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2	Naval Weapons Industrial Reserve Plant		
3	Bethpage, New Yo	rk .	
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5	Restoration, Advisory Board		
6	Regular Meeting		
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9		7:00 P.M. November 5, 2003	
10		Bethpage Community Center Bethpage, New York	
11	PRESENT:		
12 13	Joe Kaminski	United States Navy Naval Air Systems Command	
14	Dave Brayack Judy Lamey	Tetra Tech NUS	
15	Jim Colter	Northern Division, NAVFAC	
16	Steven Scharf	NYS DEC	
17 18	RAB Members Community Members		
19	Community Members		
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CO-CHAIR KAMINSKI: This is the Bethpage RAB meeting. Today is whatever day it is. Apologize for starting late, there was a rain delay. We expected to start at six and started at 6:30. ran over meeting. First thing to do, I'm Joe Anybody who is a RAB member needs to Kaminski. move up to this table right now. The way the RAB works, is the RAB members sit up at the table. Anybody who is in the audience sits in the back so we know who we are talking to. The RAB is the community representatives. We like to think that the people who are taking the time and the effort to be members of the RAB are representative of the community and every one of you who is a RAB member, represents hundreds and hundreds of other people. That has been proven now any number of times. We'd like you to be here. I think the rain has delayed a lot of people. So we'll get started a little late. As people trickle in, that's fine. With the table wet and everything else.

(Brief recess)

CO-CHAIR KAMINSKI: This is the
Bethpage RAB, thanks for being here. It is the
regularly scheduled meeting, November 5th, Which we

didn't used to do, we used to do whenever it seemed like enough stuff accumulated to have a RAB meeting, with -- with the experience that the Systems Command gained in Texas with regular RABs, we found it was a better idea. Sometimes you have a few things to talk about, sometimes you have a lot of things to talk about. Today we are somewhere in the middle of things to talk about. At times we'll have long meetings and at times we'll have shorter meetings.

Standard issues, standard details of the meeting, are the approving the minutes of the last meeting.

MR. COLTER: We sent transcripts out without paraphrasing them. In response to the request at the last meeting.

MR. COLTER: Did you get the transcript.

A WOMAN: Yep.

MR. COLTER: I know Mike didn't.

MR. GRELLO: I just got it today.

I'll review it.

A WOMAN: Make a motion to approve the transcript if somebody will second it.

MR. SCHARF: I will second it.

That's done.

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Backing up a minute, let me congratulate everyone who won yesterday, including one of our members, I guess is just out celebrating but that's okay.

CO-CHAIR KAMINSKI:

Legislator Mangano is one of the RAB members, he did win.

MR. GRELLO: So did John.

CO-CHAIR KAMINSKI: Failing to find anymore anecdotes for congratulations to you, I have to get right into the agenda. Which I'll get a copy of. And without any further ado we'll get right into it.

Jim, why don't you go into the agenda.

MR. COLTER: The next item on the agenda, regards the status of the Navy's off-site groundwater efforts. At the last meeting, we had an action item to update the question of implementation, and that's what I just handed out.

Just a minute ago.

As you can see, basically, up on top, the installation of the outpost monitoring wells, that's what we are currently involved in and some of you may have seen the drill rig out in your

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2 neighborhoods. We've gotten calls and we've talked 3 to a lot of local neighbors so we're pursuing completion of that. In a second, David Brayack 5 from Tetra Tech NUS will give a little bit more 6 detailed accounting of what we have accomplished in 7 the past three to six months, and where -- what we 8 have left to do. But if you look at item eleven on 9 the schedule, install outpost well clusters, we 10 started that effort back in early June of 2003. 11 it looks like if all goes well, we should be done by 12 the end of November. What I'll do now is turn the 13 meeting over to Dave and he can go through, like I 14 said, what we've done so far and what we have left 15 to do.

MR. BRAYACK: Basically, we started in early June. We have been installing monitoring wells since then.

Some of the access to the monitoring wells was based on property access between the Town of Oyster Bay and the Town of Hempstead.

But basically, just to orient you, this is the Navy property in this area here? The Grumman property extends out further. What we do know, and Hooker Ruco is in this area here are, too.

