6 deep.  
 7 A MAN: There are no deep wells there,  
 8 there is no supply wells. They are glacial aquifer  
 9 and used for domestic, handwashing stations and  
 10 domestic usage.  
 11 MR. BRAYACK: There is one well on  
 12 the house.  
 13 A MAN: That one well at the house  
 14 is not used.  
 15 MR. BRAYACK: Are there any other  
 16 wells on the property?  
 17 A MAN: There's two wells by the  
 18 skeet range, shallow wells, used for watering the  
 19 lawn. But they're well out of -- they are across  
 20 the other side of the river.  
 21 MR. BRAYACK: Okay.  
 22 A MAN: Where there is no  
 23 contamination.  
 24 MR. BRAYACK: When we were talking to  
 25 various people out there, people were mentioning

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2 wells to 100 feet, 150 feet. But everyone -- no one  
3 was quite certain how deep those wells had gone.  
4 Okay.

5 A RAB MEMBER: I don't know, just a  
6 rough scaling off this map, this whole area that you  
7 look like you're characterizing I, looks close to  
8 6,000 feet, 5 or 6,000 feet, anyway, based on the  
9 scale on the bottom, here. How confident are you  
10 that if some of these non-detects, where this stuff  
11 is going from the source area?

12 I know in a lot of locations, it  
13 looks like you just have one boring. Perhaps some  
14 of the explanation for some of the non-detects  
15 you're saying, you're east/west of where the plume  
16 is, maybe it is not that wide of plume. How  
17 confident are you on the groundwater movement here.

18 MR. BRAYACK: Back in 1997, the  
19 Navy --

20 Jim, who was the other?

21 MR. COLTER: Nature Conservancy.

22 MR. BRAYACK: Nature Conservancy did  
23 a groundwater flow survey for this entire area.

24 A MAN: Did a synoptic sampling.

25 MR. COLTER: Four times, each quarter

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2 in the one year.

3 MR. BRAYACK: Based on that, this  
4 entire area was reasonably delineated as to where  
5 the groundwater was flowing. Like I said, what you  
6 see here with these contour -- these represent both  
7 where we've detected it plus the groundwater  
8 contours that were developed. As an example, in  
9 this case, here, you would -- there would be a  
10 contour that is flowing into here, and over here it  
11 was flowing into here. Basically the Peconic River  
12 is the major receiver of all groundwater. Then the  
13 only question is how does it get into there?

14 What we know is where we put the  
15 non-detects, or where we found the non-detects,  
16 there are some wells that are 20 or 30 feet apart,  
17 where we have a detection in one well and nothing  
18 detected in the wells around it. I think we had six  
19 or eight temporary wells across this edge, here. As  
20 I remember it, half of these were dirty. Half of  
21 them were clean. We may just be looking at time  
22 effects. If we went back and resampled now, where  
23 it was clean is now dirty, and vice versa. We are  
24 trying to get a handle. We'll never have 100  
25 percent information. We are trying to collect

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2 enough information to see the magnitude and try to  
3 select a remedy.

4 A RAB MEMBER: Right. What I'm  
5 really asking is, as you get away from the source  
6 area, have you done a series of borings  
7 perpendicular to these plumes, to be confident that  
8 where you're going, you're actually where the plume  
9 is, or is there a lot of uncertainty? We are  
10 talking travel time of 30, 40, 50 years here.

11 MR. BRAYACK: We have in the range of  
12 50 monitoring wells, plus, in this area here, that  
13 helped delineate that initial point. And we have  
14 six or eight, maybe 10 wells along the road, here.  
15 Once we get off-site, we really only moved off-site  
16 last summer.

17 A RAB MEMBER: That's where many more  
18 of my questions are focused on, is off-site.

19 MR. BRAYACK: Right.

20 A RAB MEMBER: How confident are you  
21 of where this stuff is. Where you're looking is the  
22 right spot. I'm not trying to second guess what  
23 you're doing. It seems like it is very complex  
24 geology. With the movement of the groundwater near  
25 the river, it seems very complex. And even though

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2 the river acts as a sink for the groundwater, still,  
3 it looks like, just looking at that picture, it  
4 looks like the water is moving in some very dynamic  
5 directions. In places it makes some big changes.

6 MR. BRAYACK: It is a small area that  
7 expands as it is moving. It is a typical dispersion  
8 type plume. It is affected by minor seasonal  
9 variations. There is a couple ponds shown on the  
10 map. One of the ponds is right in this area here,  
11 and the second one is here. If you look at the  
12 groundwater contamination flowing and discharging to  
13 this point, and then to a series of ponds that all  
14 intersect here, that is where we see most of the  
15 spread occurred from. That if it was strictly a  
16 groundwater flow, then I think we would see what  
17 you're mentioning, a fairly tight plume, you know,  
18 moving all the way through.

19 But we are seeing, we got detections  
20 here, we have detections here. We have detections  
21 here, and we have detections here. They are the  
22 same chemicals. We have no reason to believe that  
23 they're truly independent hits.

24 A RAB MEMBER: You have non-detects  
25 in between.

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1  
2 MR. BRAYACK: Not in this case here.  
3 Vertically we do but not horizontally. And that's  
4 why we have, you know, the two different hatches.  
5 If you see the double crossed-hatch, any well in  
6 that point means we definitely found contamination.  
7 In these cases, here, they're all related. I think  
8 this one was 5 parts per billion. I forget offhand.  
9 This one was relatively low, too. These were both  
10 very low and very shallow. There was nothing deeper  
11 on them.

12 This was an intermediate depth. This  
13 is the only deep hit that we found.

14 A MAN: Dave, do you have any deep  
15 wells northwest of TW-20 in the same depth as where  
16 you found the contamination.

17 MR. BRAYACK: TW-20 is the upgradient  
18 well that is clean.

19 A MAN: Right. Do you have any  
20 more?

21 MR. BRAYACK: We have shallow wells,  
22 not deep ones.

23 A MAN: You don't have any more deep  
24 ones.

25 A MAN: You don't have any proof,

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1 other than TW-20, that your deep contamination isn't  
2 coming from further upstream?

3 MR. BRAYACK: That is correct.

4 A MAN: Is there any reason why you  
5 haven't put in deeper wells? Your results kind of  
6 beg the issue of deep well, deep water recharge.  
7 Here, the complexity of the area, the hydrogeology,  
8 which is not fully understood, and the fact that you  
9 have hits on a vertical scale, you stopped drilling  
10 before you ran out of hits, kind of begs the issue  
11 of deep water testing.

12 MR. BRAYACK: In which area?

13 A MAN: Where you stopped drilling  
14 and you still found results.

15 MR. BRAYACK: Here? That is what we  
16 said, and here. Those are the two places we want to  
17 go back and drill.

18 A MAN: What are you talking about,  
19 when I give my report and I say "deep drilling",  
20 what are you talking about?

21 MR. BRAYACK: Until we quit finding  
22 it. What we would propose here, is we stop at 100  
23 feet. This is on the Sportsmen's Club. We probably  
24 go to 200 feet. If we get it clean at that point,

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1 then we will be done.

2 MR. COLTER: Bear in mind, back at  
3 TW-20, we do have other deeper wells. We drilled  
4 this site five times and we have gotten the same  
5 results each time. We have gone upgradient and  
6 downgradient. We have done additional, deeper  
7 wells, to try to box this thing in and try to figure  
8 out what is going on -- it is not that we just got  
9 it and walked away. We have done three or four  
10 rounds of deep wells over here in the last couple of  
11 years.

12 A MAN: Deep well, 200 feet.

13 MR. COLTER: Look on the map you'll  
14 see total depth of 202. We've gone just as deep as  
15 we have found the contamination. Upgradient,  
16 downgradient, and we haven't been able to find it  
17 expanding that is what aids in this confusion. We  
18 are not sure what is going on. But we have  
19 attempted. What we want to do again, is to  
20 bring -- you have to bring a different rig in. This  
21 is one of the reasons we stopped here.

22 We used a hollow stem auger that was  
23 probably effective to, as far as we have gone, 200  
24 feet. We're going to need a different type of rig

## Proceedings

1 to go further, and more money. We have to plan for  
2 that type of program. We would probably go with  
3 some type of mud rotary, hopefully. We are using  
4 that at Bethpage, but that's things we have to work  
5 out with the regulators as far as the drilling  
6 techniques. If mud rotary isn't acceptable, then we  
7 have to come up with some other technique to get  
8 down to 200, 300 feet.

9 A MAN: You can go another 100 feet  
10 with a good auger except that you might have trouble  
11 with all that clay.

12 MR. COLTER: A lot of drillers get  
13 nervous with that. We have trouble finding somebody  
14 to do it.

15 MR. BRAYACK: As we are drilling  
16 down, the concern we have, especially with the  
17 hollow stem auger, you never get a truly tight fit  
18 on them. When you're collecting samples in the  
19 clay, there is still a chance that these detections  
20 that we are seeing is a result of our drilling  
21 technique, and that they're not there. That is  
22 still a very viable explanation for that. It is not  
23 good enough, and that is why we are talking about  
24 going back. But it is possible.

1 Proceedings

2 A MAN: Have you considered permanent  
3 monitoring wells.

4 MR. COLTER: That was my next point.  
5 Part of doing temporary wells is you try to define  
6 your plume so you can reasonably put permanent wells  
7 in where it is not a waste of money. So far for the  
8 last couple of years that's what we have been doing,  
9 a lot of temporary wells. We've tried to define the  
10 plume.

11 What we want to try to get to, if we  
12 can, is say that we know the horizontal extent of  
13 the plume, as was shown on the previous page, is  
14 adequate enough for us to start choosing some type  
15 of remedy. Just for an example, if the remedy was  
16 let's monitor this plume and see if it continues to  
17 migrate or does it naturally attenuate, the way you  
18 do that is with a series of permanent monitoring  
19 wells. But that is basically a remedial decision.

20 In order to make a remedial decision,  
21 you have to go through the circle of hoops, a PRAP,  
22 a ROD, Feasibility Study. That is what we want to  
23 get to so we can start putting in permanent wells as  
24 part of a solution.

25 Regarding the FCTW-09 area, the deep

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2 Study that we do, that type of analysis.

3 In my opinion, and as far as our last  
4 couple of technical meetings have gone, the  
5 regulators opinion is we have done a lot of study.  
6 We have done a decent enough, not 100 percent  
7 characterization, but adequate characterization that  
8 we can start talking about what to do at this point  
9 and what to do about that deep contamination. I'm  
10 just trying to suggest that we do that as part of a  
11 remedy versus another round of studying. Something  
12 to think about.

