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2 Naval Weapons Industrial Reserve Plant
3 Calverton, New York
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5 Restoration Advisory Board
6 Regular Meeting
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9 7 00 P M
10 October 24, 2000
11 Riverhead Masonic Lodge
12 Riverhead, New York
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14 P R E S E N T :
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16 Judithanne Hare United States Navy
17 Naval Air Systems Command
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19 Dave Brayack Tetra Tech NUS
20 Judy Lamey
21 Debbie Cohen
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23 Jim Colter Northern Division, NAVFAC
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25 RAB Members

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1 Proceedings
2 words because I know you're anxious to get started.
3 Get up to date on Bethpage and Calverton. We do
4 cover a large area and we have a lot of work going
5 on at active bases and at GOCO. So we get out in
6 the field once in awhile and get a good feel for how
7 things are going. But I hope we have a good
8 meeting.
9 CO-CHAIR HARE: Thank you. I will
10 quickly review the agenda. Does everybody have a
11 copy of the agenda?
12 We will go through the review and
13 approval of the minutes. I will then turn it over
14 to Sherry for membership and steering committee
15 update. We are going to reverse a couple of items.
16 Jim Colter is going to go next and
17 he's going to update us on activities at Calverton,
18 including Site 9. And then he will turn it over to
19 Dave Brayack, who will present the main part of our
20 discussion this evening for Sites 1, 7 and 6. Then
21 we will have an action item review and discussion
22 for meeting topics and any questions and concerns at
23 this time. So without further ado, I would like to
24 ask if everyone did get a copy of the minutes?
25 Anybody that didn't?

1 Proceedings
2 CO-CHAIR HARE: Well, ladies and
3 gentlemen, I'm delighted to welcome you to the
4 Restoration Advisory Board for Calverton. I
5 appreciate the fact that you came out on such a
6 significant evening. You are missing the ball game.
7 Actually the ball game doesn't start until eight
8 something, right? So if we hurry this along maybe
9 you won't miss the ball game after all.
10 I would like to introduce someone to
11 you that normally isn't here but has come along as
12 representing the Navy this evening. This is Mr.
13 Conrad Mayer to my right. Mr. Mayer is director for
14 environmental matters for the naval facilities
15 engineering command at Northern Division and
16 Northern Division's area of concentration is
17 everything from Chicago --
18 MR. MAYER: Delaware to Maine.
19 CO-CHAIR HARE: Quite a large area.
20 And he also happens to be Jim Colter's boss and Con
21 and I have known each other for a long, long time
22 now, done business for many years. So at this point
23 I would like to turn it over to him and if you would
24 like to say a few words of welcome.
25 MR. MAYER: I'll say a few brief

1 Proceedings
2 Were there any corrections or
3 omissions to the minutes? If not, all those in
4 favor of approving the minutes signify by saying
5 aye.
6 (Ayes)
7 CO-CHAIR HARE: Those opposed?
8 (None)
9 CO-CHAIR HARE: The minutes are
10 approved. Sherry, at this time I'll turn it over to
11 you.
12 CO-CHAIR JOHNSON: I have one
13 question quickly.
14 CO-CHAIR HARE: Yes, sure.
15 CO-CHAIR JOHNSON: We mentioned
16 wanting to go back to some of the items, on August
17 30th. I want to ask recent submittals on Site 1, 7
18 and 6, are we going to go back maybe and tell what's
19 been happening from February.
20 MR. COLTER: That's what I'm going to
21 do before we get into Dave's presentation.
22 CHAIRMAN JOHNSON: Okay.
23 CO-CHAIR HARE: Sherry, is there
24 anything else you wanted to add as far as the
25 steering committee is concerned.

5
1 Proceedings
2 CHAIRMAN JOHNSON: The steering
3 committee met twice. We met once in May and once
4 in -- three times?
5 We met in May, before the May meeting
6 we didn't have. We met in August, before the August
7 meeting we didn't have.
8 And I think we kind of have been
9 talking by phone and e-mail since then. We
10 basically expressed some concern about the plume.
11 Hopefully if Jean makes it tonight, I understand she
12 isn't feeling well she may be late or not at all,
13 but she has been working on a TAP proposal and I
14 know she did want to introduce that and at least
15 give us a presentation on it.
16 CO-CHAIR HARE: Okay, now. We didn't
17 have that on the agenda for tonight. Is this
18 something that was going to take awhile -- I wanted
19 to try to stick closely to the agenda.
20 CO-CHAIR JOHNSON: I don't think it
21 will take her long if she makes it in.
22 CO-CHAIR HARE: All right. Well,
23 okay. We'll see.
24 Other items?
25 CO-CHAIR JOHNSON: I don't think we

6
1 Proceedings
2 have anything else.
3 CO-CHAIR HARE: Okay? All right?
4 In that case, I'm going to turn it
5 over to you, Jim.
6 MR. COLTER: As Sherry mentioned, the
7 last time we met was February and what I plan to do
8 is on a site by site basis here, go down what the
9 Navy has been working on on each site since February
10 and bring us up to speed on where we are at and what
11 we are going to present tonight. I'll start off
12 with Site 1, which is the Northeast Pond Disposal
13 Area. Back in February, we met with regulators at a
14 TRC prior to the RAB meeting. We discussed the
15 concept of bank stabilization and presented some
16 rough alternatives for what we thought would be
17 appropriate. If you'll recall, we have a lot of
18 sediment, not a high concentration, but we do have
19 several hits of sediment contamination at the base
20 of the landfill in the wetland. We also have
21 significant sink holes at the top, and the bank
22 continues to erode into the pond.
23 So we felt that it would be
24 appropriate to introduce a bank stabilization
25 project to alleviate that, knowing that there's a

1 Proceedings
2 good chance that our final remedy will be a New York
3 State Part 360 cap, we would design the bank to tie
4 into that. What that would allow us to do, the cap
5 project, probably 80 percent of the cap project
6 would have been the bank stabilization portion of
7 it. The cap itself is really a small piece. If we
8 were able to get that going early and budget for it,
9 that would go a long way in getting that site closed
10 out. So we presented that concept to the regulators
11 in February. They were responsive to it.
12 They did have concerns that most of
13 our rough alternatives had us impacting the wetlands
14 to a certain extent. They voiced their disagreement
15 with that and asked us to evaluate other
16 alternatives that minimized or eliminated impacts to
17 the wetlands.
18 We tasked Tetra Tech to go back and
19 give us several alternatives, which they did. Also
20 at the time that we were doing the field work over
21 the summer. We -- they put that report together and
22 gave me an internal copy that we reviewed. We
23 discussed it. We sent a preliminary to the state to
24 see if this -- if we were on the right track as far
25 as the alternatives they were looking at. They said

8
1 Proceedings
2 we were.
3 We came back and basically wrote an
4 action memorandum that outlined what the Navy's
5 preferred alternative is, out of that report, of
6 several. And we submitted those in October. I
7 believe hopefully everyone got a copy of that. That
8 was what we wanted to discuss with regulators at
9 this technical meeting. They were unable to make
10 that. We have rescheduled that technical meeting
11 for November 8th in Stony Brook. So that will be
12 our first item of business with the state, is to get
13 their comments on our recommendations. Basically
14 what it is, it's just basically to cut the bank back
15 at an angle of three to one and revegetate it. It's
16 really to start at the toe. So it is going to be a
17 significant cut into the landfill, but it will give
18 it a flatter slope and stabilize that, and that's
19 basically what that alternative.
20 CO-CHAIR JOHNSON: Do you have -- you
21 said a significant cut. In feet, 10 feet, 12 feet.
22 MR. COLTER: I can't really recall
23 what the horizontal distance is.
24 MR. BRAYACK: 40 to 60 feet in places
25 based on how high it is.

9

1 Proceedings

2 A MAN: What do you do with the

3 material that you scrape off.

4 MR. COLTER: One of the

5 subalternatives was either off site disposal of the

6 material or to consolidate it on top and our

7 preliminary read from the state is they'll allow us

8 just to put it on the top. So that is a significant

9 cost savings, knowing that the final remedy will be

10 some type of cap.

11 A MAN: If you're going to cap that,

12 and in any way, what impact does that have on the

13 future use. Is that going to be forever off limits?

14 MR. COLTER: Basically it will be a

15 capped landfill and there are some appropriate uses

16 for that. You won't be able to develop on it

17 obviously. But the land reuse plan submitted by the

18 Town of Riverhead basically had that area as kind of

19 a refuge or a preserve anyhow because of the

20 location of the wetlands. So the LRA's plan as

21 presented in the reuse plan is really not to develop

22 that area anyway. So it is kind of a consistent use

23 with the LRA's plan.

24 A WOMAN: When you do that bank

25 stabilization, how long before you cap it.

10

1 Proceedings

2 MR. COLTER: That is going to depend

3 on the funding structure. Right now, the

4 funding -- we'll talk about the milestones. The

5 final remedy for Site 1 isn't budgeted until 2004,

6 or something like that? But that's -- that's a

7 snapshot look to try to balance our budget.

8 Basically the way we run is if you have a project

9 and you're ready to go and somebody else's project

10 is slipping, which always happens, a lot of times we

11 are able to fund a project like this. The

12 reason -- if we do the bank stabilization first,

13 that is a portion of the total cost. The cap is the

14 other portion. It's we have a better chance of

15 funding the bank this year and say the cap maybe

16 next year, versus the cap and bank all at one shot.

17 And you would probably have to fund that and the out

18 years because of the cost of both.

19 A WOMAN: If you only do bank

20 stabilization, the rain waters runs into that. So

21 that's going to go into the groundwater. So you

22 have to do both at the same time.

23 MR. COLTER: The chromium I believe

24 is -- Dave, can you help me out on that.

25 MR. BRAYACK: There is some

1 Proceedings

2 groundwater contamination associated with it. The

3 levels are in some cases above drinking water

4 standards but they are not extremely high. And we

5 put additional wells on the what would be the

6 downgradient side of the pond, which would be to the

7 north and east, and we didn't find any exceedences

8 in that level. The levels are low, and they're not

9 moving.

10 MR. COLTER: When we put the debris

11 on top, we will cover that with a soil cover.

12 Because it will be some length of time before you go

13 get to the cap, we just won't leave it exposed. We

14 will do -- we'll have to do OSHA type work to make

15 it safe. And we will put a soil cover over it. We

16 will continue to monitor the groundwater and if we

17 start seeing impacts in the downgradient wells, that

18 will trigger a groundwater response.

19 CO-CHAIR JOHNSON: Do you have a

20 regular monitoring plan at those wells.

21 MR. COLTER: It is not regular. It

22 will be, once we basically get into a remedy

23 of -- we'll get into either quarterly or

24 semi-annually sampling. Right now what we do is

25 sort of what we've done when we are doing a

12

1 Proceedings

2 corrective measure study, we want to get a snapshot

3 shot of how it looks. We go out and take a round.

4 We don't have anything structured at this point.

5 But those structured sampling events will be made

6 part of the remedy.

7 CO-CHAIR JOHNSON: You mentioned the

8 corrective measures study. At the Technical Review

9 Committee meeting back in February -- it stuck in my

10 mind, because it is going to be an EPA cap, cap.

11 MR. COLTER: A state cap.

12 CO-CHAIR JOHNSON: They said that you

13 don't have to do a corrective measures study for

14 that. Is that true.

15 MR. COLTER: Actually, you're right.

16 We'll have to do I guess what amounts to a focused

17 Feasibility Study. We'll basically know the remedy.

18 But, yes, you're right. I do remember that now.

19 CO-CHAIR JOHNSON: Does that save you

20 some money.

21 MR. COLTER: Definitely. We probably

22 will be able to just put together a decision

23 document.

24 CO-CHAIR JOHNSON: Could that move

25 the timetable up any at all.

13

1 Proceedings

2 MR. COLTER: I'm not sure if it will

3 move the timetable up only because when we get into

4 the schedule that I showed you, there's a lot of

5 reports going out.