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But there is a groundwater plume that's starting here and moving to the south.

Grumman has active operations going on on-site to capture it at the property. The Navy is in the process of installing a remedy in this area, here, this has been an isolated hot spot. But mostly we're looking at some contamination at fairly low concentrations. It is extremely widespread and just as a point, the contamination is not the entire thickness of the aquifer. It is generally present at varying thicknesses. Generally it starts at 200 feet below the ground surface and extends to three or 400 feet below the ground surface. There are a series of water district wells down in this area, there's a Levittown water district, which is to the Based on computer models, the contamination in this area is never projected to hit that, at least within the next 30 years.

There's a New York Water Supply system just to the south right here. This area has also been a concern because we did find some levels of contamination just to the north of that. installed monitoring wells specifically to monitor the contamination in that area. We have the South

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this is the Seaford Oyster Bay Expressway running down along here. There's the South Farmingdale water district, here. And then there's another set of South Farmingdale Water District wells over here. This is the Bethpage Parkway. This area, here, is about the width of the groundwater contamination. Once, again it is not continuous, it is sporadic. It is generally low level.

What we did was installed a series of monitoring wells, that based on computer modeling, are located between where the contamination currently is, and where these water districts pull their water from.

The idea being these wells would be used to monitor over time. They're located so that they give approximately a five year warning time.

Meaning that if contamination shows up in this well, it is then projected at about five years from now, some of the contamination may enter the water districts, it may not. And at that point, the Navy has agreed to enter into negotiations with the water districts to make sure that those water districts remain protected.

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about is predominantly volatile organic compounds, it is very easy to treat and remove from the groundwater. To date, we installed two monitoring wells here, they are called OW, Outpost Wells 41 and 42.

Just for your information, 41 is 692 feet deep, that's from the ground surface, it goes down 692 feet. Monitoring well 42, goes to 764 feet. So these wells are extremely deep in this area.

Outpost Cluster Number 3, there's two wells there, they're installed to 516 feet and 647 feet.

Those have been installed. Outpost Well 2, they're shallower, they're 400 feet and 495 feet.

And finally, at Outpost 1, 2, and 3, we finished installing Outpost Well 1-3, last week. We finished installing Outpost Monitoring Well 1-2 just yesterday. And Outpost Well No. 1, is scheduled to be installed and be in by the middle to end of next week. Once the wells are in, they need to be developed. As we have been installing the

wells, when we get the well installed, there's some formation fines. They have to be pulled out of the wells.

We have sampled one of these two
wells. We have a problem with one of these wells
and we have to go in and fix it right after
Thanksgiving. We have installed these. To date, we
did find one trace level of volatile organic
compounds in one of these wells. We went back out
and resampled it because sometimes we get false hits
and this -- I just got the results back a couple of
days ago. It looks like the first sample result was
a false hit. The second sample which was sampled
more like it should be, was perfectly clean.

MR. GRELLO: Are you doing split samples on these, so we know if there's laboratory error.

MR. BRAYACK: We collect trip blanks. With trip blanks, if there's a laboratory error it shows up there.

 $$\operatorname{MR.}$  SCHARF: What was the contaminant  $% \operatorname{MR}$  that was in the first sample of well three, was it.

MR. BRAYACK: It was Well 3-1, benzene at two parts per billion. Benzene is not

one of our site contaminants.

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As we develop these wells, we are using, you know, fuels. The fuels go into the air and we have seen fuels, benzene, toluene, sometimes affect our groundwater samples. That's why we went out the second time. We are planning on going out a third time within another week or so, another couple of weeks, and resampling it a third time, just to confirm, you know, the previous result.

So, based on the modeling, the modeling had actually projected that this area would be contaminated. Based on the results, we know that the model is somewhat conservative. Based on these results we know that the contamination is actually north and that there's not as much urgency in that area as we had first thought.

These are all preliminary results. We will be issuing this in a report, yet, but that's what we found so far.