13 A MAN: Even with the deep  
14 contamination at TW-04, there is an anomaly because  
15 of drilling technique, the big blob of contamination  
16 midway, there, in the first silty clay layer, is not  
17 an anomaly. And even that is very difficult to  
18 explain. There's no logical reason for it to be  
19 down that deep if the source is the paint shop area.  
20 I'm still very puzzled by the pattern.

21 A MAN: Is there any evidence that  
22 these releases were sporadic as opposed to  
23 continuous.

24 MR. BRAYACK: This was -- Grumman  
25 used to first pressurize their aircraft fuel systems

1 Proceedings

2 one there. If we were to -- we have a 1000 parts  
3 per billion. We have many types of extraction  
4 systems we need to put in there. Part of that  
5 design of that system would be a deep boring all  
6 around there to, you know, how many wells do you  
7 need? What type of capture zone do you have? All  
8 that drilling would aid in defining the design. So  
9 we could go back out time and time again with  
10 additional temporary wells, we can keep going down  
11 20 feet further here or there, or we can start  
12 trying to put permanent wells in and do other field  
13 work as part of a design. And going towards some  
14 type of remedy.

15 Like I said, the remedy will be  
16 different for the left side than it will be for the  
17 right side only because of the vast difference in  
18 concentration. You're looking to the right side, 20  
19 part per billion, 43, those are levels where pump  
20 and treat really isn't going to do you much good.  
21 You've already got down to those levels with the  
22 pump and treat system. So we have to decide, we  
23 have to work with the regulators and find what else  
24 is out there, what else can we do? We need to get  
25 to that stage, and the stage is the Feasibility

1 Proceedings

2 in this location. And when the fuel lines were all  
3 pressurized, it wasn't uncommon for them to leak.  
4 And when we first moved out here, we expected only  
5 to find fuels. This is the edge of a concrete pad.  
6 I don't know if you could -- if it shows up on here.  
7 But this TW-04, is the very -- is the first edge of  
8 concrete within hundreds of feet upgradient from  
9 there. So anything that was spilled on the  
10 concrete could very easily flow off to the edge.

11 Like I said, this location is  
12 literally within about 10 or 20 feet of the  
13 concrete. Any spills in the area would have entered  
14 the groundwater right at that point.

15 From this point, from here to at  
16 least over here and up to here, this whole section,  
17 is all building concrete. It is thick concrete.  
18 They used to run the airplanes over this. This  
19 isn't just little, thin, 68 inch slabs. But this  
20 operation occurred over decades. From the '50s to  
21 the -- I don't know when they stopped, probably the  
22 '80s or '90s. So what we are seeing is probably  
23 releases over 30 years.

24 A MAN: My question is since you're  
25 showing blobs, you wouldn't expect to see blobs with

1 Proceedings  
 2 a continuous release.  
 3 MR. BRAYACK: That is correct. That  
 4 is what we were talking about in part, these  
 5 overland transport? Groundwater is only three to  
 6 five feet deep in this area. And during storm  
 7 events, probably during the recent melting of the  
 8 snow, the groundwater table comes up. And is  
 9 actually above the ditch line. It is only about a  
 10 foot from the ground surface at that point. Any  
 11 contaminated groundwater could very easily enter the  
 12 ditch here. This is a culvert, it is a concrete  
 13 culvert, that flows from here and dumps into a pond  
 14 down here.  
 15 So what might normally take five or  
 16 ten years to move, can occur in one day. Under the  
 17 right conditions. There is a pond here. We think a  
 18 lot of this actually resulted from the leaking of  
 19 this culvert. It hit these ponds in this area, and  
 20 it would sit in there for a while and migrate.  
 21 Actually most of -- we put a lot of wells around  
 22 those ponds those are actually clean. It is a  
 23 likely scenario it is clean water, now, it is all  
 24 flushed out.  
 25 From these ponds under the right

1 Proceedings  
 2 storm conditions, the groundwater will flow under  
 3 the railroad tracks into another set of ponds, here,  
 4 which would -- once again, what would normally take  
 5 ten years, can occur in one or two days. And then  
 6 there's culverts. This is a little stream that runs  
 7 down through here. It actually runs from about  
 8 here, right down to this point, because we put this  
 9 point right beside that stream. What would normally  
 10 take five or ten years, could once again occur in a  
 11 day. We are seeing 30 years of discontinues flows.  
 12 So the different patterns that we see here are more  
 13 than likely storm events.  
 14 A MAN: Have you ever put a 5 or 600  
 15 foot well down there.  
 16 MR. BRAYACK: No.  
 17 A MAN: Why?  
 18 MR. BRAYACK: The primary reason is  
 19 that we start where the contamination is and we work  
 20 outward from there, which includes vertically and  
 21 horizontally.  
 22 A MAN: You have a body of evidence.  
 23 MR. COLTER: In that one area, that  
 24 may be where it ends up being. We don't normally go  
 25 up to 700 feet without evidence of shallow,

1 Proceedings  
 2 intermediate zones. In that area, you may be right,  
 3 we may have to go down to that depth.  
 4 A MAN: My question to you on  
 5 October 24th is the same one today. It does not  
 6 appear that you have found the bulk of the  
 7 contamination.  
 8 MR. BRAYACK: I don't know about  
 9 that. This source area, here, at one time had tens  
 10 of thousands.  
 11 A MAN: You're talking about an  
 12 operation that exceeded 40 years of usage, with  
 13 daily usage, of 55 gallon barrels of engine cleaner.  
 14 MR. COLTER: But not daily disposal.  
 15 A MAN: You weren't there. You  
 16 don't know that.  
 17 MR. COLTER: The evidence isn't  
 18 there, in the surface.  
 19 A MAN: My point exactly. You didn't  
 20 find it.  
 21 MR. COLTER: You're assuming that  
 22 they disposed of it on the ground for 40 years.  
 23 A MAN: Actually, there was accounts  
 24 of personnel on-site during those years that said,  
 25 yes, that's what they did.

1 Proceedings  
 2 MR. COLTER: Most of the spills, I  
 3 think we, as part of the close-out report, Northrop  
 4 Grumman identified all the spills through the DEC  
 5 and addressed each spill. I mean, John, you're  
 6 asking us to prove a negative, and you can't do it.  
 7 A MAN: I'm asking you to find out  
 8 what you haven't found.  
 9 MR. COLTER: That is poking holes on  
 10 every two foot centers to prove a negative. That is  
 11 not the basis of the program. It its not the basis  
 12 of any CERCLA program, whether it is run by the  
 13 state or EPA. You just don't poke holes on a grid  
 14 to try to prove a negative. It is not part of the  
 15 CERCLA process.  
 16 A MAN: One of your big points here,  
 17 correct me if I'm wrong, is that this is a highly  
 18 anomalous area.  
 19 MR. BRAYACK: I disagree. Go ahead.  
 20 A MAN: There's no anomaly.  
 21 MR. BRAYACK: No, you said "highly".  
 22 A MAN: You're talking about five foot  
 23 upward gradient. You're talking about a river that  
 24 used to be seven feet across that is now 100 feet  
 25 across. There's been a lot of stagnation and deep

1 Proceedings  
 2 water recharge. I'm not a hydrogeologist, but it  
 3 kind of makes sense.  
 4 MR. COLTER: As far as the  
 5 hydrogeology goes, everything we presented tonight  
 6 has already been published by the Suffolk County  
 7 Department of Health. We are not shedding new light  
 8 in this area that has not already been published.  
 9 A MAN: We're not asking you to  
 10 reinvent the wheel. We're asking you to find it.  
 11 MR. COLTER: We are at a loss, John.  
 12 There may not be anything to find. We found  
 13 sporadic hits.  
 14 A MAN: Punch one hole down there  
 15 and find out if there is nothing there. That is  
 16 not a double negative.  
 17 MR. COLTER: We may dig deep in that  
 18 area. We're not arguing that point.  
 19 A MAN: It sounds like it.  
 20 MR. COLTER: We want to go back to  
 21 the gun club and go deeper in this other area. But  
 22 we want to do it as part of a remedy of putting in a  
 23 permanent well and monitoring the plume.  
 24 A MAN: Nobody beat you up about  
 25 putting permanent wells in the gun club.

1 Proceedings  
 2 MR. COLTER: We have a process we  
 3 have to follow. We have to go through the  
 4 regulatory hoops.  
 5 A MAN: That is all well and good,  
 6 somewhere along the line don't you think it would be  
 7 appropriate to test the Raritan? Don't you think  
 8 it is appropriate to go down just once on that,  
 9 someplace in that area and see if --  
 10 MR. COLTER: We very well might end  
 11 up at the TW-04 area. We are not saying we don't.  
 12 A MAN: -- your upgradient well.  
 13 MR. COLTER: It's not the upgradient.  
 14 Off to the left there, the one that is the deep that  
 15 we haven't defined.  
 16 A MAN: I thought TW-04 was  
 17 upgradient.  
 18 MR. COLTER: That is the one we have  
 19 been talking about all night. We end up at the  
 20 Raritan. We don't know but we'll get out there and  
 21 start the process. But to start the process takes  
 22 time.  
 23 A RAB MEMBER: Based on those  
 24 questions and John's questions and Mr. Pim from the  
 25 health department was asking to solve the mystery.

1 Proceedings  
 2 Then what David explained about finding levels of  
 3 contaminants or water or whatever from those areas  
 4 jumps into a man-made culvert and it moves and it  
 5 jumps into a man-made culvert and it moves. Then  
 6 looking for contamination to define it, we really  
 7 can't use. It has created a mystery in what the  
 8 health department is saying.  
 9 So in these, specifically in these  
 10 two areas, because those are points right now I know  
 11 you want to go into a remedy situation because it's  
 12 more cost-effective to start working on a remedy  
 13 than to do -- we all know that. Now we have two  
 14 definitive things that we have to look at and really  
 15 solve mysteries here. Maybe we have to come out of  
 16 the box on how we go about defining stuff, because  
 17 we have real complex hydrogeology, here. We have,  
 18 for want of a better word and not being able to deal  
 19 with the jargon, we have bodies of water that just  
 20 sort of bubble over.  
 21 The Peconic tributaries have to  
 22 create such emphasis to the contaminant flow, and I  
 23 know you brought up the Nature Conservancy, how  
 24 reliable really is that data for groundwater  
 25 contours? That you're using as a baseline.