6 CO-CHAIR JOHNSON: I have 2005 --

7 MR. COLTER: That is like I said our

8 budget today. We just got done doing our budget

9 exercise. We can't exceed our final numbers. My

10 management arbitrarily moves things around to make

11 it even, that is not necessarily what's actually

12 going to be reality. I'm hoping to get that cap

13 done way before 2005.

14 A MAN: You're going to put the soil

15 covering on the debris, is grass or some kind of

16 planting. Is it a dense grass covering, something

17 to stabilize that? How is that stabilized?

18 MR. COLTER: We'll have some type of

19 vegetative cover on that, the cap will go on top of

20 that when the final remedy goes in. But the bank

21 stabilization itself will be soil and a vegetative

22 type of cover at a slightly less steep angle so it

23 prevents erosion.

24 The specific type of grass and things

25 I'm not sure. We leave that up to a contractor.

14

1 Proceedings

2 What we'll also do, while we are

3 doing the pulling back of the landfill, since our

4 sediments are right there at the base of the

5 landfill, we'll probably just go in and excavate

6 those contaminated sediments. Again put them on top

7 of the landfill and just close out on the whole

8 sediment contamination question. It's probably

9 cheaper to do that than it is to discuss whether the

10 sediments represent an ecological concern or not.

11 A MAN: Does the state have any

12 comment with putting soil on top of the landfill and

13 letting it leach for several years before putting a

14 top on it.

15 I thought if they let you do that,

16 you have to cap it not that day but within a

17 reasonable time frame. Rain is coming down on there

18 for a couple of years, it is going to wind up just

19 back where it was over time. So something will have

20 to be done with it if you can put it on top.

21 MR. COLTER: The state has the

22 report. We haven't met with them obviously to

23 discuss -- they may have a concern of that. Like I

24 said, there is two subalternatives, one is off site

25 disposal. One is on site consolidation. It could

1 Proceedings

2 happen that we could consolidate the debris but not

3 the sediments.

4 A MAN: It makes sense to put it

5 under the cap. But it doesn't seem to make

6 sense --

7 MR. COLTER: We'll have a soil cap

8 covering the debris and the vegetative cover on

9 that, because there will be sometime before a cap

10 goes on. Like I said we won't leave it exposed.

11 MR. BRAYACK: One of the issues is

12 that the landfill has been there well over 20 years

13 and it is sand. And what has leached or can leach

14 has already leached. What we are seeing remaining

15 in the sediments and in the waste are basically

16 non-leachable type chemicals. If we had something

17 that would be leaching --

18 A MAN: Even what you're

19 finding -- what -- a little bit concern I'm raising

20 is stuff you're going to dig up on the edge of the

21 pond that has already leached out. And you're not

22 finding that in the landfill. But that stuff is

23 probably a little more mobile.

24 MR. BRAYACK: No, they are all pretty

25 much very immobile as to what's left. One of the

16

1 Proceedings

2 requirements with the landfills is you do leaching

3 tests on it. And we haven't had a problem with

4 leaching on those sites. But it is the nature.

5 A MAN: The sediments would be

6 non-hazardous.

7 MR. BRAYACK: In many cases the

8 sediments pass human health standards. You could

9 put it in your front yard, basically. But they do

10 have a potential risk of ecologic receptors, the

11 fish, there's a blue heron that hangs out there,

12 tiger salamanders, that type, is the real risk with

13 that. It would get picked up and put under probably

14 a foot of soil cover.

15 MR. COLTER: Any other questions

16 about Site 1?

17 CO-CHAIR JOHNSON: This is going to

18 be on the agenda for the TRC.

19 MR. COLTER: Yes.

20 MR. COLTER: At Site 2, at the last

21 RAB meeting, you'll remember we gave a presentation

22 and GIS and a cross-sectional presentation of what

23 the site contaminants look like at that time. And

24 since then we've restarted that pilot air sparging

25 system that is in place out there. We still had an

17

1 Proceedings
2 operating budget for that so we turned it back on
3 for this summer to try to get a little bit more VOC
4 removal from the main contaminated area around the
5 Fire Ring. That is still in operation right now.
6 It will be shut down coming up for the winter again.
7 Next year, if we have the budget enough, we'll
8 evaluate, to run it some more. The more we run it
9 -- when we first started it back in '96 and '97, we
10 got over 90 percent removal. We are still running
11 it now trying to break loose some free product that
12 is out there. That is the other thing we are
13 doing, is free product removal.
14 At the last meeting we presented
15 vapor assisted oil skimming process wasn't that
16 effective due to the high water table and basically
17 the lack of significant product. We announced that
18 we were going to institute a passive recovery
19 basically putting pillows, if you will, in the wells
20 and leaving them there for several weeks to soak up
21 free product and change them out periodically. That
22 got started, late summer that program got started.
23 We collected pillows from 18 wells at Site 2, and 16
24 wells at Site 6. That material was sent to the lab
25 for analysis. Based on the results that come back,

18

1 Proceedings
2 they'll be able to quantify how much free product
3 they got out of the aquifer. And those results
4 haven't been returned yet. So there will be a
5 report. We'll do that until December. We'll do a
6 report. And then we'll evaluate what if anything we
7 should do the next fiscal year if we should continue
8 to operate that or if really if there is anything
9 out there to recover.
10 Hopefully the air sparge system that
11 we've turned on will help break up any of the slight
12 product that might remain, maybe it will help get it
13 mobile and get it moving into the wells. So we'll
14 see how that works.
15 We also did field work at the
16 Electronic Counter Measures Area. Site 9, that's
17 the northeast portion of the property, near
18 Calverton Enterprises, which I guess is a sand
19 mining operation. A few years back, we did an
20 on-site investigation at Site 9, we found low level
21 VOC contamination, I believe 35 and 55 in two wells,
22 parts per billion of 1,1,1 TCA was what we found.
23 We also had a historical hit in a well off site on
24 that property, owned by Suffolk County Health
25 Department. When we went to do an off-site

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2 investigation a few years back, the previous owner
3 denied us access and just again at the last RAB
4 meeting we announced that we had just received
5 property access from the new owner. That was part
6 of our summer field work, was to go out on his
7 property and implement the work plan that we handed
8 out at the last meeting.
9 I just received the internal draft
10 report from Tetra Tech. Basically primarily we
11 didn't get any hits of VOCs on that gentleman's
12 property. So I'm reviewing that report and just
13 because of the volume of reports we are putting out
14 for the other sites, and the Christmas and
15 Thanksgiving holidays, we probably will not submit
16 that to the regulators until sometime in January.
17 CO-CHAIR JOHNSON: How many wells did
18 you put in there.
19 MR. COLTER: How many wells total, we
20 had two phases.
21 MR. BRAYACK: Eleven.
22 CO-CHAIR JOHNSON: Probably -- did
23 you have a slide on where they were.
24 MR. COLTER: At the last RAB I think
25 we presented the work plan. They basically did a

20

1 Proceedings
2 first round and we came out totally clean. And so
3 we went in toward the Navy site and then we went way
4 down just because possibly it could have been
5 migrating past our initial point. We covered both.
6 We went in and we went out. And weren't able to
7 find any concentrations. It was low to begin with.
8 The source obviously was removed when Northrop
9 Grumman vacated and took away the building, whatever
10 source that might have been. So we are basically
11 just recommending no further action. We haven't
12 presented that to the regulators yet.
13 CO-CHAIR JOHNSON: Just out of
14 curiosity, does Suffolk County have any test wells
15 in that area along 25 anywhere.
16 MR. COLTER: I'm not sure of along
17 25.
18 CO-CHAIR JOHNSON: Do you recall the
19 original Suffolk County wells, how deep it was at
20 that time.
21 MR. COLTER: I think it was -- was it
22 80 feet?
23 MR. BRAYACK: What was the question.
24 MR. COLTER: The original Suffolk
25 County well, it had the 120 in it.

21

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2 MR. BRAYACK: They had seven wells

3 and the furthest -- one well was

4 approximately -- they started right at the fence

5 line and they moved in an L shape.

6 MR. COLTER: Depth.

7 MR. BRAYACK: Those were water table

8 wells, at that location the groundwater starts at

9 around 40 feet.

10 MR. COLTER: We tried to find the

11 well but the sand mining operator had it under a 50

12 foot mound of dirt, so we couldn't resample any of

13 those wells. So we tried, based on our drawings, we

14 sunk a well as close as we could to that location

15 and couldn't recreate the hit.

16 CO-CHAIR JOHNSON: Okay.

17 MR. COLTER: Site 7, the Fuel Depot,

18 again at the last RAB meeting, we announced the work

19 plan to do a snapshot round of sampling to see what

20 the current conditions of the site are so we could

21 base that, use that in our corrective measures

22 study. We also took parameters for monitoring

23 natural attenuation to determine the viability of

24 that as a cleanup alternative. We did that field

25 work again during the summer. The EPA actually

22

1 Proceedings

2 submitted comments in late February regarding that

3 process. We responded to the EPA in writing and

4 that was also sent with the final work plan that we

5 submitted in late April. The EPA called us back,

6 they had some questions on our responses, and we had

7 a conference call with them. Basically their one

8 main comment was the use of a peristaltic pump

9 versus a submersible pump to collect the samples.

10 We had no problem with that, so we changed our work

11 plan to do that. With I guess one exception, right

12 Dave? Where the well was too small in diameter to

13 accommodate a submersible pump.

14 MR. BRAYACK: Right.

15 MR. COLTER: That was the only

16 exception.

17 The DEC actually came in with their

18 comments in mid June regarding the work plan.

19 However, most of their comments weren't really

20 centered around the work plan that we proposed. It

21 was mostly what are we going to do with the data,

22 how are we going to evaluate it, how is it going to

23 be used in a CMS, how is it going to be used to

24 determine whether it should be a stand-alone or an

25 add-on technology to some other source removal. We

2

1 Proceedings

2 had responded to those comments and we were prepared

3 to discuss them today at the TRC, which we didn't

4 have. So that will be another item. Actually, we

5 plan on submitting the corrective measures study in

6 December. We have a draft to the state. So we want

7 to try to accommodate their comments and concerns at

8 the November meeting and incorporate those

9 accordingly into the draft report of what

10 alternative are we going to use out there? And

11 we'll go over this schedule, here at the end of the

12 meeting when we get into action items. We'll go

13 over it more.

14 Site 6 and the Southern Area, we'll

15 just talk about those combined. Again at the last

16 RAB we issued a work plan to fill the data gaps that

17 were identified at the TRC meeting previous. We

18 presented that to you at the last RAB meeting.

19 During the summer we implemented that work plan.

20 Again the DEC issued their comments in June

21 basically when we just got started mobilizing.

22 Their only real comment was about the, on Site 6

23 area, where they thought maybe that deep area of

24 contamination that was unbounded could be coming

25 from an upgradient source. But as you recall in our

24

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2 work plan we had an upgradient well planned to

3 ascertain whether that was a possibility or not. So

4 that was basically their only comment and it was

5 already addressed.