These wells over here, they'll be sampled within the next two or three weeks but of all these wells we've been installing as outpost monitoring wells, it was the three clusters that we were the most concerned with. And we have two

1	Proceedings
2	non-detects for any type of site contaminant so far.
3	So that's some level of comfort, there.
4	We expect, I think Jim mentioned the
5	end of November, we will be done with this outpost
6	well cluster by then. We had a little problem with
7	one of the screens on this, we are going to go back
8	in and fix it. So our end date is really more like
9	the first or second week this December.
10	Then this will complete one aspect of
11	the ROD.
12	CO-CHAIR KAMINSKI: Will the report
13	be issued to the members before the next meeting?
14	Will you get it cranked out by then.
15	MR. BRAYACK: The report is scheduled
16	to be done probably end of January time frame.
17	CO-CHAIR KAMINSKI: You all will
18	probably see it before we meet again, we can update
19	it.
20	MR. BRAYACK: Okay. There's been
21	some discussion about some of the southern
22	libraries, this would be one of the records that
23	goes into it.
24	MR. COLTER: Any questions on the
25	Yes, ma'am?

Yes, ma'am?

1	Proceedings	
2	A WOMAN: Are these monitoring wells	
3	south of the turnpike or north of the turnpike?	
4	MR. BRAYACK: The Hempstead Turnpike	
5	runs right across about the middle.	
6	A WOMAN: Yeah.	
7	MR. BRAYACK: For reference, this is	
8	the Southern Parkway. The monitoring wells are	
9	roughly a third to a half a mile away between those	
10	two.	
11	A MAN: How many miles from Hempstead	
12	Turnpike.	
13	MR. BRAYACK: The question is how	
14	many miles.	
15	A MAN: From Hempstead Turnpike are	
16	the wells, approximately?	
17	MR. BRAYACK: Three or 4,000 feet.	
18	A WOMAN: Is there anything north of	
19	Hempstead Turnpike.	
20	MR. BRAYACK: There is some known	
21	contamination up in this area, as well.	
22	A WOMAN: Would that be west of	
23	Stewart Avenue?	
24	MR. BRAYACK: It would be west of	
25	Stewart Avenue. Right now, the contamination is	

1	Proceedings
2	very roughly bound by about Wantagh Parkway, and
3	Bethpage State Parkway is a little too far east,
4	maybe a little closer to the Seaford Oyster Bay
5	Expressway. But groundwater from this area flows to
6	the south and just a little bit east. So anything
7	west of.
8	A MAN: You mean Wantagh Avenue not
9	Wantagh Parkway.
10	MR. COLTER: Right, Wantagh Avenue.
11	MR. BRAYACK: Yes, Wantagh Avenue.
12	A MAN: Wantagh Parkway is another
13	few miles to the west. You don't want to be over
14	there.
15	A MAN: What concentrations were you
16	founding there when you took the samples?
17	MR. BRAYACK: We got one detection of
18	benzene at about two parts per billion.
19	CO-CHAIR KAMINSKI: We don't think
20	that's a detection, though.
21	MR. BRAYACK: That is correct. The
22	laboratory found benzene. Like I said, any of the
23	fuels.
24	A MAN: Just benzene, nothing else.

MR. BRAYACK:

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Just benzene, nothing

2 else.

MR. SCHARF: Keep in mind these are outpost monitoring wells, where we went ahead of what we project where the plume is. So we put those wells in there to monitor that before it gets to the municipal wells. And in addition to that, Tetra Tech put in a whole series of vertical profile borings down 800 feet, over about a year period, that was about two years ago.

MR. BRAYACK: Yes.

MR. SCHARF: That was an extensive effort to delineate, which turned out to be much further than we had thought, but still fortunately not far enough yet to affect the wells south of Hempstead Turnpike.

CO-CHAIR KAMINSKI: We consider the leading edge of the plume at five parts per billion for detection.

MR. BRAYACK: As far as the outpost monitoring wells are concerned, there is an action level of between .5 and 1.5 parts per billion. The objective is to protect the water districts at the detection limit.

CO-CHAIR KAMINSKI: Okay.

MR. BRAYACK: Which is .5 parts per billion.

CO-CHAIR KAMINSKI: In the known plume area we have readings from, detections all the way up to the hot spot, which is very, very contaminated, that we are dealing with separately.

MR. BRAYACK: There are places in particular on the Grumman property where they are routinely pulling out 500 to a couple thousand parts per billion.