1 Proceedings  
 2 MR. COLTER: I'd say very reliable  
 3 as -- Northrop Grumman, maybe Suffolk County  
 4 Department of Health, Nature Conservancy, all sample  
 5 wells on the same days. I would agree with you if  
 6 it was on different days. We all did it on the same  
 7 days, four times a year. All the maps that were  
 8 generated, which I believe you all have, showed the  
 9 same type of flow. In addition, when you compare  
 10 that to what Suffolk County Health Department has  
 11 done over the last several years, here, they match  
 12 up right on. So we are very confident with  
 13 groundwater flow.  
 14 A RAB MEMBER: Then we have a solid  
 15 foundation of the groundwater contours to look at.  
 16 But just based on what David said and the fact that  
 17 we -- you know, there's a mystery here. The paint  
 18 shop dump, the air force base did X, Y, Z, cleaning  
 19 fluid and jet fuels and metals and stuff, and all,  
 20 really to say we have done characterization and we  
 21 just aren't quite sure where it's coming from, this  
 22 has got to bother you guys too, because you know it  
 23 is there.  
 24 So we have to come out of the box, is  
 25 all I'm saying, and do it on these specific areas.

## Proceedings

1  
2 I think you need to deal with the state and the  
3 county on how you're going to nail it down. I think  
4 John Pedneault is right in going for deeper, a  
5 deeper look. Because if it can jump that quick,  
6 then it is mitigated down deeper and you haven't  
7 gotten to the end of it, over the years, you really  
8 haven't. You have to go deeper because it is not  
9 behaving -- the contamination, all I hear in all I  
10 go back to, is the contamination historically is not  
11 behaving on this site the way it behaves elsewhere  
12 on Long Island. Please don't bring up the  
13 difference in hydrogeology, because I understand.  
14 It just doesn't behave the right way in any way,  
15 shape or form.

16 MR. COLTER: This is not explainable,  
17 what we are finding, especially in the TW-04 area.

18 MR. BRAYACK: The TW-04 area is a  
19 problem and we are going to go deeper, that is  
20 basically what we have been saying. The location of  
21 TW-113 area is a problem. Be what we are saying is,  
22 first of all, we know that that's a major source.

23 MR. COLTER: Define problem. We are  
24 at 20 and 40 and 120 parts per billion, levels where  
25 pump and treats are ineffective. So.

## Proceedings

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2 A RAB MEMBER: I understand. But we  
3 still have to deal with it.

4 MR. COLTER: We have to delineate it,  
5 and that's what we want to do.

6 MR. BRAYACK: That the area, Site  
7 6-A, there was at one time several feet of free  
8 product sitting on the water table. Hundreds of  
9 gallons of free product were pulled out of there,  
10 that free product was measured to be contaminated  
11 with chlorinated solvents. There is no mystery as  
12 to where the groundwater contamination came from.

13 If you go out there right now, you  
14 could open up certain wells and there is a free  
15 product recovery system going on, if you open up the  
16 well, there is free product sitting on the water  
17 table. That is the source. We have the  
18 chlorinateds. We have the fuels. They are right  
19 there. We found them. That was one of the first  
20 things we delineated in '94, is where that free  
21 product was. It is a small area. It is about 100  
22 foot deeper right at the edge of this concrete. We  
23 went further up in there. We did not find anything  
24 further up. That is why we never went further  
25 upgradient.

## Proceedings

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2 There was the one question about the  
3 contamination, in particular the deep contamination  
4 was flowing in from upgradient sources. The hangar,  
5 here. Maybe it dropped this way. We put a  
6 monitoring -- vertical profile boring upgradient  
7 from there, right between those two points and we  
8 didn't find anything.

9 So what we have is we have a smoking  
10 gun right here. We haven't talked about it but  
11 there is one other mechanism for the contamination  
12 to come down, and that is a D-NAPL, if you get 10 or  
13 15 gallons of trichlorethylene and you dump it on  
14 the ground, it is going to hit the water like  
15 putting water in oil; when you put a drop of water  
16 in oil, the water is going to go straight down to  
17 the bottom. That one mechanism could account for  
18 all of this. I'm not saying that is what is  
19 happening, but that is one possible mechanism.

20 As far as.

21 A MAN: What species have you found  
22 deep?

23 MR. BRAYACK: That is why we keep  
24 going down and looking at concentrations, but we are  
25 finding most of them. Which includes the fuels,

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1  
2 too. Which means if you have a chlorinated solvent  
3 and a fuel, you mix the two together, they're going  
4 to be heavier than water. If you drop them, there  
5 is a possibility D-NAPLs are able to penetrate a  
6 clay unit without stopping. So that is one  
7 explanation. Our bottom hit was only 13 parts per  
8 billion, compared to 13,000 parts per billion up at  
9 the source.

10 So, you know, even though we are not  
11 at the bottom, we think we are pretty close at this  
12 point.

13 A RAB MEMBER: Do you know  
14 historically, at all, where the next clay layer  
15 would be?

16 MR. BRAYACK: No. This 200 foot is  
17 the deepest we've gone.

18 A MAN: Is there any USGS information  
19 or historical information.

20 MR. BRAYACK: Not deep like this. At  
21 least not in this area.

22 A MAN: You never found an  
23 explanation of why there was solvents in the fuel  
24 area.

25 MR. BRAYACK: Other than that there

1 Proceedings  
 2 was a paint shop and that was the edge of a concrete  
 3 pad.  
 4 A MAN: You never found any  
 5 explanation of solvent usage in the fuel operation.  
 6 MR. BRAYACK: It is possible they  
 7 used the solvent to clean up the fuels after they  
 8 were spilled, so if you have an aircraft there and  
 9 you have that diesel fuel spilling all over, you  
 10 probably go get solvents and wash it down and clean  
 11 it up. That's a possible explanation. It would not  
 12 be -- it's like a maintenance operation. You have  
 13 some amount of solvents there regardless. It is  
 14 predominantly fuels, but you would have some  
 15 solvents in general.  
 16 A RAB MEMBER: You came up with 1300  
 17 as the highest hit before. What is 4,000.  
 18 MR. BRAYACK: The highest hit was  
 19 13,000 back in 1991. That has since dropped to, I  
 20 believe, is it 4,000?  
 21 MR. COLTER: Yes.  
 22 MR. BRAYACK: The contamination  
 23 levels are definitely dropping in this source area.  
 24 A MAN: Dave, the area of free  
 25 product, can you give some details on that.

1 Proceedings  
 2 MR. BRAYACK: The area.  
 3 MR. CHEN: The area of product where  
 4 there was extracting.  
 5 MR. BRAYACK: The area of free  
 6 product. This is not the best map. But if you see  
 7 where TW-04 is on your map, it is right here, it  
 8 extended roughly from a little bit to the west of  
 9 TW-04, maybe 10 or 15 feet, and it extended east  
 10 about 60 or 80 feet. And it was approximately, that  
 11 was the east-west orientation on it. And it was in  
 12 the range of 30 to 50 feet north and south.  
 13 MR. CHEN: How did you determine the  
 14 boundaries behave.  
 15 MR. BRAYACK: Grumman did this. They  
 16 put a series of shallow water table wells in,  
 17 looking for free product formation. There's trace  
 18 amounts right now. The Navy is doing free product  
 19 recovery.  
 20 MR. COLTER: As part of the Site 2  
 21 free product recovery system, we also were doing the  
 22 same at Site 6, here. We installed, I don't have  
 23 the number, but we installed additional wells to put  
 24 the pillows in to extract and soak up. That will  
 25 all be in that report that I'm supposed to be

1 Proceedings  
 2 getting here shortly, to document how much we have,  
 3 what's left, what should we do next.  
 4 MR. CHEN: And what's the free  
 5 product.  
 6 MR. BRAYACK: The free product is  
 7 predominantly fuels, diesel fuel and jet fuel, with  
 8 chlorinated solvents a half percent, 1 percent.  
 9 MR. COLTER: Those pillows we take  
 10 them out and send to the lab for analysis. I don't  
 11 have that data back but all of that will be in the  
 12 report. We'll know how much solvents, if any, we  
 13 are detecting in the pillows.  
 14 MR. CHEN: In the field?  
 15 MR. COLTER: In this area and Site 2,  
 16 they put the same type of shallow extraction system.  
 17 MR. CHEN: What site.  
 18 MR. COLTER: Fire Training Area.  
 19 MR. CHEN: Fire training. Within  
 20 TW-04, is that the only location they did this  
 21 investigation?  
 22 MR. BRAYACK: They put these  
 23 temporary wells on about 25 foot centers, and they  
 24 kept gridding outward until they didn't hit any more  
 25 free product and they did free product -- they had

1 Proceedings  
 2 an active free product recovery system with the  
 3 groundwater extraction cell that ran until '91, and  
 4 they pulled hundreds of gallons out of here. It is  
 5 in one of our reports.  
 6 MR. CHEN: Hundreds of gallons on  
 7 this site.  
 8 MR. COLTER: This, here.  
 9 MR. BRAYACK: At times, there was  
 10 upward of over a foot of free product, contaminated  
 11 with chlorinated solvents. Some of the later tests  
 12 at TW-04, showed it was a fuel chlorinated solvent  
 13 mix. If you come over to this edge about 60 or 80  
 14 feet, there was no chlorinated solvents in it. It  
 15 was probably separate occurrences so it wasn't a  
 16 continuous mix. It was, you know, pure diesel, and  
 17 diesel is a chlorinated. Where we are finding the  
 18 deep contamination is where the mix is.  
 19 A WOMAN: The contamination that you  
 20 have here on the Sportsmen's Club, was that the same  
 21 contamination as was at the paint shop.  
 22 MR. BRAYACK: The chemicals are very  
 23 similar, yes.  
 24 A WOMAN: Isn't that a long distance  
 25 away?

## Proceedings

1  
2 MR. BRAYACK: Yes, that is what we  
3 were just talking about. If you look at groundwater  
4 velocity times. One of the things we are working on  
5 is the monitored natural attenuation modeling. That  
6 gives predictions on, if you released it here, how  
7 long does it take to get to the different places?  
8 And this report that we issue, it is a complex  
9 report, those numbers are in it. That is what we  
10 are finalizing right now. But in general, that  
11 evaluation indicates that a release here, shouldn't  
12 move very far.