6 The site -- let me go back to Site 7

7 and Site 6. This is what Dave will be informing you

8 about, the results of our summertime field work

9 here, shortly. We again wanted to present that data

10 to the state and the TRC to make sure that there's

11 no other data gaps that we may have to go fill and

12 how relevant are those data gaps before we start

13 finalizing the investigation report for Site 6 in

14 the Southern Area. So we'll discuss these,

15 basically the presentations you're about to see,

16 we'll discuss those at the TRC. Again, as my

17 letters indicated, we'll incorporate all that data

18 into upcoming reports. That is basically what the

19 Navy has been up to since February.

20 What I'd like to do now is turn it

21 over to Dave, to give you a presentation of the

22 results that we got. You all should have gotten a

23 hand-out mailed to you with the packages. I don't

24 believe we are going to be able to show them on the

25 overhead. But we'll just -- Dave will just speak

25
1 Proceedings
2 about the handouts and try to go over what we did
3 and what we found. Again, this information has to
4 be incorporated into final reports yet. Ready,
5 Dave?
6 MR. BRAYACK: We don't know what the
7 problem is this time. We are not getting the
8 interconnection. But I'm going to start with Site
9 7. I sent out -- we sent out handouts. I do have
10 extra copies here for anyone who needs them or would
11 like them. Just a brief review of the history of
12 Site 7. Site 7 is an old underground storage tank
13 area, a series of bulk storage tanks, mostly
14 containing diesel fuel, jet fuel. There was one
15 tank containing gasoline. All of these tanks have
16 been removed as of 1998.
17 Back in the 1980's, Grumman was going
18 through their underground storage tank program and
19 discovered floating in around free product on the
20 groundwater. At that time they implemented a free
21 product recovery system. Very similar to what we
22 are doing right now at Site 2 and at Site 6. The
23 tanks that they had found that were problems have
24 been all replaced with the more current type tanks.
25 Like I said, as of 1998, all those tanks have been

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2 removed. When the tanks were removed from the
3 ground, any of the contaminated soils that were
4 associated with those tanks, at least above the
5 tank, was removed at that point.
6 At this point in time, we believe
7 that there's only some groundwater contamination
8 left. We have not seen any free product petroleum
9 in this area since 1995, even though we've looked
10 once or twice per year. The four chemicals of
11 petroleum are the benzene, the toluene, the
12 ethylbenzene and xylene? These are the most toxic
13 and also the most mobile. We did this presentation
14 I believe about a year ago. One of the concerns we
15 had at that time was some of our data was old. The
16 Navy is moving towards a corrective measures study.
17 That study is being worked on right now. As Jim
18 Colter pointed out, it is due to the regulators, and
19 the RAB, I think in December, correct, Jim?
20 MR. COLTER: 16 December.
21 MR. BRAYACK: We are moving towards a
22 corrective measures study on this.
23 The chemicals that we've seen in the
24 past, this very first page in the handout is
25 benzene. You'll see that there's some little green

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1 Proceedings
2 dots. Green dots means that it was detected above
3 .7 micrograms per liter but less than 50. We didn't
4 see much benzene as a problem at the site. Benzene
5 once again is associated with gasoline which we
6 didn't have much there.
7 If you go to the third page, figure
8 three. You'll see the second chemical, which is
9 toluene. There is one red hit of toluene meaning it
10 is greater than 500. That is pretty substantial.
11 As you look at these slides, too, it's important to
12 remember that the groundwater flows basically from
13 left to right in these figures. It flows almost due
14 east. The red in the dot in in this figure, area,
15 represents where the underground storage tanks used
16 to be prior to being removed.
17 The next figure, figure four, shows
18 the computer modeling of the location of the toluene
19 plume. You'll notice that there's one plume that's
20 to the left and up a little bit. If you look in the
21 green area, FC-MW04S, you'll see that plume goes to
22 the north. That might be an artifact of the
23 sampling. We don't have any real well data in that
24 point. When we set up a remediation system, it will
25 encompass this entire area.

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2 The next figure, figure 5, is
3 ethylbenzene. You'll notice that there's not any
4 reds on the ethylbenzene. But there are a series of
5 yellows indicating that the concentrations were
6 detected between 50 and 500. Also notice there is a
7 little more dispersed throughout this area.
8 And figure six, which shows the EVS
9 computer modeling as to how the contaminant
10 distributions apply. When you set up a cleanup
11 system, you look at the worst case one. You use
12 that to define the cleanup. That is pretty much
13 what we are looking at here.
14 Finally, figure seven shows xylene.
15 For those with chemistry backgrounds or organic
16 chemistry backgrounds, xylene is the heaviest
17 molecular weight of these, there is some other
18 information, most difficult to biodegrade naturally.
19 Diesel type fuels, it represents a higher weight
20 percent initially, less soluble in water than some
21 of the others. Looking at older plumes like we are
22 here, xylene is pretty much the one that defines
23 what's left.
24 If you go to the next one, Figure 8,
25 I think some of the handouts might call this

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2 something else, but this is the xylene plume. If
3 you look at Figure 8. Yours doesn't say xylene
4 plume. This one right here, this is actually the
5 xylene plume. Like I said, as far as definition on
6 the groundwater contamination, if you look at
7 xylene, when you encompass xylene, you encompass
8 everything else.
9 So this is pretty much, we showed
10 very similar maps to this back in I believe February
11 or before that. Some of the data was older. We
12 pretty much confirmed what we expected the
13 contamination hasn't moved very much.
14 The other things you'll notice is on
15 the far right here, there's four new wells in here.
16 One that you had known about and that is O7S. I
17 think at the time there were comments about putting
18 deeper wells in. So what we wound up doing, since
19 we were out there for other reasons, we put in
20 deeper wells, known as O7I, that's another 20 feet
21 down. We also installed a well to the north and to
22 the south to make sure that we are not missing the
23 contamination. The other things we did too is put a
24 permanent monitoring well in between where we knew
25 the site was and where our perimeter monitoring well

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2 was. Like I said, it was a convenient time to do
3 that. I think the RAB members overwhelmingly
4 requested this.
5 CO-CHAIR JOHNSON: How deep is the
6 permanent well?
7 MR. BRAYACK: It's groundwater is
8 about 15 feet. It is 20 feet below that, so it is
9 35 to 40 feet. We are working on a report with
10 that. And that will be coming up.
11 The only other thing I'd like to
12 point out is there is freon in this area as well.
13 The freon hit, it doesn't show it, on a previous
14 presentation we had shown it, but it is down in this
15 general area here. It is very isolated. As we were
16 collecting these samples, we did get a couple of
17 stray freon detection, in the 10 to 14 parts per
18 billion range. We don't see freon as a major plume,
19 but any type of remediation would have to address
20 that freon as well. I don't want to hide anything.
21 I don't want to be misleading.
22 So this really sets the basis for the
23 corrective measures study. The corrective measures
24 study is in progress. It's going to evaluate
25 groundwater remediation in the source area for down

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2 gradient. It is a standard technology. It's going
3 to evaluate air sparging in the source area, kind of
4 what is going on in Site 2. The air sparging does
5 have some benefit for stripping the volatiles. When
6 you get to the petroleum type chemicals, what it
7 really does is it provides oxygen. It enhances
8 insitu biodegradation. Biodegradation does 50 to 90
9 percent of the work. The air sparging does the
10 balance.
11 The third technology is what is known
12 as ORC and HRC. ORC is oxygen releasing compound.
13 It's a, generally some type of organ -- not organic.
14 Some type of slow release oxygen compound. It looks
15 at enhancing biodegradation by converting it to an
16 aerobic environment. That works well on the fuel
17 chemicals BTEX and other related chemicals. It
18 doesn't really work on the chlorinateds. Also,
19 looking at HRC. Hydrogen releasing compound. That
20 targets, it creates an anaerobic environment that
21 targets degradation of chlorinated solvents.
22 The HRC doesn't really have much
23 relevance at Site 7 so much. It is more significant
24 at some of the other sites.
25 CO-CHAIR JOHNSON: Like 2.

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2 MR. BRAYACK: 6, actually 6 is the
3 best candidate for that right now.
4 As you know at Site 2, we shut the
5 system off in the winter and turn it on again in the
6 summer. To an extent what we are doing is
7 converting the aquifer from aerobic to anaerobic and
8 back again. Some of the organics are degrading
9 aerobically, and some are eroding anaerobically. So
10 that is something that has been occurring.
11 As part of this investigation, and
12 one of the reasons for the delay of the corrective
13 measures study, is that we are evaluating the
14 monitored natural attenuation. In the package that
15 I distributed, I handed out an evaluation -- or
16 actually the ROD data that goes into the monitored
17 natural attenuation evaluation. We are right now
18 preparing a technical memorandum. That technical
19 memorandum will summarize the potential efficiency
20 of MNA at this site. If you get into the data, what
21 you're going to see, it really suggests that
22 monitored natural attenuation is working at the
23 site. The plume is not really expanding. There is
24 some movement of it. When you do the biodegradation
25 rates, it is predicting a stable plume, which is

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2 pretty much what we are seeing. The third component
3 of it is is you have to monitor over a long time to
4 show that the plume is not migrating or expanding on
5 you. We have limited data on that.
6 But the second thing with the
7 evaluation was that knowing the plume's not
8 expanding, if we just leave it go as is, it is going
9 to be there for a long, long time, tens of decades.
10 If we go in and treat the source area through
11 enhanced biodegradation, it shortens it to perhaps
12 less than ten years. That's what the corrective
13 measures study will be providing. It will be
14 providing these different options.
15 I guess at this point, is there any
16 question on the Site 7, the plume delineation, the
17 monitored natural attenuation results?
18 A MAN: On the sequence of things.
19 Looking at this other handout you gave us tonight.
20 If you did continue with this acceptance by the
21 regulators, December, early next year perhaps, you
22 wind up with a ROD by June of next year.
23 MR. BRAYACK: (Nodding)
24 A MAN: Then your budget has, looks
25 like starting pre ROD activities and going right

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1 Proceedings
2 into implementation right after that. Is that
3 speculative at this point. Are you leaning towards
4 an active we we which is what I'm leaning and and
5 what I prefer?
6 MR. COLTER: Can you say that again,
7 Bill?
8 A MAN: I'm not sure these are
9 numbered.
10 MR. COLTER: You're on Site 7.
11 A MAN: Go by the i.d. 222 remedial
12 design. Looks like June 26th, which is basically
13 the day after the ROD. You're going into that
14 award.
15 MR. COLTER: What we'd like to do at
16 this site, since it is kind of our test site for a
17 concept of going site by site and getting the
18 information, finalizing reports and moving into the
19 next phase, I was able to get money to do this site
20 or have a remedy in -- actually, it is going to be,
21 the award will be 2002. Because it's going to take
22 some time to go from the design to that.
23 A MAN: Right.
24 MR. COLTER: What we are trying to
25 do, is we kind of know already what we want to

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1 Proceedings
2 recommend as the preferred alternative. We are
3 willing to take a little bit of a risk by saying
4 that while the regulators are reviewing our CMSes
5 and our decision documents, we'd like to start
6 designing, doing some prelim -- a lot of this is
7 pre-award work that you have to award to a
8 contractor to do your design. So there really isn't
9 much in particular there because they're going to
10 design something. We'd like to get that process
11 started as soon as possible. We are actually
12 looking to design a system. We do feel there will
13 be at least a source area treatment system here.
14 How big that system is, whether it is a full site
15 system or a source area system with some other
16 technology toward the lower end? That hasn't been
17 worked out yet. But we are planning to design
18 something and construct something, in sequence after
19 the decision document is accepted.
20 A MAN: Two comments: One is you
21 did this work this summer to update your data. Now
22 it looks conclusive you have a good handle on the
23 plume. I suggest you move quickly to make sure you
24 act on it before you have to take more samples in
25 the future.

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2 MR. COLTER: I agree wholeheartedly.
3 A MAN: Why spend any more money on
4 MNA when we are all agreeing.
5 MR. COLTER: MNA is kind of a new
6 concept as far as remedies go.
7 A MAN: Uh-hum.
8 MR. COLTER: More the scientific
9 community is starting to recognize just natural
10 biodegradation sometimes cleans up lower level
11 plumes faster than a pump and treat system because
12 of the ineffectiveness of pump and treat at low
13 concentrations. The Department of Defense put out a
14 policy wanting us to monitor and evaluate natural
15 attenuation as a stand-alone. Give it something to
16 compare it to. As Dave said, if you had MNA as the
17 sole alternative here, it would be tens of decades
18 to clean up. You have a baseline to say if you do a
19 source area removal, which may cost a little more,
20 we are talking eight to ten years. So you can
21 actually see that. There are some things we have to
22 do. The one step is we have to determine if natural
23 attenuation is even viable. In some type of bedrock
24 type of settings, it may not be as viable. So you
25 have to do those data collection to satisfy folks

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1 Proceedings
2 like the EPA and the state to say, well, we know it
3 will work. Now we'll evaluate how fast it will
4 work.
5 A MAN: Okay.
6 MR. COLTER: I think, though,
7 hopefully we'll be able to move faster with MNA at
8 this site because Site 7 is the model and because
9 the geology is similar. The only difference is the
10 type of contaminant that's there. I'm hoping that
11 we can piggy back on the work that we did at Site 7
12 to speed up the MNA reports for the other sites.
13 CO-CHAIR JOHNSON: Going back to your
14 EPA comments on this that they submitted in January.
15 They kind of raised that issue.
16 MR. COLTER: Yes.
17 CO-CHAIR JOHNSON: About MNA without
18 source treatment, they actually said it is unlikely
19 to be an effective remedy.
20 MR. COLTER: Right.
21 CO-CHAIR JOHNSON: So that's what you
22 are still working on with them and are they going to
23 recommend on what you are actually proposing?
24 MR. COLTER: They'll comment on the
25 CMS when we submit it.