This hot spot area here, it is a fairly well-defined area. Has a maximum of, I believe, one or 2,000 parts per billion. Anything south of the Hempstead Turnpike, is much lower, maybe 100 parts per billion. There's a couple stray hits down to, you know, the majority of the samples are clean. So as we are sampling down over 800 feet, we may collect 25 or 30 samples and we may find one or two samples at ten or 12 parts per billion.

MR. GRELLO: This is 100 parts per billion at the turnpike area, at what depth, approximately?

MR. BRAYACK: At the turnpike, the

Proceedings 1 majority of what's down here starts at perhaps a 100 2 to 150 feet below ground surface, which is fifty to 3 100 feet below the water table, and it goes to maybe two, or at the most, 300 feet below the ground 5 surface. The water districts generally pull six to 6 hundred feet. There's a lot of vertical buffering 7 in there, as well. 8 MR. GRELLO: The 500 to 2,000 on the 9 Grumman site on the hot spots what's the depth on 10 11 those. 300, 400 feet. 12 MR. SCHARF: MR. BRAYACK: I think three to four 13 hundred feet, maybe 500 feet. 14 MR. GRELLO: Three to five. 15 Don't forget there's a 16 MR. COLTER: containment system at the Grumman southern boundary 17 that prohibits that from moving off-site. 18 MR. BRAYACK: That containment is 19 three to 500 feet as well. 20 MR. SCHARF: Some of the 21 contamination that migrated onto the site from the 22 23 Hooker Ruco site.

CO-CHAIR KAMINSKI: It is all going

to get washed away tonight.

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MR. COLTER: That's where we are at with the first item, the installation of the outpost wells, where as David said, we are nearing completion of that.

What Dave mentioned also, was the hot spot, what we designated as the GM38 area. It is an area where we have up to 3,000 parts per billion of contamination. So it is significantly higher than the remainder of the plume that David said is around from anywhere from 10 to 200. So part of our remedy is to address that site and take the mass, as much mass as we can, out of that area. As we mentioned at the last RAB meeting, we gave a little presentation about the siting of the remedy and some of the options that we had in front of us and we ultimately chose the area that they have pointed out, that's near the intersection of Broadway and Arthur.

What we have been doing, is talking a little bit with the Town of Oyster Bay, about the possibility of using their property. They have been receptive to that. So what I've laid out here, starting at item 17, is laid out a little bit more of a detailed outline of the steps that we have to

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go through to design the remedy and then ultimately construct the remedy.

Basically, from item 18 down to item 27, we've completed that. The preparation of a basis of design report. And that was handed out a couple meetings ago. It was done by Tetra Tech NUS and it basically just outlined the schematic of what's going to be involved in this GM38 remedy and the location that we have chosen. It incorporates the model result that Arcadis Gerrity Miller had been doing for us, with the simulation of how many wells, the location of wells, the treatment plant, and estimated times to clean space up, those type of Where we are at right now is basically item 29. We're under the construction of the GM38 remedy sub-task.

What we have been doing since the last RAB meeting is working with our construction contractor, who is Tetra Tech FW and they were formerly Foster Wheeler. They have been bought out by Tetra Tech, but it is basically the same company that's been involved in this ever since we decided to take on this action. So there's not -- there's no new learning curve. It is just a name change.

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One of the first items we have to do is we have to conduct a survey of the GM38 treatment We have to do this for two reasons: area.

One, we need the survey information so we can start putting together site plans for the design. Secondly, we need legal descriptions of this area, so that we can write up real estate agreements between the Navy and the town, that states where we are going to conduct our work and how we are going to conduct our work, and things like that.

At this point, we haven't received our FY-04 allotment of environmental cleanup funds from Congress. We usually don't get them first quarter. It usually is late first quarter or even second quarter. But what we are doing now is basically work on contracts and getting proposals from different surveys and different drillers and getting everything kind of aligned so that when the money comes in, we can make a contract award. Again, one of the first things we need to do is conduct that survey. I'm hoping to do that starting in the first of December. I'm hoping we get some money this month that we can at least make an award

to a survey contractor and get the ball rolling there.