13 What will happen is you'll get the  
14 natural attenuation, these chemicals stay around for  
15 a long, long time. But when you look at how the  
16 groundwater is moving, you look at their degradation  
17 rate versus how fast they're moving. This  
18 contamination here, you don't expect it to go very  
19 far out. Just based on modeling. That has to be  
20 confirmed, of course. And that is why we think most  
21 of this problem area here is that over land, that  
22 culvert transport, that we were talking about  
23 that -- we did sink a lot of monitoring wells in  
24 this area, here, that were all clean. As well as in  
25 here, that were all clean.

## Proceedings

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2 MR. CHEN: In your monitoring natural  
3 attenuation, if you have any data from the wells, to  
4 substantiate the model. In other words, I want to  
5 see product and vinyl chloride. If you have that  
6 information. Because if you don't have that, then  
7 after all these years, if we haven't seen it, then  
8 it's a good guess it is not occurring.

9 MR. BRAYACK: What we have, there is  
10 a three pronged approach for monitored natural  
11 attenuation. One, is the modeling which is probably  
12 the weakest part. It is more theoretical.

13 Two, is the formation of degradation  
14 products just like you were mentioning, Marsden..  
15 Take for example, our chemical 1,1,1-trichloroethane.  
16 One of the products of its degradation is  
17 dichloroethane, and then chloroethane. We have  
18 those.

19 The third, is the actual monitored  
20 part, the monitored natural attenuation. That is,  
21 looking at the concentrations over time. We now  
22 have data from '91, '94.

23 MR. COLTER: '97.

24 MR. BRAYACK: We have some from '97.  
25 Do they have to be in the exact same well? It is

## Proceedings

1  
2 not quite perfect like that. Like I said, that's  
3 the monitored natural attenuation, trying to  
4 understand and evaluate this plume is what's taking  
5 us so long on this report. But it was those three  
6 prongs, was the last thing that we have been working  
7 on, and that is what really is holding it up right  
8 now. We just finished that.

9 MR. COLTER: If we were to get to the  
10 point where we were to install permanent wells  
11 outside of the Navy's property, we can start that  
12 type of long-term analysis. As you know, we have  
13 long-term property access issues that we have to  
14 deal with. Possibly with the gun club, possibly  
15 with the Town of Riverhead.

16 But that's kind of where we are  
17 hoping to get to, is maybe get a decision along  
18 those lines or at some remedy line that we can start  
19 installing permanent wells instead of always taking  
20 temporary wells, and start some type of long-term  
21 analysis to try to back this premise up.

22 It is getting to be a quarter to  
23 nine. I know there are some other issues that were  
24 brought up from the beginning of the meeting.

25 A MAN: One question. You said this

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1  
2 area here, underneath the gun club, it is difficult  
3 to remove that by pumping it out of the ground  
4 essentially.

5 MR. COLTER: Right.

6 A MAN: What other remedies are  
7 there for that type of situation.

8 MR. COLTER: You want to speak to  
9 that.

10 MR. BRAYACK: Well, one of the  
11 remedies that would be considered would be pumping.  
12 There are other remedies that aren't as good. One  
13 is like a monitored natural attenuation. If it's  
14 fairly well defined and not impacting anything, we  
15 could put some permanent wells in there. When you  
16 do monitored natural attenuation, you do certain  
17 assumptions. One of the assumptions is that it  
18 stable, it is not moving. You put the wells in to  
19 prove that.

20 One would be to confirm it is not  
21 moving and not impacting anything. It is kind of  
22 deep for technology such as air sparging, although  
23 we just installed an air sparging system 200 feet  
24 deep at another site. That is something to be  
25 considered. I don't know if it would work here. We

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would not consider something like Fenton's reagent. Some of these in situ oxidation technologies, iron filing barrier. They are too aggressive for the low levels of contamination.

When you do a lot of them, you destroy the aquifer for other reasons. You have to look at the cost benefit on it.

MR. COLTER: That is what our Feasibility Study would answer, your questionnaire, weigh the different alternatives, implementability, time, cost, that is what our RFS would do.

MR. BRAYACK: We are constantly looking for new, innovative technologies, for situations like this.

A MAN: Can I try to summarize what I heard the next steps are. Issue your draft IR report by April 13th. And you're not doing anything at the source area until basically the whole process goes through the review, FS and remediation analysis, is that right.

MR. COLTER: Probably not. Probably won't wait that long.

A MAN: Tell me what you will do, then.

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MR. COLTER: We don't know. We haven't sat down, we haven't issued the report. We haven't discussed strategy with the DEC. You know, it is kind of like this is -- the table here. It is not my decision or just Marsden's. It is what do people think the best approach is. And there's other things. We are trying to put in a remedy at Site 7. We are trying to put an air sparge system in. We are trying to hopefully, maybe fully excavate the landfill at Site 1.

A MAN: I think you're hearing the sensitivity of the people here to the Peconic.

MR. COLTER: Yes.

A MAN: The Sportsmen's Club area sounds like you'll go back early sometime this summer if you can get access.

MR. COLTER: Or if the funding is there.

A MAN: Wait, wait, wait. I don't want to hear that.

MR. COLTER: We haven't got to that point. I can't promise we will be back this summer.

A MAN: To drill one or two wells, that has to be in your budgetary judgment, no?

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MR. COLTER: To do a deep boring to 5 or 600 feet.

A MAN: I'm going back to get to the bottom of those wells on the Sportsmen's Club.

MR. COLTER: Okay. We can mobilize for one well. It is a lot of hoops and a lot of things for one boring. What are the levels, 20 parts per billion at the bottom there. It is 120? Okay.

Even at 120, versus the 13,000 on site, is considered in the science as low level. We have -- the RAB has to set its priorities. You know? We can't -- I'd love to do everything that I have planned on this site in the next three years but we have to set our priorities.

A MAN: I know. The air sparging soil vapor extraction is a good thing to do.

MR. COLTER: We are almost there. We are this close.

A MAN: The Sportsmen's Club is unknown, because it has such potential impact off-site and to the Peconic, you have to go there. That is a high priority.

A RAB MEMBER: Taken any samples out

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of the well from the Sportsmen's Club.

MR. COLTER: That was one of the portions of the letter that you sent, you requested the analytical data. I'd like to get it if we could.

CO-CHAIR HARE: Can you share the data?

A MAN: Absolute.

A MAN: I'm going to instruct them to comply fully with the RAB board. I have no problem with it. Fully intent with having you on board on the property. They'd like a say in the issue and they'd like split samples.

A RAB MEMBER: There's supply wells on site.

A MAN: They have -- they don't have, I don't think they have anything to do with their contamination because it's too many gaps there. It appears that there was some loss of gasoline that contaminated the shallow wells. I don't personally think they have anything to do, one with the other. Our problem is the deeper wells. We are kind of wondering what's happening below, where they have tested 100 foot in that particular geologic area, is

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 2 really kind of scratching the surface.  
 3 MR. BRAYACK: You don't have any  
 4 wells deeper than 35 or 50 feet at that.  
 5 A MAN: No. They are all glacial.  
 6 A MAN: What is the drinking water  
 7 standard for volatile organic compounds?  
 8 MR. COLTER: Five parts per billion.  
 9 That is our ultimate remedial goal. That is why  
 10 these systems are costed out to 30 years. If we  
 11 pump and treat a source area down to say 120 parts  
 12 per billion and we are pumping more groundwater than  
 13 we are removing, then you go to like a  
 14 biodegradation model and it takes time. We usually  
 15 budget 30 years to reach our remedial goal, which as  
 16 most of you know, is a lot of the time unattainable.  
 17 But we strive over the years.  
 18 A RAB MEMBER: Jim, you said before  
 19 that, to Bill Gunther's questions as an ending to  
 20 it, that the RAB board has to decide where they  
 21 want.  
 22 MR. COLTER: Input. Input.  
 23 A RAB MEMBER: Where they want to  
 24 proceed. We have to give input. The state and  
 25 county is here. I think we should put input on all

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 2 of this tonight. I think you should leave here  
 3 tonight with input, serious input. I'd like to hear  
 4 from Marsden and Jeff where they believe some  
 5 priority issues are here and certainly from Jim  
 6 Pim.  
 7 Jim Pim has been dealing with this  
 8 site for a long time here. The county has definite  
 9 concerns and is watching over this. I don't think  
 10 we should let them leave out their input.  
 11 A MAN: I would like to see, in the  
 12 Southern Area, say we found these levels here.  
 13 Unless we see it, one of these in front of me, with  
 14 all the data there, and a bunch of different maps to  
 15 look at, it's sort of hard -- I agree with most of  
 16 your points here. Come back and put more wells in  
 17 here. Put more delineation. The paint shop speaks  
 18 back to the old Grumman reports. Take a look at  
 19 those. Where it is correlated. You have three or,  
 20 three or four different pathways we are following  
 21 for different sites. Take an aggressive approach to  
 22 try to get reports done. Because we have studied  
 23 this, I won't say to death, we took quite a bit of  
 24 sampling out there. It's time to get it down, and  
 25 say what are you going to do? Let's get out there

1 Proceedings  
 2 and clean it up.  
 3 Like an approach with the Fuel Depot  
 4 Area. So you're starting to pull the different  
 5 chunks out and take care of certain areas.  
 6 A RAB MEMBER: Marsden, what do you  
 7 think would be a priority for this?  
 8 I don't want to put you on the spot.  
 9 MR. CHEN: We are not on the spot.  
 10 You know, Jeff mentioned Southern Area, which  
 11 everybody has been talking about. When we first  
 12 started on this project.  
 13 Jim Pim was really concerned about  
 14 that paint shop. I don't see where the paint shop  
 15 is relationship to TW-04 and just said that you did  
 16 put another upgradient well between TW-04 and  
 17 upgradient area, whatever that is. Is that  
 18 upgradient to the paint shop?  
 19 MR. BRAYACK: Yes, that is between,  
 20 yes.  
 21 MR. CHEN: All right. The thing is  
 22 that TW-04, it is the further one up, you went all  
 23 the way and you didn't stop finding stuff, as we  
 24 call it. So the question is, irrespective of that  
 25 upgradient well where you found nothing, I don't

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 2 know how deep you went to that upgradient clean  
 3 well. When all of this was going on, this paint  
 4 shop concern that Jim Pim had for years, it just  
 5 kept hitting me, something that occurred at that  
 6 paint shop is causing this deep contamination that  
 7 is in the, we don't know.  
 8 Jim alluded to that. Maybe you need  
 9 to go back.  
 10 And the gun club drilling. And those  
 11 are the two projects. Everybody is focusing on  
 12 those two. So, yes. And then again the free  
 13 product stuff you mentioned to me. That came as a  
 14 surprise to me. And irrespective of Grumman doing a  
 15 fan type sampling, until they came up with nothing,  
 16 are there other free product areas outside of this  
 17 area that Grumman had sampled. So the two  
 18 priorities are the gun club drilling, and the  
 19 upgradient well, in a nutshell.  
 20 A RAB MEMBER: Do you concur on all  
 21 of this, Jim?  
 22 MR. PIM: Yeah.  
 23 A MAN: They can all run concurrent.  
 24 We definitely, raised some eyebrows tonight in terms  
 25 of going back and taking a more comprehensive look

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2 at that point shop area and downgradient area,  
3 definitely.