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2 CO-CHAIR JOHNSON: Okay.
3 A MAN: Am I to understand that the
4 BTEX was done along with the rest of the compounds
5 usually found in gas? Or are you just focusing on
6 that for the cleanup.
7 MR. BRAYACK: What we did was the TCL
8 List, which is a VOC scan basically. So we focused
9 on the chlorinated plus some of the BTEX.
10 State drinking water list, you're
11 familiar with that? That's what we did.
12 We did not test trimethylbenzenes.
13 A MAN: Dichlorobenzenes?
14 MR. BRAYACK: We would have picked up
15 dichlorobenzene when we did the DSOV and VOC scans.
16 A MAN: That was probably leaded gas
17 there.
18 MR. BRAYACK: We checked for lead.
19 A MAN: There was no -- discernible
20 increase in lead.
21 MR. BRAYACK: No. The reason being
22 is this farm was more for the trucks, the diesel
23 trucks, than the planes. Which means it wasn't
24 really gasoline. It was diesel jet fuel, rather
25 than the more, the heavier compounds and the

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2 hydrocarbons. There's very little, we are seeing
3 very little benzene there.
4 A MAN: Given that statement, why
5 didn't you look for the heavier compounds.
6 MR. BRAYACK: We did the TCL
7 TAL -- we did the TCL list for organics, which picks
8 up the particulars as well as the tentatively
9 identified compounds.
10 A MAN: MTEB?
11 MR. BRAYACK: MTEB, this site wasn't
12 really active past 90, mid 90. MTEB wasn't really
13 an issue.
14 MR. COLTER: But we did sample for it
15 and didn't see it.
16 A MAN: You didn't see it.
17 MR. COLTER: A lot of the work we did
18 was several years prior, where we basically scanned
19 out everything except the BTEX compounds. What
20 you're seeing is just centered around the BTEX. We
21 did a lot of the preliminary.
22 A MAN: That is what I want to know.
23 MR. COLTER: Investigations and Phase
24 I RFIs a year and a half, two years ago, where we
25 didn't find the TCEs and PCEs, and things like that.

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1 Proceedings
2 So we basically scanned them out and started dealing
3 with just the BTEX and what are the alternatives to
4 clean up the BTEX? That seems to be our chemicals
5 of concern.
6 A MAN: Was that found in the
7 shallower soil samples?
8 MR. BRAYACK: No. No, most of the
9 tanks, the bottom of them was around 13, 14 feet.
10 We were not able to dig within the tank's area
11 during the program so we sampled the soils around
12 it. But as the tanks were coming out, any of the
13 soil that was identified as contaminated, the county
14 oversaw our excavations as part of the TAP Program.
15 Any of the soil that came out with contamination
16 with it was hauled off site for disposal. Then we
17 generally took N samples. We saw contamination
18 generally right around the 15 to 17 foot below
19 ground surface depth, and that corresponds to the
20 water table. What we think we were looking at was
21 the remnants of a floating free product that had
22 been smeared across that zone.
23 MR. COLTER: That zone of soil will
24 be addressed as part of our remedy. It will be a
25 groundwater remedy but it will have a component to

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1 Proceedings
2 address the deeper soils at the interface.
3 A MAN: What happened to the diesel
4 fuel? The jet fuels seem to have disappeared
5 entirely. It's BTEX.
6 MR. COLTER: That's all we found.
7 MR. BRAYACK: Well, we did DRO and
8 GRO as part of the analysis. So we do have -- as
9 you know, the BTEX is just a portion of the fuels
10 and it represents somewhere between two and maybe 10
11 percent of the fuels. These are the ones that are
12 regulated.
13 A MAN: That is still a question.
14 MR. BRAYACK: No, it is there. It
15 is there as hydrocarbons.
16 A MAN: You mean it's there as a
17 degradation product only.
18 MR. BRAYACK: No, I'm sure there's
19 some of the original.
20 A MAN: That was the whole question.
21 You're addressing BTEX.
22 MR. BRAYACK: We are addressing BTEX
23 in groundwater.
24 A MAN: As the parameters for the
25 cleanup.

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2 MR. BRAYACK: Yes.
3 A MAN: You expect to get the DRO
4 stuff.
5 MR. BRAYACK: There is no state
6 standard for DRO and GRO. We have no cleanup goals
7 for DRO and GRO, other than no floating product.
8 A MAN: Maybe I'm missing something.
9 There was very little gasoline and a huge amount
10 historically of jet fuels, which doesn't encompass
11 if I remember correctly benzene, toluene and xylene.
12 MR. BRAYACK: Very little benzene,
13 but it encompasses benzene, toluene and xylene.
14 A MAN: Also the heavier end.
15 MR. BRAYACK: C-10s, C-12s and C-14s.
16 A MAN: And C-8 and C-9s.
17 MR. BRAYACK: Yes.
18 A MAN: I'm curious and I apologize
19 for coming in at such a late date and asking you
20 these historical type questions. Why wasn't that
21 addressed, because there's no state cleanup goal for
22 it, is that it? Is that what you're saying.
23 MR. BRAYACK: Pretty much, yeah. If
24 there is no risk and there's no regulation, and we
25 are looking at the remnants of it, we clean up to,

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2 in essence, regulatory or risk based criteria.
3 CO-CHAIR JOHNSON: So are you saying,
4 Don, that there are things there that they are not
5 testing for, basically, if I'm.
6 A MAN: No, I believe you said you
7 did diesel range and gas range.
8 MR. BRAYACK: (Nodding)
9 A MAN: You didn't say whether you
10 found it or not.
11 MR. BRAYACK: Yeah, we found it.
12 A MAN: Yeah, there's stuff there
13 they're not cleaning up.
14 CO-CHAIR JOHNSON: Thank you. That
15 is simple enough.
16 A MAN: That is where I was heading.
17 You made the statement, and I agreed with you, most
18 of the fuel out there was not gasoline based, it was
19 a fuel designed for jet engines and -- and that's
20 you're not going to see a lot a lot of, a lot of
21 BTEX out of that. But you're going to see the
22 heavier ends but there is no cleanup criteria for
23 that -- I wasn't aware there is no cleanup criteria
24 for that. I thought there was.
25 A MAN: Do those data show up in your

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1 Proceedings
2 baseline survey.
3 MR. BRAYACK: The "GRO", is gasoline
4 range organics. And "DRO", is diesel range
5 organics. They are a measure of total hydrocarbons.
6 They don't split them out individually. That if you
7 would take, you know, a pound of gas or a pound of
8 diesel and put it on a fuel, it would measure a
9 pound of DRO. It would measure, you know, two
10 percent of that as toluene. So it would measure
11 whatever that corresponding number is.
12 MR. COLTER: I think one thing you
13 got to remember is in the State of New York, they
14 don't regulate total petroleum hydrocarbons. Their
15 Starrs Memorandum No. 1, which dictates tank
16 cleanups, says you sample tank sites for VOCs and
17 SVOCs. If you find them in excess of drinking water
18 standards, you invoke a cleanup. It doesn't
19 regulate total petroleum hydrocarbons such like the
20 State of Pennsylvania might, at say 500 parts per
21 billion. They don't have a standard TPH. We sample
22 VOCs and SVOCs. The absence of those does not
23 trigger a cleanup under the Starrs Memorandum.
24 A MAN: Starrs Memorandum catch that
25 in a GCMS analysis.

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1 Proceedings
2 A MAN: What is that, Don?
3 A MAN: Gas chromatography.
4 A MAN: What is GCMS.
5 MR. BRAYACK: That is what we do when
6 we do the analysis.
7 A MAN: So you have, you have, then,
8 the records that show that there's diesel
9 contamination here. If you did GCMS, then you know
10 there's diesel contamination there. Even if it's
11 non-regulated. Even if it is under the baseline.
12 You understand what I'm saying?
13 MR. BRAYACK: I think what you're
14 asking us to do is do we have.
15 A MAN: I'm just asking you. I'm not
16 asking you to do anything. I'm just asking you.
17 MR. BRAYACK: Do we have organics
18 greater than background present at the site? The
19 answer is yes. Do we have organics greater than a
20 health based standard or a regulation based standard
21 at the site? That is what we are addressing. We
22 are addressing all the health based and the
23 regulation based constituents.
24 A MAN: Have you published those?
25 MR. BRAYACK: What's that?

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1 Proceedings
2 A MAN: DRO/GRO GCMS data as other
3 than your target compound.
4 MR. BRAYACK: Yes, that is in all our
5 reports. That is in the Riverhead Free Library
6 right now. And I think the RAB -- the full scans
7 would have been done in the '94 --
8 MR. COLTER: I tell you what, Dave.
9 Don, what we'll do, we are going to go back and take
10 a look at this and get you a better answer. We
11 don't have the data in front of us. We'll go back
12 and collect the data and we'll submit it to you so
13 we can try to answer your question. We can't answer
14 it tonight, obviously.
15 A MAN: My rationale, if you will.
16 I'm not trying to be argumentative here. My
17 rationale, is there is a lot of toxic components to
18 diesel fuel. If you target analytes or BTEX, that
19 is good for a cleanup.
20 MR. BRAYACK: We have never limited
21 our analysis to BTEX. Every time we have done it --
22 that is what we have detected.
23 MR. COLTER: That is a focus study.
24 That is a third phase type of study that is focused..
25 A MAN: That is what you're basing

4

1 Proceedings
2 the remediation on.
3 MR. COLTER: I want to go back and
4 look at the data so I can get you a proper answer.
5 A MAN: You may have to encompass a
6 little more.
7 MR. COLTER: We may have to, right.
8 Let us go back and dig out the data to give you a
9 better answer so we can incorporate it into a
10 cleanup or give you data to show it is not a
11 concern.
12 CO-CHAIR JOHNSON: Send a copy to
13 whatever you send to him, send to me.
14 A MAN: Can we have it as an action
15 item at the next meeting.
16 CO-CHAIR HARE: Instead of sending it
17 out, why don't we just include it. We'll include it
18 in the discussion perhaps for the next RAB meeting.
19 A MAN: I have one more question.
20 Have you monitored for methane production, which
21 would indicate a natural background degradation? Or
22 are you just assuming that because it is
23 disappearing.
24 MR. BRAYACK: This summer we did the
25 monitored natural attenuation. We collected

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1 Proceedings
2 groundwater samples and we analyzed those for full
3 VOCs, we added Methyl Tertiary Butyl Ether to that.
4 A MAN: The methane you analyzed in
5 the water.
6 MR. BRAYACK: Yes.
7 A MAN: Did you see it.
8 MR. BRAYACK: Yes. We saw a
9 non-detect in our u gradient monitoring well and we
10 saw relatively high air concentrations. In the
11 plume area and we saw a decreased or non-detect
12 concentrations, I forget which, in the downgradient
13 area.
14 This is the report that we are
15 working on right now. This is -- we provided in
16 this latest submittal, all of our raw data and that
17 is what we are pulling together right now.
18 A MAN: One last question.
19 A MAN: You said the last one was the
20 last one.
21 CO-CHAIR JOHNSON: This is
22 interesting, Bill.
23 A MAN: When you say 500 to maximum,
24 is 500 your maximum found or is there a maximum
25 that's implied here.