It will probably be from the time they go out to the field, to come back and provide drawings and submit the drawings to us. We are probably looking at a deliverable date of about mid-January to get some type of drawings and legal descriptions from the surveyor.

Following that process, once we receive the survey drawings, I'm going to skip down to item 32, we are going to start the real estate process at that point with the Town of Oyster Bay. We anticipate that being a pretty lengthy process. You'll see I have till July 1st in there. It's a very cumbersome process with how real estate -- and I'm not a real estate expert, so I'm not going to try to explain all the details that go into that.

But while we are doing all that,
while we are doing our surveys and working with the
Town of Oyster Bay, we were asked also to conduct a
neighborhood workshop for the residents in that
area to let them know what's going on and what they
can expect as far as construction and time frames
and things like that. That's the other reason we

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would like the survey drawings, so we can get an accurate picture of what their neighborhood looks like when we use that to make some posters of the area to help geographically explain what we are doing.

I talked to Steve a little bit about what he thought would be a good time. We had the elections coming up and now we have the holidays coming up. We don't have our surveyor under contract yet. What we kind of threw out is a date and this isn't even published, it is not set in stone, but for scheduling purposes we are looking at sometime in early February. February 4th or something like that. But it looks to be in February we'll have some type of community workshop out there.

MR. SCHARF: Also you may want to mention, Jim, you may want to combine that with an overall project review to the public, of a poster session with the overall Northrop Grumman, and the Navy project, so people can ask any questions that they feel are appropriate or just get information.

A WOMAN: Are you going to hold that here.

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MR. SCHARF: We are not sure where. It might be at the Bethpage High School.

MR. COLTER: We'll probably do it at the junior high school since it is close to the neighborhood. It is going to be a poster session, it is going to be a walk-through, we'll have 15 or twenty posters set up and people can walk through. We'll have consultants and Navy personnel, state personnel, manning posters, answering questions. is not going to be a formal sit down computerized presentation. It is going to be informal, just walk through ask any questions you have.

MR. GRELLO: Will you have a public comment thing set up so people can talk or are you going to let people run wild.

A WOMAN: People are going to ask the same questions over and over again.

Why don't you have a MR. GRELLO: forum where people can ask the questions? Otherwise they'll all ask the same questions. Usually the high schools are better set up for that.

MR. SCHARF: To answer your question, when we had the proposed remedial action meeting, we had a formal meeting and a forum where people could

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stand up and ask questions and we had a 2 3 stenographer, as we have tonight, to take the minutes. After that, we had the poster session at 4 5 the middle school and it worked very well, it went 6 from the beginning of the site history up to the 7 present with all the goings-on, all the current activities, all the design work that was happening. 8 9 And everybody that came through had all their 10 questions answered, and when they were satisfied 11 they got the answer they needed, or they met the 12 people that could get them the answers to the 13 questions that they had.

MR. COLTER: The decision basically that was back in December of 2000, was the formal public hearing and public comment period, asking for comments at that time.

At this time we wanted to do something informal and target those neighbors that are going to be impacted and keep it informal. It is not going to be a public meeting.

(Whereupon, Mr. Mangano joins the proceedings)

MR. COLTER: How you doing, Ed. Congratulations.

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MR. MANGANO: Thank you very much. Sorry I'm late.

MR. COLTER: Continuing on with our schedule for the construction. After -- well, at the same time, again that the real estate process is being done with our real estate people in the Town of Oyster Bay, Foster Wheeler will be performing some site work to collect some data that you have to do when you do a design of any building or system. And one of those things is the geotechnical investigation. Basically they're going to go out and take soil samples and things and figure out what type of soil was out there, what type of foundation can you build, how much can this foundation support. Because we are going to be building a treatment plant with heavy equipment. So we are going to be doing geotechnical work out there, which is going to ben incoporated into the design of the treatment building itself.