4 MR. PIM: D the only explanation that  
5 makes any sense so far, for the pattern that you  
6 have, is the D-NAPL problem which is a real  
7 possibility, except you would probably have thought  
8 you would have discovered a heavier contamination  
9 column all the way down if that had been the case.

10 MR. CHEN: It depends D-NAPL also.  
11 Not all D-NAPLs go through clay. Some of them do,  
12 and some, as concluded by a study from \*University  
13 of Texas, Austin, some stop. Depends on what  
14 species you're talking about.

15 MR. PIM: I asked him what species he  
16 had, he said he had them all, all the way down.

17 Even if that is the cause and you are  
18 in it and you're going through where the puddle was,  
19 and you got the column going straight down, we still  
20 need to find out, as you're saying, how deep does it  
21 actually penetrate? So you'll have to follow that  
22 all the way down.

23 But as they have said, I still think  
24 with this much complex evidence here, it is worth  
25 the trouble to go back and thoroughly and carefully

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2 go back over the old reports for everything  
3 upstream, from that paint shop and other buildings  
4 that are involved here, and systematically go  
5 through and analyze what Grumman did do, rather than  
6 just saying Grumman did it and don't look at it. Go  
7 through it, look at it. What they did, was it  
8 adequate, was it sufficient, was it thorough, was  
9 there any spots that they might have missed related  
10 to those buildings, which should be looked into  
11 further.

12 I looked over those things back then,  
13 too. I was puzzled not to find anything in the  
14 explorations that they did. I think you guys can do  
15 the same thing. You may come up with the conclusion  
16 everything they did was all they can do, and nothing  
17 more can be done there. That's fine and it will be  
18 done. You may, in doing a proper analysis, find  
19 here's some things they didn't look at.

20 MR. COLTER: If I could play devil's  
21 advocate. I believe those questions, I'm sure those  
22 questions were all asked by the RCRA folks in Region  
23 I. I couldn't imagine that they.

24 MR. PIM: I asked the questions. I  
25 didn't always get complete and satisfactory answers

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2 years ago when the reviews were on their way. I'm  
3 only suggesting that because you had a mystery here,  
4 and you're saying that is a potential source, then  
5 it is logical to go back and review the work that  
6 was done to see if it was sufficient.

7 MR. COLTER: I think --

8 MR. PIM: Generally, you people have  
9 always resisted, for whatever reason, my impression,  
10 going back and reviewing anything that Grumman did.  
11 Maybe I'm wrong.

12 MR. COLTER: We also reviewed, since  
13 it was our property, we also reviewed the reports.  
14 But we put a lot of the emphasis, we laid that with  
15 the DEC/RCRA folks, who were the regulatory  
16 authority. When we reviewed them, we reviewed them  
17 for, "did they do what we would have done in trying  
18 to determine if this building is a source area".

19 MR. PIM: That is what I'm suggesting  
20 be done. I don't know if you have done it in this  
21 case, or not.

22 MR. COLTER: As part of the closure  
23 process, it was done. When RCRA came back and said  
24 we agree with the conclusions, the Navy was  
25 satisfied with that. As far as the paint shop being

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2 the source area, I don't think we are homing in on  
3 that, as far as us. I think Dave has alluded a  
4 couple of times that we've, Grumman looked at the  
5 paint shop. Grumman looked around the paint shop  
6 and just didn't find anything.

7 What's more likely a source is that  
8 this grass area is where all the runoff from several  
9 hundred thousand square feet of concrete, is the  
10 discharge point. It is more likely that things that  
11 got spilled on the concrete, or maintenance  
12 activities that took place on the concrete, this is  
13 where they ended up. I think what we are saying is  
14 that it is more likely that is the scenario than the  
15 paint shop.

16 MR. CHEN: In effect that is what Jim  
17 Pim is saying. The RCRA program is conducted by  
18 Stan's shop. I divorce myself from anything Stan  
19 was handling that part of the shop. What always  
20 stuck in my mind, however, is that there was a RCRA  
21 investigation to identify areas that CERCLA sites  
22 would need to have identified, and I think that is  
23 the point we are probably trying to make, here.  
24 RCRA put the well here, Superfund site is here.  
25 Actually Superfund well should be up here. If this

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 2 well's in the RCRA investigation, it's clean.  
 3 We don't know if this upgradient is  
 4 clean. And that's a point that you need to take a  
 5 quick look at. What Grumman did on the RCRA to see  
 6 if their investigators were satisfied, all the  
 7 Superfunds.  
 8 MR. COLTER: Would that be something  
 9 that maybe you could get the report that Stan has  
 10 and see if it meets your standard or.  
 11 MR. CHEN: Then I would be doing your  
 12 work for you.  
 13 MR. COLTER: Or vice versa. You're  
 14 asking us to regulate Grumman.  
 15 MR. PIM: I can do the same thing. I  
 16 can dig out the report, re-review them and go over  
 17 them all again, and think it all out again, and  
 18 decide in my own opinion whether it was adequate or  
 19 not. But I'm suggesting that why don't you guys do  
 20 it. Why should I have to do it again? That is my  
 21 point.  
 22 MR. COLTER: If you take the team  
 23 approach to this, we can certainly do that, dig out  
 24 the reports and give it an analysis. But that's  
 25 going to take time away from something else. It has

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 2 to.  
 3 MR. PIM: Boy, it sure does with me,  
 4 too.  
 5 MR. COLTER: That is not a criticism.  
 6 That is the reality, that if we want to get the  
 7 landfill looked at and the Site 7 depot cleaned up  
 8 and, you know, additional wells drilled, we can do  
 9 all this. But it is not going to be in the next  
 10 three months, it it's -- some things will get done  
 11 and some things won't. We can do it, but everyone  
 12 here has to realize that there are costs associated  
 13 with spreading Dave and his group thin. Some things  
 14 aren't going to get done.  
 15 MR. CHEN: The reason I'm saying I'm  
 16 doing your work for you is true, but also the  
 17 underlying fact in our section, we have -- men with  
 18 multiple, multiple operable unit because we are  
 19 stretched pretty thin.  
 20 MR. COLTER: You know what I'm  
 21 talking about.  
 22 MR. CHEN: I know what you're talking  
 23 about.  
 24 A MAN: Let me say one thing about  
 25 the Grumman RCRA closures. You have to recognize

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 2 that Grumman Northrop had 40 different consultants  
 3 that were doing all the buildings, the entire site.  
 4 The final RCRA closure report, I think there were 16  
 5 volumes yea thick (indicating) that were analyzed.  
 6 The paint shop was one area not of -- it was of  
 7 concern, but I don't think, my recollection, it was  
 8 that thorough, you know, analysis they went to the  
 9 dry wells and searched wherever we could from the  
 10 recollections of people that had worked on site.  
 11 I think Al may have known something  
 12 about that, is we came to certain conclusions that  
 13 it was clean, but that was the extent of the  
 14 investigation that was done, and it was done very  
 15 thoroughly, based on as much knowledge as we had. I  
 16 remember at one time, Jim Pim, when we walked  
 17 through the site, he particularly went to the paint  
 18 shop, the washes, how they flowed from the building.  
 19 We traced that, and I know even way back then, there  
 20 was a concern before it surfaced, because that was a  
 21 very critical area where contaminants were used, and  
 22 how they were possibly abused, and which way it went  
 23 from the building and it was a pretty loose  
 24 operation, at least in the old paint shop. But I'm  
 25 giving you my recollection of what the RCRA closure

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 2 investigation review entailed.  
 3 MR. COLTER: Let me reiterate that  
 4 all the data in 16 volumes, we did include in our  
 5 GIS. When we talk about this area, we talk about  
 6 all samples taken from the Navy and Northrop Grumman  
 7 over the last 10 years.  
 8 A MAN: Stan and I have been around  
 9 since the early '70s. That Fuel Calibration Area,  
 10 that old fuel calibration was a very messy site. I  
 11 mean, it was messy.  
 12 A MAN: We are talking about the  
 13 paint shop that was adjacent to it.  
 14 A MAN: The new paint shop was a dry  
 15 operation. But the Fuel Calibration Area itself was  
 16 very messy. We used to do repairs over there.  
 17 MR. PIM: These things I mentioned.  
 18 What else, you say repairs in addition to the fuel  
 19 operations?  
 20 A MAN: They had a fueling operation  
 21 in which they tested the fuel tanks and everything  
 22 else. There were spills. They also did repairs on  
 23 stuff. They also did run-ups over there. Like I  
 24 said, it was a real messy area.  
 25 MR. CHEN: Metal washing in that.