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1 Proceedings
2 MR. BRAYACK: I'm sorry what --
3 A MAN: Okay. Your little red dot.
4 MR. BRAYACK: Those are greater than
5 500.
6 A MAN: What are they.
7 MR. BRAYACK: That is in the data
8 package that we sent you. The maximum was 4,550.
9 A MAN: That is where I'm at a
10 distinct disadvantage.
11 MR. BRAYACK: Did you not receive the
12 package that we sent.
13 A MAN: I got that from somebody
14 else.
15 CO-CHAIR HARE: You're not on our
16 mailing list.
17 A MAN: I've seen your list. I got
18 some stuff here. I'll show you what I have.
19 CO-CHAIR HARE: I'm puzzled because.
20 A MAN: It is not a big issue.
21 MS. HARE: We send out information
22 prior to the RAB.
23 MR. BRAYACK: Yeah.
24 A MAN: I'm not complaining. I'm
25 just new here.

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1 Proceedings
2 CO-CHAIR HARE: The reason I'm
3 checking into this is because if there is a RAB
4 member who's not getting the data for any reason
5 then I need to go back and figure out why that is.
6 A MAN: I'm new, that's why.
7 CO-CHAIR HARE: If there is an
8 address problem.
9 MS. COHEN: After the meeting, we can
10 knock it out.
11 A MAN: She's going to bring me up
12 to date.
13 MS. COHEN: What I missed you were
14 talking about GCMS. Is there certain compounds you
15 were talking about, GCMS.
16 A MAN: It was just the presence of
17 all those diesel compounds that weren't being
18 addressed. I was just curious about it.
19 MS. COHEN: GCMS is equipment, not a
20 chemical, which were you were talking about --
21 A MAN: I offer it as an analytical
22 method.
23 MS. COHEN: Method, okay.
24 A MAN: What was the maximum number.
25 MR. BRAYACK: 4,500.

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1 Proceedings
2 MR. BRAYACK: Yes, that's the xylene.
3 CO-CHAIR JOHNSON: That's the xylene.
4 MR. BRAYACK: When we went through
5 the maps here, this is the big red blob. When you
6 run the software, the bigger the concentration, the
7 more it expands it outward.
8 A MAN: On the Site 6 and 10 data,
9 you show a maximum concentration, which is very
10 helpful to know what your upper bound is. Maybe you
11 can do that on your Site 7 map, too.
12 MR. BRAYACK: Okay.
13 A MAN: Instead of maximum could you
14 actually say the number?
15 A MAN: They do on the other one.
16 A MAN: On the other map they give
17 you five maximum, but they actually give you the
18 number 4,000.
19 MR. BRAYACK: Yes, there is a fuel
20 problem at the Site 7. That's.
21 MR. COLTER: Any other questions on
22 7? We'll move into 6 and the Southern Area.
23 MR. BRAYACK: Okay, the next one.
24 A MAN: You know, I have one other
25 question. What laboratory -- are you aware of what

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1 Proceedings
2 laboratory generated this? Is this in-house or is
3 this out sourced.
4 MR. COLTER: We have a lab out here.
5 MR. BRAYACK: We are using EcoTest.
6 A MAN: You said Volumetric.
7 MR. BRAYACK: No, EcoTest. We had
8 talked about that when we were out here.
9 MR. BRAYACK: Okay. At Site 6, if
10 you look at the map here, the little box up in the
11 corner, that is Site 6. If you proceed to the south
12 and east from there, that is what is known as the
13 Southern Area. And at this point in time, the
14 Southern Area extends off-site on to the Peconic
15 Sportsmen's Club. The three chemicals that we've
16 found associated with Site 6, are the primary one is
17 1,1,1-trichloroethane, a chlorinated solvent that
18 was used at the facility. We found it, and this
19 number is a little bit out of date now, we found it
20 as high as 12,000 micrograms per liter. This was
21 back in the earlier '90s. But, you know, more
22 recent concentrations are level.
23 This once again is mixed with a fuel
24 contaminant. It appears to be a diesel type fuel.
25 There is a floating free product layer as Jim had

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1 Proceedings
2 pointed out earlier, there is a passive free product
3 recovery system going on right now for this site.
4 What we know or what we suspect is
5 that Site 6 Fuel Calibration Area was the primary
6 source of the VOC contaminated groundwater. From
7 this area, groundwater in this area is only five
8 feet below the ground surface. When there's good
9 rain the water table rises there is a series of
10 drainage ditches that run through this area. The
11 drainage ditches run first to the east then to the
12 southeast. They discharge into some ponds which are
13 near the southern edge of the Navy's property, that
14 is how we got the name Southern Area. What's more,
15 these ponds they are dry most of the time. They are
16 not true ponds. They are more of a wetland type
17 area. As they fill out, there are culverts that run
18 underneath the road and they drain toward the
19 Peconic River. The three chemicals that we are
20 looking at 1,1,1-trichloroethane. As you could see,
21 we found it in the source area as high as 12,000
22 micrograms per liter.
23 The next chemical is the
24 1,1-dichloroethane. 1,1-dichloroethane is a
25 biodegradation product. It is an anaerobic

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1 Proceedings
2 degradation product of the 1,1,1-trichloroethane.
3 When the bacteria work on it, they strip chlorine
4 off it and it becomes a dichloroethane.
5 The third chemical listed is
6 1,1-dichloroethene. This is also very related, very
7 closely related to the trichloroethane. You see
8 this as a breakdown periodically. It is not as
9 common, but it does happen.
10 These three chemicals make up the
11 majority of the chlorinated hydrocarbon problem for
12 this area. We had done a presentation, I think it
13 was about a year ago, where we looked at all the
14 chemicals that were detected in this source area.
15 As part of this investigation, you know, we focused
16 it down to these three chemicals. Although when we
17 did the analysis, we did analyze for all of them.
18 But these three for the most part define the plume,
19 the problem area from the Fuel Calibration.
20 The current investigation and I'm
21 going to go from -- to the second page in, which is
22 identified as TCA2? As you're looking at this, to
23 the far left is what would be the source area. And
24 this well cluster all the way to the right would be
25 into the downgradient area pretty much the furthest

5.

1 Proceedings
2 downgradient. You could see in the initial source
3 area where we went to minus 160 minus 180, that is
4 feet below mean sea level, that is approximately 200
5 feet below the ground surface at that point. What
6 we found in that area was some very deep
7 contamination straight down.
8 As part of this current
9 investigation, we put wells upgradient. Because
10 there is an old paint hangar and down gradient
11 trying to delineate the extent, Ultimately, like
12 you said, you get down toward these last clusters
13 here and some of these clusters are close to the
14 Peconic River.
15 If you go to figure TCA3, what this
16 is, is a computer representation of basically
17 connecting the dots both horizontally and
18 vertically. It uses the kriging method. And it
19 looks at all the data. What you'll basically see in
20 this, up near the initial source area, is one area.
21 Downgradient from that, is a second area. It's
22 possible the two areas are connected. You can't
23 read too much into these reports. What we do know,
24 though, is in between, that it was relatively clean.
25 Most of the wells that we put in that area didn't

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1 Proceedings
2 have any detected TCA. And if you get toward the
3 fence line, this is Grumman Boulevard running along
4 here, we started getting sporadic hits. We were
5 also getting a lot of non-detected results, to where
6 we got sporadic hits.
7 Finally the Peconic River is
8 represented by these two dots here. These are right
9 on the Peconic River itself. And, Don, for your
10 information, this green dot here is, I believe it is
11 known as the pistol range on the Sportsmen's Club.
12 But we did find some hits of 1,1,1 trichloroethane
13 at that point.
14 Going to figure TCA 4, you'll see
15 some of the sporadic nature of the
16 1,1,1-trichloroethane. There are places, you know,
17 where we find it and we did finely delineate it.
18 But you can see it is showing up in various places
19 throughout this area. For the most part the highest
20 concentrations are all located right in the shallow
21 groundwater at the site. As you go to depth, you'll
22 find elevated levels as well, but not as high. You
23 go throughout this area. The maximum detection we
24 found was about 200 micrograms per liter of -- that
25 wasn't the maximum. It was the other chemical, was

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1 Proceedings
2 200. We found several hits off-site of
3 1,1,1-trichloroethane.
4 If you go to TCA, Figure 5. This is
5 pretty much just looking at the data from a
6 different cross-sectional area, not much of
7 interest. Once again, cross-section BB on TCA 6,
8 just a different location going through the plume.
9 Like I said, you'll see there's a green dot here and
10 there's a green dot here. It is very likely that
11 those dots are connected. You don't want to read or
12 misread too much into these. You have to use some
13 common sense when you are looking at these.
14 The 1,1-DCA.
15 A MAN: Can you talk a little bit
16 more about TCA for a second.
17 MR. BRAYACK: Yes.
18 A MAN: You may have talked about
19 this before. I apologize if you have.
20 At the source you have these deep
21 hits. Then you don't really verify or validate with
22 any of the downgradient wells because they don't
23 come near those depths.
24 MR. BRAYACK: If you look, when we
25 were out there this last time, we put wells

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1 Proceedings
2 approximately 100 feet downgradient from there and
3 we put wells approximately 100 feet upgradient from
4 there.
5 A MAN: How deep did you go.
6 MR. BRAYACK: The same depth.
7 CO-CHAIR JOHNSON: You don't show
8 them, though, with non-detect hits.
9 MR. BRAYACK: If you look at Figure
10 2, see the blue dots? There is actually three wells
11 located in that. And it is really the angle that we
12 are looking at.
13 CO-CHAIR JOHNSON: But what about all
14 these wells in this area where the last non-detect
15 you show is at 40 or 50 feet. How come you didn't
16 go down to 100 feet there?
17 MR. BRAYACK: We went to 100 feet in
18 a couple other locations. We had done this
19 presentation before and what we found in the very
20 source area.
21 CO-CHAIR JOHNSON: Right.
22 MR. BRAYACK: Was some very deep
23 problems. What we wound up doing was, putting
24 there, was borings one in the middle upgradient and
25 one in the middle downgradient.

5

1 Proceedings
2 CO-CHAIR JOHNSON: To me, from a
3 layperson, when I look at this, the further you get
4 away from it, I think it would be deeper. So I
5 would want to see -- I could be totally off base
6 here. But it would make sense to me that some of
7 these wells at least go down to the 160 feet and
8 that you show non-detects if there were no hits.
9 Because I would assume, with no knowledge, with no
10 background, being totally dumb and naive, that the
11 contamination is going to go down and not come
12 backup.
13 MR. BRAYACK: Let me jump in for one
14 second.
15 CO-CHAIR JOHNSON: Am I wrong? Am I
16 totally wrong.
17 MR. BRAYACK: Yes.
18 Not totally wrong. But one of the
19 things that we did, as part of this investigation,
20 we talked about this. Is we did the piezometer
21 study along the Peconic River. And we've talked
22 about this numerous times. When you're near a
23 groundwater divide, the groundwater generally sinks.
24 The nearest real confining unit in this area is
25 about 1100 feet down. So it has a lot of room to go

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1 Proceedings
2 down. There are clay layers in between. It is not
3 continuous throughout the area, but between around
4 50 and 60 feet we have been seeing in 70/80 percent
5 of our locations, a clay layer. But more
6 importantly, what we know is the groundwater just
7 doesn't keep going down forever. It comes up
8 somewhere. There is three choices for this area:
9 One, is the Long Island Sound and
10 based on what we know, everything north of the
11 groundwater divide, which is about the Fuel Depot,
12 will come up into the Long Island Sound.
13 CO-CHAIR JOHNSON: We don't have to
14 talk about northern divide.
15 MR. BRAYACK: Southern divide what we
16 found is all the water, at least to a depth of 80 to
17 100 feet, rises into the Peconic River.
18 CO-CHAIR JOHNSON: It comes back up.
19 MR. BRAYACK: We've talked about this
20 a few times, but the Peconic River is the -- is a
21 very substantial stream. I believe Sy Robins was
22 mentioning this last time. One of our real concerns
23 at this point was, will this contamination flow
24 underneath the Peconic River and keep moving toward
25 the Atlantic Ocean, or will it start coming up.

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1 Proceedings
2 When we did the piezometers, what we found is
3 there's approximately a five foot upward gradient
4 moving toward the Peconic River. We put -- the
5 Peconic River cuts right through about the middle
6 here. We put a piezometer right on the Peconic
7 River, here. There were a cluster piezometers,
8 water table, 40 and 80 feet.
9 CO-CHAIR JOHNSON: I recall that.
10 Three a cluster.
11 MR. BRAYACK: One up in
12 intersections, one at river. The river flows
13 between these two points. And we put one here. If
14 the groundwater was going to flow and keep moving
15 towards the Atlantic Ocean, what we would see, we
16 might see a dip right near the surface. But what we
17 saw was the groundwater elevation at a depth of 80
18 feet down, in this center well, was about four to
19 five feet lower than the groundwater here and the
20 groundwater here. Which means the groundwater over
21 here is flowing in toward it, too, which means it is
22 not under flowing. Okay, that's one of the
23 technical evaluations we are working on. The
24 Southern Area is a complicated area.
25 But getting back to your original

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1 Proceedings
2 comment. We know the groundwater contamination
3 flows downward, particularly near the Fuel Depot and
4 probably the Fuel Calibration Area. What we've
5 seen, we went back and looked at the data throughout
6 the Southern Area, what we've seen with one
7 exception, was that the contaminated groundwater
8 never went below about 60 feet below the ground
9 surface. In fact, some of the wells closest to the
10 Peconic River showed it more shallow. Whether it
11 got there by overland flow or by underflow coming
12 up, that's the way it was going.
13 CO-CHAIR JOHNSON: Does that makes
14 sense to you guys.
15 A MAN: I have a question. I don't
16 know when you had the 12 how micrograms per liter of
17 TCA but did anybody, particularly at the one
18 location where you showed it is smeared down pretty
19 deep, was there an evaluation done for potential of
20 a DNAPL to be present there?
21 MR. BRAYACK: We never found high
22 enough concentration for a DNAPL.
23 A MAN: Wouldn't 12,000 parts per
24 billion be close to where that would be considered.
25 MR. BRAYACK: It is at the lower end.

6

1 Proceedings
2 This area here is kind of unique. It
3 is a mixture between diesel fuel and chlorinated
4 solvents. To form a DNAPL, you need to have --
5 A MAN: It is like 1 percent of.
6 MR. BRAYACK: Somewhere between one
7 and 10 percent, you start looking for a DNAPL.
8 A MAN: Man what is it for TCA -- you
9 probably don't know off the top of your head.
10 A MAN: I know what a DNAPL is. Ann
11 and I were talking about it before the meeting.
12 A MAN: It is actually like product
13 that sinks down. It's not just dissolved product.
14 It is product.
15 MR. BRAYACK: Non aqueous phase
16 liquids.
17 A MAN: These chemicals are much
18 heavier than water. They sink if they're not
19 dissolved. What you can get at some of these sites
20 is, actually I think they have this problem at
21 Bethpage, you can actually get places down very deep
22 where the stuff is pooled up and it is hard to get
23 it out, any way, if it is there. And it acts as a
24 source, continual source, for very long time.
25 A MAN: Thank you.

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1 Proceedings
2 MR. BRAYACK: There's a couple
3 answers to that. As we drill, we take split
4 samples. I have worked with DNAPL before. When you
5 hit a DNAPL zone, it comes up and you could
6 definitely smell it. You get thousand PMPID
7 readings. We didn't see that. As far as how the
8 chlorinated solvent got there, I would suspect that
9 we are looking at the remnants of a minor DNAPL. It
10 went down, straight down. Now it is sitting there.
11 But I don't think there is any DNAPL left out there.
12 We didn't see any other evidence of it. It trips
13 off our equipment. There is no reason why it should
14 be at 180 feet. When we first found it there, we
15 thought we were pulling it down with our sampling
16 tools. We went back and cased it off and did it
17 again. And we confirmed it.
18 So the numbers we are looking at
19 depth are in the hundred plus ppb range. It was
20 associated with LNAPL, light nonaqueous phase
21 liquid. What we are seeing at that site, there's a
22 floating free product layer, heavily contaminated
23 with chlorinated solvents. The mixture is such that
24 it floats on the water. But it still is able to, it
25 probably decomposes and releases the TCS.

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1 Proceedings
2 A MAN: One of the things everybody
3 is -- how do you explain that the TCA isn't
4 traveling at that depth. It got down there as a
5 DNAPL but we don't see it moving in either direction
6 away from there and it should move. If it is
7 dissolved, it should be moving with the groundwater.
8 I'm not trying to -- it just seems funny you would
9 expect to be able to find some of it at depth.
10 MR. BRAYACK: We know that the
11 shallow groundwater moves much faster than deeper.
12 I just did the number in particular for Site 9,
13 because we were looking at that specifically. How
14 far could the contamination have gone in ten years,
15 is what we were looking at.
16 What we know, it varies from site to
17 site because a gradient factors in some areas the
18 groundwater flows 100 to 200 feet per years, in ten
19 years it should have gone a long way.
20 Second, we looked at what is known as
21 the retardation factor. When you have these
22 chlorinated solvents and these other chemicals, they
23 don't move with the groundwater. They flowed along,
24 they encounter a soil particle, absorb on to it,
25 desorb, it becomes a smear zone. That is how the

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1 Proceedings
2 gas chromatograph works, it smears them out. But
3 what we do know is at depth the groundwater flows
4 much slower. Where we were seeing 270 feet, in one
5 case, at the surface, if you go down 50 feet, the
6 number was more like 27 feet per year. It is a
7 tighter sand basically, it is just a unique geolog
8 -- hydrogeological parameter, and that is what we
9 are observing.
10 A MAN: That doesn't answer the
11 question. Why don't we see it traveling even if it
12 is at a slower rate.
13 MR. BRAYACK: We do not know. We
14 know the chemicals degrade over time. The half-life
15 for TCA is about one to two years.
16 A MAN: Really?
17 MR. BRAYACK: Yes.
18 A MAN: At this site, or just in
19 general? Because we don't see that.
20 MR. BRAYACK: That is what MNA
21 evaluation comes in and looks at.
22 A MAN: Would you.
23 MR. BRAYACK: Monitored natural
24 attenuation works much better for the fuels. I
25 think that is in agreement.

6

1 Proceedings
2 For the fuel, you do modeling, you
3 look at historic conditions. In a case like this,
4 this deep contamination? That's what the
5 corrective measures study does. Its intent is not
6 to let any of these go. The intent is to address
7 them one way or the other. But we have not seen
8 this deep component moving.
9 A MAN: I'm questioning are you
10 looking?
11 MR. BRAYACK: Yes.
12 A MAN: You looked in a couple of
13 spots very close to where that source was. If it is
14 traveling faster than what you're anticipating,
15 could it be shifting further downgradient.
16 MR. BRAYACK: We saw it at the same
17 location again. We drilled the same location four
18 times, I think we drilled it in '94, '96.
19 A MAN: You saw lower concentrations
20 now.
21 MR. BRAYACK: No. The numbers
22 aren't roughly the same.
23 A MAN: I thought you said hundreds.
24 MR. BRAYACK: As you go deeper, it
25 gets less.

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1 Proceedings
2 A MAN: Have you bottomed out on
3 this location?
4 MR. BRAYACK: That is what we finally
5 did here.
6 A MAN: Are you planning on putting a
7 permanent well at that location.
8 MR. BRAYACK: Right now we want to
9 move to corrective measures study to evaluate
10 potential remedies and based on those remedies, you
11 know, see what needs to be filled. We could keep
12 studying this. We could just keep testing, but the
13 question is when do you get to the point where
14 you've collected enough data to make a decision.
15 MR. COLTER: What we'll end up doing
16 is evaluating alternatives with this particular area
17 in mind, and then we'll also have a monitoring
18 program associated with it. Probably several
19 permanent wells to monitor whatever system or
20 whatever decision we make just to long-term monitor.
21 What these are, these are vertical profile borings,
22 they are temporary. As part of any remedy, we would
23 put in something more permanent so we can go back
24 and sample on a regular basis.
25 We think basically we are in that

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1 Proceedings
2 phase right now. We could drill this probably 10
3 more times and come up with the same thing.
4 A MAN: That is what I'm saying. Put
5 a permanent well in there.
6 MR. COLTER: To get to that point, we
7 want to get into remedy discussions with the state.
8 Get out of the drilling one or two holes and.
9 A MAN: Right.
10 MR. COLTER: We don't see it moving.
11 So we will go out into our design, we'll reconfirm
12 this data so we can put an appropriate remedy in as
13 part of the design. So we will be back out here
14 doing sampling.
15 A MAN: Degradation products really
16 don't follow mathematically the concentrations of
17 TCA. Would you then assume that it's just expanding
18 as a gas into the interstitial areas between the
19 soil particles and is unavailable for analysis.
20 MR. BRAYACK: Most of the
21 contamination we have is at depth. In particular,
22 as you go further down, which means that there is
23 clean groundwater on top of it. So, no, I would not
24 expect it to.
25 A MAN: But you haven't accounted

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1 Proceedings
2 for where it went.
3 MR. BRAYACK: I'm missing your
4 question.
5 A MAN: Mathematically, if you look
6 at 12,000 and you look at the degradation products,
7 they don't account for where all that TCA went into.
8 You do know you're seeing bits and pieces of it.
9 MR. BRAYACK: What we are seeing is
10 that the source area is not moving. It is sitting
11 there.
12 A MAN: And it is degrading.
13 MR. BRAYACK: Very slowly, yes.
14 A MAN: But the degradation products
15 don't show up.
16 MR. BRAYACK: 1,1 DCA and 1,1 DCE.
17 A MAN: They don't add up to what is
18 lost mathematically. My question is maybe instead
19 of degrading, maybe it's just expanding.
20 MR. BRAYACK: It is expanding and
21 degrading, yes.
22 A MAN: But more expanding, right.
23 MR. BRAYACK: That is what the
24 evaluation does.
25 A MAN: Mathematically, it has to be

7.

1 Proceedings
2 expanding and it is outside the purview of your
3 analytical, of your focus.
4 MR. BRAYACK: Our focus is 2000 feet
5 away. Our focus for the source area has gone all
6 the way to the Peconic River.
7 A MAN: Where you haven't found it.
8 MR. BRAYACK: We found it close.
9 That is what we were talking about originally. Is
10 that we have gaps in the groundwater between the
11 source.
12 A MAN: Right.
13 MR. BRAYACK: And the downgradient.
14 If you have a source that is continuously leaching
15 contaminants, you expect to see a more or less
16 continuous plume. What we are seeing is clean zones
17 in between, which is very unusual.
18 A MAN: Do the ponds take the run-off
19 in there.
20 MR. BRAYACK: Yes.
21 A MAN: So that could be dispersing
22 the plume in different directions and making it
23 very --
24 MR. BRAYACK: Yes.
25 A MAN: That would explain the plume

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1 Proceedings
2 broken up this way, you get a lot of rain and
3 recharge and it scatters the stuff and.
4 MR. BRAYACK: (Nodding)
5 A MAN: Or it is still just there.
6 A MAN: It scatters it and makes it
7 more difficult to track it.
8 MR. BRAYACK: Right. That is why
9 this Southern Area, we are starting with basically a
10 two or three acre source area, a very small compact
11 source area, you know the data is not showing it is
12 moving much. More than likely the hydrocarbons are
13 holding it in place there. It is moving somewhat,
14 and it's probably biodegrading somewhat. That is what the
15 MNA tells us, there is degradation and/or
16 attenuation exceeding migration.
17 It is very likely that there are
18 slugs of contamination that moved through, they got
19 deposited in the one location and the next year a
20 different set of rain conditions came through and
21 they distributed a whole bunch of clean water
22 throughout there. But we are basically starting
23 with the one, the two acre source area and we're
24 looking at a 100 plus acre downgradient zone right
25 now.