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 2 A MAN: I'm talking 30 years ago?  
 3 But it was a messy operation, I mean, even back in  
 4 the early '70s, it was pretty dirty.  
 5 MR. PIM: We have the evidence of  
 6 that.  
 7 A MAN: It might just be from the  
 8 operation they did at the Fuel Calibration Area.  
 9 That new paint shop, by the way, was  
 10 only built in the '80s.  
 11 A MAN: We have no problems with that.  
 12 CO-CHAIR JOHNSON: What happened to  
 13 the old one.  
 14 A MAN: It is still there.  
 15 A MAN: One was converted to a dry  
 16 operation and the other one they basically stopped  
 17 using in the early '80s.  
 18 CO-CHAIR JOHNSON: Was that fully  
 19 investigated, the old one?  
 20 A MAN: Yes, it was the type of  
 21 investigation that was not as thorough as you would  
 22 need to make conclusions, based on the  
 23 investigation, to be able to say it was thoroughly  
 24 cleaned and appropriate for closure. Or transfer.  
 25 CO-CHAIR HARE: It is five after

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 2 nine. Should we be moving on to the next subject?  
 3 CO-CHAIR JOHNSON: We want to give  
 4 some input here as a group first? Do we have a  
 5 consensus or agreement on -- do we want to make a  
 6 recommendation at this point on where we'd like to  
 7 see them go, what we'd like to see them do? Is  
 8 there any more discussion among the RAB members?  
 9 Do you just want to leave it at that, let the state  
 10 and the county speak? Do you want to wait?  
 11 A RAB MEMBER: Bill Gunther, you  
 12 started this. You tie it up.  
 13 A MAN: I tend to agree with the  
 14 Navy's approach of going through the process, and I  
 15 was pleased to see Jeff supported that. Basically  
 16 get the report done, get it out so everybody can  
 17 review it, get all the data in one place. However,  
 18 I think because of that downgradient area, the  
 19 Sportsmen's Club, we have unknowns. I'd like to see  
 20 while the reports are going through the process, an  
 21 additional field investigation at that location.  
 22 MR. PIM: Which is what they say  
 23 they're going to do.  
 24 A RAB MEMBER: We'll second that.  
 25 A MAN: I want to hear them say

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 2 they're going to do that, Jean.  
 3 MR. COLTER: We'll do it.  
 4 A WOMAN: We have someone here in the  
 5 Sportsmen's club that you can talk to. You said  
 6 they can go on the property, right, they need a  
 7 letter from you?  
 8 MR. COLTER: We still just won't go  
 9 on unless we can get a hold of somebody.  
 10 A MAN: That would be ill-advised.  
 11 MR. COLTER: We have the permission.  
 12 We still have to get the contact. We always had the  
 13 permission. We just haven't been able to click with  
 14 the on site man.  
 15 Jim Olivant is the man you have to go  
 16 through, the president of the club.  
 17 CO-CHAIR HARE: That is who the  
 18 letter was addressed to.  
 19 MR. CHEN: Do you have the  
 20 president's number.  
 21 MR. BRAYACK: We have his cell  
 22 number, home number.  
 23 MR. CHEN: Vice versa, does he have  
 24 your number?  
 25 MR. BRAYACK: Yes.

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 2 MR. CHEN: How about this gentleman,  
 3 you have his number.  
 4 MR. BRAYACK: Yes.  
 5 A RAB MEMBER: You'll be speaking to  
 6 Mr. Olivant within the week, correct.  
 7 MR. COLTER: Yes, we will be speaking  
 8 to him. We want to get the report out to everybody,  
 9 that's what we are going to do. And this summer, we  
 10 probably could do some type of field work plan.  
 11 A MAN: Jim is going to ask you how  
 12 deep the well is going to be.  
 13 MR. COLTER: We have to talk about  
 14 that with the regulators and get a work plan.  
 15 A RAB MEMBER: But your intent, Jim,  
 16 your intent is to do it this summer.  
 17 MR. COLTER: I can't promise that.  
 18 The summer is towards the end of our  
 19 fiscal year, a lot of money gets yanked from us and  
 20 sent all over the country. I can say today money is  
 21 there to do it and tomorrow the money is not there.  
 22 What do I come back to tell you folks, I made a  
 23 promise I didn't keep.  
 24 A RAB MEMBER: I didn't ask for a  
 25 promise. I said the intent is to do it this summer.

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 2 MR. COLTER: Yes, the intent is  
 3 there. The intent is there, yes.  
 4 A RAB MEMBER: Apparently there is a  
 5 possibility you might need money.  
 6 MR. COLTER: Yes.  
 7 A RAB MEMBER: You're telling me the  
 8 budget is at a strain now.  
 9 A RAB MEMBER: We need to go after  
 10 money to make sure it is done this fiscal year.  
 11 CO-CHAIR HARE: Was the next issue  
 12 that you wanted to talk about the TAPP application,  
 13 is that correct?  
 14 CO-CHAIR JOHNSON: We went through  
 15 everything else, I guess.  
 16 A RAB MEMBER: Did we answer all of  
 17 Vinny's questions.  
 18 A RAB MEMBER: Yes.  
 19 A RAB MEMBER: The TAPP proposal is  
 20 fairly easy and we had started out the steering  
 21 committee way back when. After tonight's  
 22 information, there might be input and discussion on  
 23 changing it. The TAPP proposal that I had put  
 24 together, which is really rude of me because I  
 25 should give Judith -- do you want me to give this to

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 2 Jim, or do you want it directly, because I have two  
 3 copies.  
 4 CO-CHAIR HARE: Is that the  
 5 application?  
 6 A RAB MEMBER: The placing and  
 7 background information.  
 8 CO-CHAIR HARE: If you have two  
 9 copies, one has to go to Jim. But I probably need  
 10 one also because Jim and I will be going back and  
 11 forth on the phone with it, or whatever.  
 12 A RAB MEMBER: The Navy is getting  
 13 the two copies I have tonight, the rest of the board  
 14 members, state, and county will get it as of this  
 15 weekend, I'll mail it out. Saturday I'll dump  
 16 everything.  
 17 The TAPP basically is a questionnaire  
 18 form and according to the handbook and all the  
 19 handbook says, stick with the form and don't  
 20 elaborate with all this other stuff. So what I had  
 21 given, what everybody got, was just a basic  
 22 background of a technical adviser who is already on  
 23 DOD, because I got it from the DOD web site a couple  
 24 of months ago. The technical adviser, they list  
 25 technical advisers that other RABs use. This

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 2 gentleman has been checked out. He has a lengthy  
 3 background in other DOD sites, helping RABs with all  
 4 sorts of understandings. Now, my copy --  
 5 CO-CHAIR HARE: If you need this one  
 6 copy back.  
 7 A RAB MEMBER: No no. I have the  
 8 original. Basically, as a steering committee, we  
 9 sat down and discussed feasibility of TAPP for  
 10 community RAB members in downgradient groundwater  
 11 modeling of south eastern boundary of the data  
 12 that's there, to find out future impacts or  
 13 intrusion to the Peconic River. And that was our  
 14 greatest focus. I worked and researched a good  
 15 hydrogeologist and a GIS specialist that could take  
 16 that data. If the steering committee and the rest  
 17 of the RAB members want to go that way, we can give  
 18 the TAPP to you to discuss and put forward.  
 19 However, my personal understanding of  
 20 everything tonight that you have been given, I had  
 21 just said to Sherry moments ago, perhaps the TAPP  
 22 money might be spent better with an outside  
 23 technical consultant and someone that has GIS  
 24 understanding, to review all this data that.  
 25 That is now the present, and go back

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 2 and review all the historic data and find out where  
 3 the RCRA documentation or the RCRA closure might  
 4 have gaps to the CERCLA process and fill in those  
 5 gaps as we are remediating.  
 6 MR. COLTER: In this area. It has to  
 7 be specific.  
 8 A RAB MEMBER: To the Peconic.  
 9 MR. COLTER: To evaluate RCRA versus  
 10 CERCLA on the 3,000 acres.  
 11 A RAB MEMBER: No, I don't want to do  
 12 the 3,000 acres. Anyone can disagree, the major  
 13 focus of the community and the surrounding people  
 14 that live here is the Peconic River, that is the  
 15 living ecosystem we are all concerned with.  
 16 MR. COLTER: Okay.  
 17 CO-CHAIR HARE: Are you saying you  
 18 think you'd like to change the application perhaps.  
 19 A RAB MEMBER: It is something to  
 20 throw up and discuss.  
 21 MR. COLTER: They do have, they have  
 22 the whole range of disciplines, they have  
 23 environmental people, they have GIS.  
 24 A RAB MEMBER: The package that I  
 25 just gave you has the, I guess you would call the

1 Proceedings  
 2 prime contractor, his entire background. He's a  
 3 master hydrogeologist everything from  
 4 radionucleotides.  
 5 MR. COLTER: CSCI Associates.  
 6 A RAB MEMBER: You can call the  
 7 gentleman and speak to him. I know all due  
 8 deference and respect to the Navy, you have the last  
 9 say so on who it is.  
 10 MR. COLTER: We can't sole source any  
 11 work. We need I think a minimum of three qualified  
 12 consultants that have to propose this. Now.  
 13 A RAB MEMBER: We can draft the IFP.  
 14 MR. COLTER: Unlike typical awards,  
 15 where we have to go with the low bid, I don't think  
 16 we have to go low bid necessarily. It has to be a  
 17 RAB decision as far as here's your three qualified  
 18 consultants, you know, this guy's this much money,  
 19 here's his expertise, this guy's this much money,  
 20 here's his expertise.  
 21 CO-CHAIR HARE: All three of the  
 22 contractors that proposed.  
 23 MR. COLTER: The Navy doesn't. The  
 24 DOD and the RAB as a whole, it is up to us the DOD  
 25 to do the contracting for you so you don't have to

1 Proceedings  
 2 do invoices.  
 3 A RAB MEMBER: That is not a problem.  
 4 Believe me.  
 5 CO-CHAIR HARE: This is normal  
 6 channels. In other words, they don't -- because  
 7 these -- the reason I'm asking the question and  
 8 obviously I should know, except that very few of  
 9 these TAPP projects actually get funded. I'm going  
 10 to be honest with you, that is the true situation.  
 11 But in fact I've never had one with any of the  
 12 facilities I've worked with. That is not to say.  
 13 CO-CHAIR JOHNSON: Have you ever had  
 14 one submitted to you.  
 15 CO-CHAIR HARE: No, no, no. With my  
 16 facilities that are all across the country, I've not  
 17 had the experience of one that was approved. You  
 18 have to remember, that sometimes the applications go  
 19 in and as Jim kind of mentioned, sometimes people  
 20 want this broad huge expanse of things and they're  
 21 not, the TAPP program is set up to focus in --  
 22 A RAB MEMBER: On one thing.  
 23 CO-CHAIR HARE: On a specific area.  
 24 A lot get tossed out for that reason alone. We have  
 25 no, we have no approval authority, here, as far as

1 Proceedings  
 2 that part of it is concerned. That's done up at the  
 3 office that handles the funding and looks at the  
 4 applications. We try to get the applications in the  
 5 best form possible before they get sent up so they  
 6 aren't just going to be automatically rejected right  
 7 away.  
 8 A RAB MEMBER: I'll do whatever needs  
 9 to be done.  
 10 MR. COLTER: This looks like a very  
 11 specific project not data collection. And that's  
 12 good. What I think you have to send up, though, you  
 13 have to have more consultants instead of just one on  
 14 the application. You might want to consider.  
 15 A RAB MEMBER: Actually, there is two.  
 16 MR. COLTER: You might want to  
 17 consider, this guy in Delaware is not going to know  
 18 much about the Peconic estuary. It might hurt your  
 19 agenda.  
 20 CO-CHAIR HARE: Make the suggestion  
 21 we call up there and find out, you know, they want  
 22 to submit this application, you know we don't want  
 23 to reject it right out of hand, here, how many  
 24 consultants do they need when they submit the  
 25 application so we don't go through this chase of.