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1 Proceedings
2 A MAN: Can you play what if?
3 MR. BRAYACK: Never.
4 CO-CHAIR HARE: Not in this business.
5 MR. BRAYACK: That's it for 6 and 7.
6 The only thing I skipped over and I think Jim
7 addressed that, was the Site 1 discussions. I don't
8 know if there was any other questions on the
9 EE/CA-Engineering Evaluation/Cost Analysis. The
10 EE/CA-Engineering Evaluation/Cost Analysis is up for
11 review and comment right now.
12 A MAN: Could I ask a question on
13 funding. Who pays for this, the Navy or Northrop
14 Grumman.
15 MR. COLTER: The Navy.
16 A MAN: That's because they own the
17 land.
18 CO-CHAIR HARE: The Navy is the
19 property owner.
20 A MAN: Do they get reimbursed by
21 Northrop Grumman since they're the folks that put
22 this in.
23 CO-CHAIR HARE: Payment. The
24 property owner is held responsible. If we determine
25 at some point in time, and we can't really do that

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1 Proceedings
2 until we have our arms totally around remedies and
3 costs and so on, if it is ultimately then determined
4 that we need to seek some reimbursement under cost
5 recovery, then we can do that at that time. Now,
6 from the total perspective of the property as a
7 whole piece, you know, originally we had 6,000
8 acres. Northrop Grumman did participate up front in
9 some cleanup of this property. You have to remember
10 that this is a small piece of the total piece of
11 property, most of which has already been cleaned up
12 and deeded over to the various receivers, Riverhead
13 being one, and of course the state and Veterans
14 Administration. So they did participate in this to
15 an extent with a majority of the acres.
16 With this last part of the cleanup,
17 if there is a determination that is to be made in
18 that area, then we would make it when we have all
19 the costs associated with this cleanup. Those are
20 all known, and then that becomes a decision that is
21 made at that time. So it would be premature for us
22 to say at this time what we would do in that area.
23 We would have to weigh what they had already done
24 and contributed to the whole total piece of property
25 and it becomes a bit complicated in the fact that

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1 Proceedings
2 usually you look at this from the standpoint that
3 there was an operator there was an owner and there
4 were other issues involved, also, that have to be
5 considered. So in a lot of properties, the answer
6 is probably, yes, that with a lot of properties,
7 cost recovery will be sought from an operator. It
8 depends on the situation. And each site or each
9 area, each facility, is different in that area.
10 You know, I have one facility, GOCO
11 facility, where the contractor just left. Didn't do
12 anything. And refused to do anything. Most
13 assuredly in that instance where the Navy then has
14 to do the total cleanup of that property, we will
15 probably seek.
16 CO-CHAIR JOHNSON: You do that
17 through the courts for the...
18 CO-CHAIR HARE: Well, we try to make
19 it a little bit friendlier than that at first. We
20 determine if there is, based on all the costs, if
21 there's a percentage that we feel is attributable to
22 the contractor, and then we usually notify the
23 contractor and try to negotiate with him.
24 If that is not a viable option, if
25 the contractor is not agreeable, then ultimately,

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1 Proceedings
2 yes, it would go to the courts.
3 Does that answer your question?
4 A MAN: It can't be answered in
5 essence at this point.
6 CO-CHAIR HARE: Not now it can't, no.
7 All those things have to be weighed, the previous
8 activity in the cleanup process, and then ultimately
9 this portion of the cleanup.
10 A MAN: I'm not trying to be cynical.
11 In other words it comes down to is it in the
12 interest -- an outfit that works with the
13 government, is it really in the public interest to
14 go after them. I guess it is political. I'm not
15 trying to be cynical, I'm trying to figure it out.
16 CO-CHAIR HARE: It really isn't that.
17 That part is not really as much of an issue as it is
18 you have to look at the total picture. We look at
19 this property as a total piece of property under
20 this particular GOCO. And we look at what did the
21 contractor do up to this point with that total piece
22 of property. The whole 6,000 acres? We look at,
23 we would look at the total cost of this last phase
24 of cleanup that Jim is doing now on this acreage.
25 We weigh that. We determine, okay, do we think the

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1 Proceedings
2 contractor still needs to make another contribution?
3 And then we might look at that in terms of, well,
4 maybe up to a certain percentage the answer is yes.
5 So then we would contact the
6 contractor and then we would begin those discussions
7 if that were to be the determination. So there are
8 a lot of things that go into it to make that
9 determination. And really that gets into, really,
10 that's when the lawyers take over at that point and
11 they really -- they work with higher level attorneys
12 in the Navy at the assistant secretary of Navy
13 level, and really that's when the determination is
14 made to do that.
15 MR. MAYER: For the foreseeable
16 future, it will come out of the Navy's cleanup fund.
17 CO-CHAIR HARE: Absolutely. That's
18 for sure.
19 MR. COLTER: I have a couple more
20 things on this.
21 CO-CHAIR HARE: Sure, go ahead.
22 MR. COLTER: These last two
23 presentations on Site 7, MNA, again, will be
24 incorporated into the corrective measures study.
25 Site 6 will be incorporated into a remedial -- RCRA

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1 Proceedings
2 facility investigation report. Both of those are
3 due to the regulators, the draft documents, in
4 December. So we are going to actually present this
5 to the regulators November 8th, get their feel on it
6 and then based on those discussions move toward
7 issuing those reports in mid December.
8 What I would suggest there was a
9 couple comments made, if we satisfactorily answered
10 them here? That's great. If we didn't and you're
11 not satisfied, I would send those to Sherry who can
12 then forward them on and we'll make sure that they
13 get incorporated somewhere into the document and we
14 can discuss them at the next meeting. If we did a
15 good job answering here, verbally, then that's
16 great. We we don't need to do that.
17 That's it for the presentations as
18 far as what we did in the summer and trying to bring
19 you up to speed since February. I guess we are
20 going to move into the action item review.
21 CO-CHAIR HARE: Debbie, do you have
22 any action items.
23 MR. COLTER: What I see here on our
24 action item list, most of this is things for Debbie
25 actually to do. Get information on new RAB members

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1 Proceedings
2 and update the database. The letter to the RAB
3 requesting continued participation. The one
4 I'm -- the one that was on my action item was the
5 chronology of activities for Calverton. Dave handed
6 out, everyone should have this packet of Microsoft
7 project tables. This is each site that the Navy is
8 working on. Most of which we talked tonight. Two
9 or three pages per site that outlines our schedule.
10 All the way out till remedy in place and long-term
11 monitoring. This is the effort that we have to do
12 once a year to establish our next year's budget
13 expenditures. At the same time, we look at what we
14 did and we cross that off the list. We look at what
15 we based on our schedule, what we think we can
16 accomplish in the upcoming fiscal year, which is now
17 2001. When those dates change, they obviously
18 affect all the dates in the out years. Our goal
19 with this, is to spend the money that Northern
20 Division is allocated and account for it. This
21 budget -- this schedule reflects some of the
22 management decision to move certain projects' dollar
23 value into the out years so we can keep a level
24 funding. It's not -- it basically balances the
25 budget.

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1 Proceedings
2 What really happens and what reality
3 dictates is based on the speed of this committee and
4 the regulators and the ability of the Navy to get
5 the reports out as we scheduled. In the out years,
6 it is possible to move some project up. If there's
7 other folks that are lagging behind. Those type of
8 decisions are made. Every year we do that type of
9 analysis. Each line item here is basically part of
10 the process that the Navy has to go through to
11 reach, either issue a contract, reach a decision,
12 put the report together, issue comments, respond to
13 comments, there's time in here for regulatory
14 review. So when you go through this, you'll see a
15 lot of line items and that may answer one of your
16 questions; Gee, why does it seem to take so long?
17 There's a lot of steps involved.
18 What I did, and this is the other
19 sheet you should have with all the dates. What I
20 did is I pulled out the dates that we plan on
21 submitting documents. I did this for the regulators
22 to try to give them a sense of what the workload is
23 going to look like from the Navy for this site. And
24 I just want out to 2002 because everything other
25 than that is conjecture at this point. As you can

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1 Proceedings
2 see Site 7, Site 1 and Site 2, all in December, we
3 are planning on putting together and submitting
4 putting together a report to the state and asking
5 for comments. Again, this schedule will be
6 determined whether we meet that date and whether the
7 regulators meet an appropriate date for comments.
8 All of this, we are not sure what's going to happen.
9 This is our best guess right now. It does give you
10 a sense of the workload that's coming up. As far
11 as reports submitted. So there will be an increase
12 between correspondence Navy RAB and regulators here
13 in the foreseeable future.
14 Site 610-B and the Southern Area, all
15 those dates up to the final RFI report that we have
16 planned for 26 April, we are going to package that
17 as one site. We are going to do Site 6, the Engine
18 Test House, which is downgradient, and the Southern
19 Area, which is further downgradient, that is going
20 to be one investigation report. How each of those
21 sites tracks after that, obviously there may be a
22 different remedy for Site 6 than there may be for
23 the Southern Area. Again, Site 10 may have a
24 totally different remedy. So the CMSes and the
25 decision documents, although they're shown here as

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1 Proceedings
2 the same dates, they'll probably track in some type
3 of different time frame. Again, out into the late
4 2001 and early 2002 time frame. It is conjecture at
5 this point, but this will give the regulators and
6 you guys a sense of what our workload looks like
7 over the next year, year and a half, trying to reach
8 decisions on a per site basis and implementing those
9 decisions into remedy.
10 As we are doing remedy for Site 7, we
11 will be making remedies at Site 2. Stabilizing bank
12 at Site 1, making other decisions on Southern Areas.
13 Doing a lot of work on concurrently on the off sites
14 concurrent schedule. Addresses action item that the
15 RAB wanted to see. If I were to update this in six
16 months, it would probably look a little different.
17 We could do that and will do that if that is deemed
18 necessary by the RAB.
19 A MAN: I think it would be. And
20 maybe also include the work that you've done. In
21 those cases where you have actually done field
22 operator systems, why not include that as well.
23 MR. COLTER: We could, it turns into...
24 five or six pages per site. It gets a little. What
25 we've done, we've done. I think what's more

8

1 Proceedings
2 important is what we plan to do and when we plan to
3 do it.
4 A MAN: The RAB in our discussions
5 with the steering committee, we are trying to figure
6 out how well you are doing from time to time. So
7 one of the things to do that is to kind of compare
8 what you said you were going to do with what you
9 actually did. So I was wondering if you might able
10 to do that for 2000 and then anticipate, based upon
11 the budget and funding you did get for 2001, kind of
12 layout the plans.
13 MR. COLTER: For 2001 and 2000 and
14 2002, which are basically the closest fiscal years,
15 this schedule represents the funding that is
16 available to me.
17 A MAN: This should be real then.
18 MR. COLTER: It is real. We're only
19 tweaking it by whether we make our 16 December date
20 and whether the regulators make their 16 March date.
21 Whether -- if those are missed by a couple weeks, it
22 is still good. If we start missing by a couple
23 months, then we are not -- you're going to see
24 something different. But this budget right here
25 reflects the money that has been allocated to

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1 Proceedings
2 Calverton for 2001 and 2002.
3 A MAN: Good, okay.
4 MR. BRAYACK: Bill, one other thing,
5 these Gant charts, action that has been done. This
6 is current through approximately now.
7 I handed to Sherry actually a three
8 page summary of all these so you could line them
9 straight up and down. These are the full size EVS
10 drawings.
11 MR. COLTER: That's all I had.
12 MS. COHEN: Action items, the two I
13 have is to get information to Don related to the
14 analysis.
15 MR. COLTER: For Site 7.
16 MS. COHEN: For Site 7.
17 The other one is Don might have to
18 check on the mailing situation.
19 CO-CHAIR HARE: Yes.
20 A MAN: The first one we said we'd
21 like to have at the RAB meeting, not just separate
22 mailing to Don.
23 MS. COHEN: Right, okay.
24 CO-CHAIR HARE: That's going to be,
25 that would be an agenda item.