1 Proceedings  
 2 MR. COLTER: There is a whole section  
 3 in the RAB --  
 4 A RAB MEMBER: This is a handbook  
 5 how to fill out applications for technical  
 6 assistance. From what I read and understand in the  
 7 handbook, it is not us that decides on the technical  
 8 adviser. It's the military.  
 9 MR. COLTER: It is the RAB/military  
 10 part of the RAB, in concert with the community  
 11 members.  
 12 A RAB MEMBER: So I have no problem  
 13 putting together other sources for us to all discuss  
 14 that who would be the best technically expert, most  
 15 well-rounded person to deal with. I'm sure, Mr.  
 16 Pim knows people.  
 17 MR. COLTER: Bear in mind the bigger  
 18 gun consulting firms, there is only a maximum of 25  
 19 thousand. Your bigger guns, you're going to get a  
 20 lot less for a lot more.  
 21 A RAB MEMBER: I stayed in the box of  
 22 your stuff. When I started researching this back  
 23 last April, I downloaded as much stuff as possible,  
 24 I went out and got all my resources and all, and I  
 25 stayed to the list on the DOD sites who, what

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1 technical experts were already out there in the  
2 field working on other RAB boards. And I made phone  
3 calls and talked to those RAB communities, members  
4 of McClellan, \*AFSI contracts that are getting the  
5 big run of the money right now and running around  
6 and doing a lot of remediation, talked to those  
7 community groups, who they like, who they didn't  
8 like, what was the easiest way to go, that is the  
9 end result of what you have in front of you. How  
10 else we want to move from there...

11 MR. COLTER: We'll take a look at it  
12 and we'll make sure that the application.

13 CO-CHAIR HARE: I suggest, number  
14 one, that you consider, do you want to change it or  
15 not.

16 A RAB MEMBER: Do the other members?

17 CO-CHAIR HARE: If this is.

18 A RAB MEMBER: I want to leave  
19 tonight without the other members making a decision  
20 on that. We waited too long for me to present this.  
21 I think we need to know tonight. When I seriously  
22 heard, when Jim Pim said what he said, that was like  
23 a big data gap we need researched.

24 A MAN: The way you have it written  
25

## Proceedings

1 environmental expertise and GIS capabilities to do  
2 what you want. Maybe there aren't any that are  
3 local that are the big guns. I don't know.

4 A RAB MEMBER: I leave that to  
5 suggestions.

6 MR. COLTER: I wouldn't want to  
7 discuss it tonight. We'll get back to you and from  
8 what I see, a lot of the work has been done. That  
9 is excellent.

10 CO-CHAIR HARE: It is pretty  
11 complete.

12 CO-CHAIR JOHNSON: So you want a time  
13 frame, Jean, when? As soon as possible, Jim? I  
14 mean, so that.

15 MR. COLTER: Yeah.

16 CO-CHAIR JOHNSON: Do we have to vote  
17 on this?

18 MR. COLTER: There has to be a  
19 majority, there has to be a documented majority of  
20 the RAB that wants this.

21 A RAB MEMBER: All in favor of going  
22 after the TAPP proposal.

23 CO-CHAIR JOHNSON: If we take a vote  
24 tonight will that hold through?  
25

## Proceedings

1 up, review of all data generated to date with  
2 specific emphasis on the southeastern boundary.  
3 Hopefully, somebody looking at the data would like  
4 the historical information as well.

5 A RAB MEMBER: Yes, that is true.

6 A MAN: It is general enough, but  
7 specific enough of the area. I think it is all  
8 right. Go for it.

9 CO-CHAIR HARE: We'll make a phone  
10 call to check out how many they need. Do they need  
11 two, is it better to have three.

12 MR. COLTER: That is not Navy. That  
13 is our contracting officer. He has to follow the  
14 FAR. There is expedited contracting mechanisms  
15 specially established for this so that we don't have  
16 to take our typical five or six month source  
17 collection board and that stuff. We can get three  
18 quotes. Quotes are just quotes. They are rough  
19 estimates and we submit those quotes and their  
20 resumes to you, us as the RAB, and that joint  
21 decision goes on to the application, I believe. But  
22 I'll look into that. If I need additional quotes, I  
23 would suggest maybe local firms that are more  
24 knowledgeable of the Peconic, but who also have the  
25

## Proceedings

1 CO-CHAIR HARE: For what? To submit  
2 it?

3 CO-CHAIR JOHNSON: To submit it and  
4 show support.

5 A MAN: Like to know what the bottom  
6 line is in terms of dollars for this TAPP program.

7 A RAB MEMBER: Only 25 thousand.

8 MR. COLTER: 25 thousand per project,  
9 a maximum lifetime cap of 100 thousand dollars per  
10 site. So if you can get this for 10 grand, that is  
11 great. If you can get it for 25, you only have 75  
12 thousand left.

13 A MAN: If we don't spend this on  
14 the next expert, can we spend it on a big party.

15 CO-CHAIR HARE: Actually, people go  
16 to jail for that.

17 MR. COLTER: That would be an  
18 ineligible project.

19 CO-CHAIR HARE: Think there is a  
20 motion on the floor. You made a motion?

21 A RAB MEMBER: To vote. Are we going  
22 to go through with the TAPP proposal.

23 CO-CHAIR HARE: You're stating that  
24 as a motion.  
25

1 Proceedings  
 2 A RAB MEMBER: Yes.  
 3 CO-CHAIR HARE: Do I hear a second?  
 4 A RAB MEMBER: Are you going to do  
 5 the other things, the landfill, that is still going  
 6 on?  
 7 CO-CHAIR HARE: This is separate. It  
 8 has been moved and seconded that the application  
 9 that was presented tonight be submitted to the Navy  
 10 for approval. Are you ready for the question?  
 11 All those in favor, signify by saying  
 12 aye.  
 13 (All ayes)  
 14 CO-CHAIR HARE: Motion is carried.  
 15 MR. CHEN: Jim, the fact that Jean  
 16 Dunn downloaded the people off the DOD website,  
 17 would that affect the need for three quotes?  
 18 MR. COLTER: Probably, yes. We just  
 19 can't sole source under any conditions. You have to  
 20 have some type of competitiveness.  
 21 A RAB MEMBER: No problem. I had to  
 22 have a starting point to my mind that was the best,  
 23 which was to go right to your website.  
 24 MR. COLTER: I may be calling you,  
 25 Jean, or Sherry if I need additional quotes. We

1 Proceedings  
 2 have to start canvassing some firms.  
 3 CO-CHAIR JOHNSON: I want you and  
 4 Jean. Jean has been researching this. She has done  
 5 a fabulous job, she has been working on it for nine  
 6 months. She had it.  
 7 MR. COLTER: You guys in BNL deal  
 8 with environmental consultants, it's not just me.  
 9 It's the RAB.  
 10 CO-CHAIR JOHNSON: Communicate with  
 11 her. If she needs further.  
 12 A RAB MEMBER: Does everybody have my  
 13 home phone number so they can call me to discuss  
 14 this, come up with suggestions of experts to see how  
 15 we proceed.  
 16 CO-CHAIR HARE: Are there any other  
 17 issues.  
 18 CO-CHAIR JOHNSON: No, I think we  
 19 basically covered, pretty much covered everything.  
 20 CO-CHAIR HARE: All right.  
 21 CO-CHAIR JOHNSON: That I had.  
 22 CO-CHAIR HARE: Any action items that  
 23 we missed along the way or have we, the letter.  
 24 There was one action letter, a letter of thank you  
 25 that the Navy sent to the Masonic Lodge for the use

1 Proceedings  
 2 of the room. They have been so cooperative and we  
 3 found out tonight the letter was.  
 4 A MAN: It was received and read.  
 5 MR. COLTER: Well, thank you.  
 6 CO-CHAIR HARE: Sherry, did you get a  
 7 letter on the RAB meeting in Denver?  
 8 CO-CHAIR JOHNSON: That was the other  
 9 item.  
 10 Yes. The meeting in Denver.  
 11 MR. COLTER: Did you get my e-mail,  
 12 Sherry?  
 13 CO-CHAIR JOHNSON: Yes, I did. I  
 14 thought I responded to you.  
 15 CO-CHAIR HARE: This is a meeting  
 16 that is put on for the co-chairs of restoration  
 17 advisory boards all across the country, who are  
 18 invited to this meeting. Obviously, the Navy as  
 19 well as the community co-chairs. I recommend  
 20 attending. They go though some very good topics in  
 21 this session. So I would highly recommend trying to  
 22 go.  
 23 CO-CHAIR JOHNSON: I'm not available  
 24 that weekend. That was one of the other weekends.  
 25 A RAB MEMBER: Is this all expenses

1 Proceedings  
 2 paid?  
 3 CO-CHAIR HARE: The Navy does pick up  
 4 expenses.  
 5 A RAB MEMBER: What weekend is this?  
 6 CO-CHAIR HARE: Can you can get a  
 7 substitute to go for you.  
 8 CO-CHAIR JOHNSON: That is what it  
 9 says. If someone would like to attend, it is May  
 10 18th to the 20th, it is going to be held at the  
 11 Denver Marriott Tech Center, Denver, Colorado. I  
 12 have a copy of the letter and agenda if someone  
 13 would certainly like to.  
 14 MR. COLTER: I want to see the  
 15 contest you're going to have to pick this alternate.  
 16 CO-CHAIR HARE: That part the Navy  
 17 will not get involved with at all.  
 18 CO-CHAIR JOHNSON: Could I sell this.  
 19 Could I auction this?  
 20 CO-CHAIR HARE: You could do whatever  
 21 you want.  
 22 A RAB MEMBER: If we don't go, do you  
 23 save money in your budget to do work here.  
 24 CO-CHAIR HARE: You're talking about  
 25 two different pots of money.