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1 Proceedings
2 MS. COHEN: Okay. Agenda item.
3 CO-CHAIR HARE: That would be an
4 agenda item for the next meeting.
5 In that regard, are there other
6 agenda items that anyone knows of at this time?
7 And you don't have to -- we don't have to decide
8 exactly tonight but if there are some other agenda
9 items. I want to in the future stick closely to the
10 published agendas. When we send out an agenda, I
11 think we need to stick to that agenda when we come
12 to the meeting so we stay focused and on track. But
13 at any time between this meeting and I would think
14 30 days, 30 days prior to the next meeting, Debbie?
15 If you come up with agenda items that you think
16 would be viable, if you can get those to Debbie or
17 to Jim, either one.
18 MR. COLTER: We are trying real hard
19 to.
20 CO-CHAIR HARE: Get those items on
21 the agenda.
22 MR. COLTER: We are trying to
23 set -- get the RAB invite letter out and set the
24 agenda, 30, three to four weeks before. That way we
25 know what we are publishing in the paper and things

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1 Proceedings
2 like that. If they come in later like that, they're
3 hard to incorporate.
4 CO-CHAIR JOHNSON: Let's put a
5 discussion on the cap proposal.
6 MR. COLTER: Is Jean going to submit
7 that between now and then or do you want to present
8 it cold at the next meeting?
9 There are -- as I did that
10 presentation back in '98 or something about eligible
11 and ineligible, we would like to take a look to make
12 sure it is an eligible project before we get too
13 heavy into paperwork.
14 CO-CHAIR HARE: In fact I would
15 recommend if you have the proposal together, you
16 probably need to send it into Northern Division so
17 they can evaluate it.
18 CO-CHAIR JOHNSON: Right.
19 CO-CHAIR HARE: There is very strict
20 criteria involved in that.
21 CO-CHAIR JOHNSON: One of the
22 criteria was it had to be moved forward by the RAB
23 itself. And I think that is kind of why we said we
24 would present it at a meeting.
25 CO-CHAIR HARE: That's fine.

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1 Proceedings
2 MR. COLTER: I want a quick glance
3 to see if it is eligible.
4 CO-CHAIR JOHNSON: I'll have Jean get
5 in touch with you. She's done a lot of work on it.
6 We've met twice on it. But she has everything.
7 MR. COLTER: You all still have those
8 books from that presentation, right? If you follow
9 that, the TAP handbook, you should be all right.
10 CO-CHAIR JOHNSON: I do have one
11 other action item. I was wondering if it would be
12 possible for the Navy to write a thank you note to
13 Warren's lodge thanking him for use of the facility.
14 I know the steering committee will do that. They
15 have been kind enough to let us come in and use the
16 facility.
17 CO-CHAIR HARE: Absolutely. They
18 have been very good about letting us use it.
19 CO-CHAIR JOHNSON: We appreciate it.
20 CO-CHAIR HARE: Very good.
21 CO-CHAIR HARE: I'll be glad to do
22 that.
23 CO-CHAIR JOHNSON: Great.
24 MS. HARE: Are there any other action
25 items we missed, maybe?

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1 Proceedings
2 If not.
3 A MAN: What is the proper procedure
4 for asking rhetorical questions, here.
5 CO-CHAIR HARE: Rhetorical questions.
6 CO-CHAIR JOHNSON: Just shout them
7 out.
8 CO-CHAIR HARE: Depends on what they
9 are.
10 A MAN: I just have something that
11 is bothering me, here. This is not offered as a
12 criticism. The Navy had a facility there for a lot
13 of years.
14 CO-CHAIR HARE: Yes, we do.
15 A MAN: In those years, there was
16 unknown quantities and no records I'm sure were kept
17 of solvents -- let's focus on solvent for a second.
18 Solvents used. Being a little more familiar with
19 the Republic facility in Farmingdale, I know that
20 there was unregulated dumping of literally tens of
21 thousands of gallons in 20 years, in 30 years, in 40
22 years. My question is, you don't seem to to have
23 accounted for a very small section.
24 CO-CHAIR HARE: Let me.
25 A MAN: Let me finish the question.

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1 Proceedings
2 CO-CHAIR HARE: I thought you were.
3 A MAN: My question is, TCA acts
4 like a gas in most instances so a lot of that stuff
5 is going to expand, as I stated before, into the
6 interstitial area between particles, hang there and
7 degrade. It's not particularly water soluble, it's
8 not going to end up down below for the most part.
9 What bothers me is two things:
10 One is there seems to be a huge
11 amount of TCA unaccounted for. TCA was used to
12 remove organic contamination from metal surfaces.
13 In this instance it seems to be no accounting for
14 the organics, the fuels, the hydraulic oils, the
15 heavier weight lubricating oils that were used to
16 remove. Plus it is known to pick up metals like
17 cadmium, chromium, off the metallic surfaces of the
18 parts that came in.
19 It occurs to me that these
20 contaminants have to be some place.
21 CO-CHAIR HARE: Are you talking about
22 the areas that we are looking at now or are you
23 talking.
24 A MAN: In general.
25 CO-CHAIR HARE: The areas of the

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1 Proceedings
2 property that have already been cleaned up.
3 A MAN: I'm talking about.
4 CO-CHAIR HARE: Are you talking about
5 the operational areas of the facility.
6 A MAN: I'm just talking about the
7 whole shooting match.
8 CO-CHAIR HARE: Because the vast.
9 A MAN: I apologize for coming in at
10 this late date and asking these questions.
11 CO-CHAIR HARE: We probably should
12 talk off-line maybe a little bit. If the RAB wants
13 to go ahead and close the meeting we could continue
14 to talk about this.
15 CO-CHAIR JOHNSON: I don't mind
16 hearing it.
17 CO-CHAIR HARE: What I was going to
18 say if you're talking about the original areas,
19 those areas, all of that was addressed. You know,
20 the entire facility, before we could pass a deed to
21 the Town of Riverhead, we had to go through a
22 complete investigation. Northrop Grumman at that
23 time was going through that investigation with us.
24 So those areas have already been addressed with
25 those operational areas, which I think is probably

9.

1 Proceedings
2 for the most part, anyway, the areas that you may be
3 speaking of.
4 A MAN: Okay.
5 CO-CHAIR HARE: If you wanted to look
6 at specifics, I guess, you could go back to those
7 documents that were generated during that
8 investigation of that portion of the property.
9 A MAN: To your memory, do those
10 documents have a lot of TCA? TCA, chromium, copper,
11 all those things.
12 CO-CHAIRMAN HARE: Couldn't even tell
13 you right now off the top of my head.
14 All those documents I assume, Jim,
15 are still in the library. Andrea is shaking her
16 head, Andrea Lohneiss. I would recommend that you
17 go to the public library and take a look at those
18 documents.
19 A MAN: Okay.
20 CO-CHAIR HARE: I don't think that is
21 something I'm going to go back and look at at this
22 late date, because that area is closed, and we
23 deeded the property over.
24 MR. COLTER: Rest assured in the
25 transfer of property, that we don't claim to give

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1 Proceedings
2 you a money back satisfaction guarantee that we
3 found every drop of contamination.
4 CO-CHAIR HARE: Nobody can do that
5 with any property.
6 MR. COLTER: Our programs aren't
7 funded and set up to do that.
8 I'll answer your what if question.
9 If during the town's redevelopment of that property,
10 they discovered areas that the Navy or Northrop
11 Grumman may have missed while they're redeveloping
12 it, the federal law that governs property transfer
13 and there is even a covenant in the deed that says
14 that the Navy comes back on and addresses that
15 situation. We have to deal with the town as far as
16 property access, but we don't have to get formal
17 property access, because we already have that by
18 them signing the deed and covenants that says if you
19 find something, you have to give us access to come
20 back on and address it. So that's your biggest what
21 if, and that is the best guarantee the government
22 can give you. It is federal law.
23 Sure if somebody is developing the
24 property and finds something, I'm sure Andrea will
25 be on the phone.

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1 Proceedings
2 CO-CHAIRMAN HARE: I will tell you
3 this... I know there are other people have come to
4 me on the side and they have said we think that
5 North -- just skipped out and didn't do their share.
6 I can tell you this: I have more cooperation out
7 of this contractor and more voluntary effort out of
8 this contractor, a willingness to step up and
9 participate in the cleanup program. I have some
10 contractors that one, that just walked off the
11 property and said see me in court. And I have had
12 others say, no, we will not participate during the
13 cleanup phase. Whatever you come up with after it
14 is all over, then you can come talk to us about
15 that.
16 A MAN: My question was never
17 intended to be a disparaging remark.
18 CO-CHAIR HARE: I'm sure it is not.
19 A MAN: My question is this is such
20 a complicated hydrogeological, area that some place
21 all of those tens of scores of years of dumping
22 unregulated into the ground has got to be someplace.
23 MR. COLTER: If that indeed happen.
24 Grumman did have records as far as your process.
25 CO-CHAIR HARE: I don't know that

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1 Proceedings
2 you're ever going to be able to be 100 percent sure
3 that you've ever addressed everything. That is true
4 of anybody's cleanup program.
5 It would be true of Brookhaven. It
6 would be true of.
7 A MAN: Very true of Brookhaven.
8 A MAN: You're comparing Republic
9 and Grumman and there is a very big difference.
10 Let me just kick in here, if I might.
11 I worked at the Calverton site back in the late
12 '60s. The Calverton site was a Final Assembly Plant
13 78. There was no or very little if any metal
14 pickling going on there. There was none of that.
15 So the solvents would not have had any real intimate
16 contact with the metals as Don suggested. I know
17 where Don is coming from. He has a valid point.
18 The TCA that is turning up is a known degreaser.
19 TCA would have been used in prep for final painting.
20 So you probably have paint solvents and TCA.
21 A MAN: Hear what you're saying they
22 didn't show up.
23 A MAN: They found the TCA.
24 A MAN: Everything you removed for
25 final prep has not been found.

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1 Proceedings
2 A MAN: It wasn't all thrown on the
3 ground.
4 You're thinking of Republic.
5 Republic was very irresponsible. I recognize you're
6 saying, when you're comparing Republic and you're
7 comparing Calverton. The mentality at Grumman and
8 the mentality at Republic is night and day. I'm
9 talking about leadership of both companies.
10 Republic was very irresponsible.
11 A MAN: I would have to agree with
12 you.
13 A MAN: I think this gentleman can
14 back me up with the mentality at Grumman.
15 A MAN: I had occasion to visit the
16 paint shop on rare occasions when I worked there, it
17 was a neat, clean operation. I have to admit.
18 A MAN: It was against the law.
19 A MAN: No, it wasn't against the
20 law. I think Grumman had a more serious problem
21 with their fuel. That is where they were lax. I
22 can't address it because I didn't witness any of
23 that firsthand.
24 A MAN: That was accidental more
25 than intentional.

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1 Proceedings
2 A MAN: My question was never meant
3 to be...
4 A MAN: I'm not defending Grumman or
5 anyone else.
6 A MAN: Accidental or otherwise. If
7 you do some simple mathematics, here, you haven't
8 accounted for but a.
9 CO-CHAIR HARE: But I don't know that
10 I can say that it has not been. Because if you go
11 back and you look at the cleanup program with the
12 other areas of the property, a lot of what you think
13 has not been accounted for may have been accounted
14 for. So I think you have to look at this as a total
15 issue and not just focus it on one part. We are
16 talking about 300, what, acres, here. As opposed to
17 6,000. And at least almost 3,000 inside the fence
18 line, which was the operational area. So I think
19 you have to consider that whole, at least consider
20 the area that was operational. And look at what was
21 done in that cleanup portion before the deed was
22 passed. And then I think you'd get a better
23 perspective.
24 A MAN: Okay.
25 CO-CHAIR HARE: Okay?

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1 Proceedings
2 Closing remarks. I'm going to thank
3 everybody for coming. You might be able to catch
4 some of the ball game.
5 Just by way of saying that if we
6 follow the quarterly base for the next meeting,
7 November, December, January, it is probably going to
8 be somewhere I would think the latter part of
9 January and we'll track to that. And then we can
10 let people know exact dates.
11 (Time noted: 9:20 p.m.)
12 -o0o-
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98

1
2
3 C E R T I F I C A T E
4
5 STATE OF NEW YORK)
6) ss.
7 COUNTY OF SUFFOLK)
8
9 I, JENNIFER MAUE, a Registered
10 Professional Reporter, do hereby certify that the
11 foregoing Matter, taken at the time and place
12 aforesaid, is a true and correct transcription of my
13 shorthand notes.
14
15 I further certify that I am neither
16 counsel for nor related to any party to said action,
17 nor in any wise interested in the result or outcome
18 thereof.
19
20 IN WITNESS WHEREOF, I have hereunto set
21 my hand this 11th day of February, 2001.
22
23
24
25
JENNIFER MAUE

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