1 Proceedings  
 2 CO-CHAIR JOHNSON: I will talk to you  
 3 folks. I'd like to find somebody to go.  
 4 CO-CHAIR HARE: Go ahead, follow the  
 5 instructions and pursue it.  
 6 MR. COLTER: Sherry, I have one  
 7 administrative thing. I'm not sure if you keep  
 8 track of attendance. Dr. Manning did call and said  
 9 he wasn't going to be able to make it. He had  
 10 another commitment. I wanted to let you know he  
 11 didn't not show up.  
 12 CO-CHAIR JOHNSON: For our next  
 13 agenda we are going to look at membership again  
 14 because we do have some, a couple of other folks who  
 15 have not attended despite saying there is -- and we  
 16 have had a couple of requests for additional seats.  
 17 And just so everyone knows, North Fork Environmental  
 18 Council had requested a seat and so we might want to  
 19 put them on as alternates at the next meeting or  
 20 bring them right on, because we had a steering  
 21 committee meeting. Citizens Campaign For The  
 22 Environment, Eric Dumont had been here a couple of  
 23 times. They expressed interest in having someone.  
 24 CO-CHAIR HARE: Is there anything  
 25 else?

1 Proceedings  
 2 A RAB MEMBER: Can you tell me if the  
 3 fire training area document that was sent to us, is  
 4 this the final.  
 5 MR. COLTER: It is the final nature  
 6 and extent. Now we are going to do similar schedule  
 7 to Site 7. We are going to go throughout the field  
 8 take a synoptic round of groundwater samples to see  
 9 what's in them today, to monitor natural attenuation  
 10 parameters and do a Feasibility Study, the same  
 11 exact process we did with Site 7.  
 12 A RAB MEMBER: Because in this, there  
 13 are chains of custody missing. To match up towards  
 14 the data. And other things. If you want comments,  
 15 I'll give you a list, rundown on all of that because  
 16 there is definitely data missing out of this block  
 17 and supporting data.  
 18 MR. COLTER: If we have to issue an  
 19 addendum we will.  
 20 A RAB MEMBER: The other question,  
 21 how come only volatile organic compounds in the Fire  
 22 Training Area, were focused on, and we never did any  
 23 metals.  
 24 MR. COLTER: Metals were done in the  
 25 earlier rounds. As far as migrating away from the

1 Proceedings  
 2 source area, we never detected, correct me if I'm  
 3 wrong, metals downgradient.  
 4 MR. BRAYACK: When we did the initial  
 5 phase.  
 6 MR. COLTER: Except the soil.  
 7 MR. BRAYACK: We found  
 8 Semi-volatiles, pesticides, PCBs, and groundwater.  
 9 We concluded the only concern was groundwater and  
 10 VOCs. There is a Phase II report here that looked  
 11 at migration beyond that. But it is in the Phase I  
 12 report, is all that information.  
 13 A RAB MEMBER: Yeah, and.  
 14 MR. COLTER: That was summarized.  
 15 A RAB MEMBER: There's hits and  
 16 things. I was wondering why we didn't go any  
 17 further.  
 18 MR. COLTER: Detections are there but  
 19 as far as widespread high level contamination, if it  
 20 was, we would have included it in our Phase II work  
 21 plan.  
 22 A RAB MEMBER: This local laboratory  
 23 used in here, the 1997, did you do an on-site audit  
 24 of this laboratory prior to giving them samples.  
 25 MR. BRAYACK: No.

1 Proceedings  
 2 MR. COLTER: The Navy.  
 3 A RAB MEMBER: At any time, did you  
 4 do an audit of this laboratory.  
 5 MR. COLTER: The Navy has a  
 6 certification process that it goes through and each  
 7 lab has to pass the certification process to be used  
 8 on our contracts or they wouldn't be used. I don't  
 9 have the exact time frame, but I can tell you that  
 10 if we used them, that they did pass the Navy's  
 11 criteria to be a lab.  
 12 A RAB MEMBER: Do you have a copy of  
 13 that criteria.  
 14 MR. COLTER: Yes, I can try to find  
 15 it.  
 16 MR. BRAYACK: They are a local lab.  
 17 A RAB MEMBER: I know they are.  
 18 MR. COLTER: Have you had a bad  
 19 experience with them.  
 20 A RAB MEMBER: Not personally, no. I  
 21 have question about suitability and QACCO, the data,  
 22 yes, I do. Of course whatever, I'll write you all  
 23 my concerns on this document and stuff, and all.  
 24 But I'd like to know what test they had to pass. I  
 25 want to see that criteria.

1 Proceedings  
 2 MR. BRAYACK: It would be a state  
 3 certified lab.  
 4 A RAB MEMBER: I know. Passing two  
 5 out of their three proficiencies and all. I  
 6 understand that much.  
 7 CO-CHAIR HARE: Anything else.  
 8 MR. PIM: You probably talked about  
 9 the dump before I came in, I wanted to know was  
 10 there any new information on deciding whether to  
 11 excavate it or not?  
 12 MR. COLTER: Only what we went over  
 13 at the technical meeting, that we think it is a  
 14 viable alternative to consider and right now Tetra  
 15 Tech is doing a Feasibility Study on the differences  
 16 between full excavation and capping and bank  
 17 stabilization versus no action, and that report is  
 18 due out June 30th to you guys in draft.  
 19 A MAN: Just another word of  
 20 precaution. I think it was expressed before,  
 21 tipping fees on the Island are excessively high,  
 22 when you estimate you have to go by 21 dollars a  
 23 yard for just clean-fill, sandy material. I don't  
 24 know whether what it is around the rest of the  
 25 country, but it is higher than most.

1 Proceedings  
 2 A RAB MEMBER: Is excavating the  
 3 landfill part of the document as a viable  
 4 alternative.  
 5 MR. COLTER: We have to determine  
 6 availability, implementability, cost, like we said  
 7 before, if we have to transport everything off the  
 8 Island, we have to look at that, versus long-term  
 9 monitoring, long-term maintenance. It may still be,  
 10 up-front, a lot of money. But over a 30 year  
 11 discounted period, we -- it's the kind of evaluation  
 12 we have to look at.  
 13 MR. PIM: Before you leave that. I  
 14 assume the state wouldn't object to them returning  
 15 inert materials to the same site if they did this,  
 16 would they.  
 17 A MAN: If it is not contaminated.  
 18 That is a concern.  
 19 MR. PIM: I don't know how the rules  
 20 go. That is why I was asking.  
 21 A MAN: We have to go back and  
 22 reexamine the whole subject about what goes in and  
 23 what is going to have to go out.  
 24 A MAN: they're concerned in their  
 25 reviewing what would be best for the wetland for the

1 Proceedings  
 2 removal.  
 3 MR. COLTER: There is one other group  
 4 that I just learned about that may dump this into  
 5 capping it. This is a highly sensitive  
 6 archaeological area. As part of the closure, the  
 7 Navy has to do a Cultural Resources Survey. They  
 8 hired a cultural archaeologist consultant who came  
 9 out to test the pits and found artifacts and deemed  
 10 this area as highly sensitive for archaeological  
 11 artifacts. I've already sent a question to the  
 12 state historic preservation officer.  
 13 The read on it from him is that if we  
 14 excavate, we need an environmentally certified  
 15 archaeologist on site. And as we get down to the  
 16 bottom, they're going to want to do a very detailed  
 17 analysis, which means time and money. And when  
 18 you're talking -- if they make us do it on the 22  
 19 acres, it may get prohibitively expensive. We are  
 20 trying to talk to them to see if we could do a test  
 21 area that may be representative of the landfill and  
 22 get on with business. I've never dealt with  
 23 archaeologists from the state so I don't know how  
 24 reasonable they are.  
 25 CO-CHAIR HARE: It depends. Based on

1 Proceedings  
 2 what other -- we did an archaeological dig on the  
 3 main part of the facility. That was necessary.  
 4 Once we did the Cultural Resources Survey, they said  
 5 but we think there is more there. And we had to do  
 6 an archaeological dig. That was additional funding.  
 7 Obviously, all this costs money.  
 8 A RAB MEMBER: Talk to Lorraine and  
 9 get a tie-in from Lorraine and the Montauk tribe, to  
 10 find out what you're going to need. It might be  
 11 easier to present your plan to the state if you have  
 12 them on your side of what you're outlining.  
 13 MR. COLTER: I had definitely planned  
 14 on talking to Lorraine, seeing what her take is on  
 15 this, after we get the report and sit down with her.  
 16 A RAB MEMBER: If you go with her  
 17 support.  
 18 MR. COLTER: When you're talking  
 19 wetlands and archaeology, all of a sudden, your  
 20 getting all material out isn't as important.  
 21 MR. PIM: If you can identify native  
 22 soil, when you reach it, maybe you can get them to  
 23 allow you to get to that point and no further.  
 24 You're doing them a favor. Because you're  
 25 uncovering the native soil again.

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2 MR. COLTER: I would ask when this  
3 becomes an issue, that you go over these, Lorraine,  
4 and Jim, and Marsden, if we can all back up the  
5 process, if it is deemed -- if it is deemed that we  
6 want to pursue excavation in the archaeology side,  
7 it may be what holds it up.

8 CO-CHAIR HARE: On the core part of  
9 the property, when they did the archaeological dig,  
10 although they found some things pottery shards and  
11 that sort of thing, from early settlers, et cetera,  
12 the findings were not huge. So they may take that  
13 into consideration and evaluate that with the whole  
14 area. And they might agree to, okay we'll take a  
15 sample of one area. And then that, that may  
16 satisfy.

17 MR. COLTER: We have a cultural  
18 resources expert in my office, and I have been  
19 working with her. She has done this before.

20 CO-CHAIR HARE: She did the original.

21 MR. COLTER: I'm deferring to her a  
22 lot. Her read on it is they are reasonable but they  
23 may ask for, for lack of a better term, throwing  
24 them a couple of bones.

25 CO-CHAIR HARE: Pun unintended. On

1 Proceedings

2 that note, we'll adjourn.

3 A RAB MEMBER: Our next meeting is  
4 when?

5 CO-CHAIR HARE: It should be to June.  
6 Probably first part of June.

7 (Time noted: 9:40 p.m.)

8 -o0o-

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