Another field effort that we'll have to do is what we call predesign groundwater investigation. That's basically putting in the extraction wells, where the model predicted they should be, installing monitoring wells around this,

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2 and doing a pump test to actually find out what are 3 the physical characteristics of the aguifer and see if that matches what the model is predicting. 4 5 model is good to get you in the ballpark but now we 6 have to actually get in there and see what the 7 aguifer characteristics are and to see if we can 8 meet the pumping rates that we have to meet in order 9 to agree with the model. So -- that's all part of real estate also. We'll have to get agreements for 10 11 the well locations and things like that. So there's 12 a lot of up-front work that has to be done. At that point, Foster Wheeler, after installing all of that, 13 14 will conduct a treatibility study, that's the pump 15 test.

After they collect all of that geophysical data and groundwater data, then they'll start doing their design or what we call a draft implementation plan. If all goes well and the funding comes in and the schedule goes off the way I have it here, we should be seeing some type of draft design or implementation plan sometime around early September of 2004. We'll get that plan or design reviewed by the RAB and regulatory members. And hopefully put out a final plan this late October,

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and then we'll basically have the winter to finalize everything, obtain any construction permits that we have to obtain and hopefully by the next good construction season, starting in March of 2005, we will be out there putting the treatment building up and putting in the air stripping tower and getting the system constructed.

When would be a MR. GRELLO: projected start-up, to be able to stay on schedule.

MR. COLTER: Probably it would take about it looks like maybe 125 working days, five days a week. The remedy, the system should be constructed and final construction by sometime September of 2005 and start-up would be soon after that. I think that's a six-month construction period. That's a pretty lengthy construction period but you never know. Sometime in 2005 should be the start-up of the system.

As the model has predicted we should have reduced almost 100 percent of the mass sometime within the seven to 10 year time frame. So that's kind of what our real estate agreements would be written for with the anticipation that if we meet our goals at that point the system would be shut off

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and dismantled at that point. Wells would be taken out and the site fully restored at that point.

That's kind of where we are at.

No.

We are taking out

MR. GRELLO: When you say "reduce the mass", you're talking the state TAGM levels.

MR. COLTER:

as much mass, where that area now reflects the rest of the plume. As Dave mentioned before, the plume basically is from, you know five to 10 to 100 to 200 parts per billion. Our goal is not to clean that site up because there is more contamination north of it that will flow through. This is basically getting a significantly higher concentration of organics and getting them out of the aquifer. It's too unfeasible to clean up the entire aguifer to drinking water standards. That was part of that whole public comment period several years ago that that was -- it is too big, too expensive. have to put a pump house and air stripping tower in people's yards, you know, all along the southern boundary, that we kind of talked about that earlier, as being infeasible. The plan now is to keep -- where most of the contamination is, keep that on Northrop Grumman property with the

containment system. What we've missed, we've missed. And let's make sure that the water supplies are protected and that's the purpose of the outpost wells in the aquifer. There is this hot spot and we want to reduce the mass there but not clean it up to TAGM.

 $$\operatorname{MR}.$  GRELLO: What numbers are we shooting for.

MR. COLTER: The model basically says we can get down to less than 100 in the seven to 10 year time frame.

CO-CHAIR KAMINSKI: Explain the alternate protection. Is the treatment system on the water district wells. The two of those have already been put in. Just reiterate.

MR. COLTER: In Bethpage water.

CO-CHAIR KAMINSKI: Through Bethpage water which has already been impacted it already has the protective treatment systems on them so the water that's used is never contaminated.

MR. GRELLO: For the chemicals that we are talking about here, what are the state TAGMs on them.

MR. COLTER: It is federal MCL, which

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is five parts per billion for most contaminants.

The federal drinking level is five. For most of the volatile organic compounds, we are talking about.

And the state levels are similar to the federal, five parts per billion.

MR. GRELLO: How did you come up with 100 parts per billion being safe.

MR. COLTER: We are not saying it is safe. The goal is to get a higher chunk of contamination out of the aquifer to reduce the aquifer. It's not to clean it up.

CO-CHAIR KAMINSKI: If water that's contaminated up to 100 parts per billion ever reached the well, the system that is put on the well knocks the hundred down to nothing.

Every well that would be impacted, the three wells that are currently impacted, have treatment systems on it. If the outpost well finds -- detects a contamination level that would impact the drinking water well, then the system would be put on the drinking water well to make sure it's.

MR. GRELLO: But our job is supposed to be restoration of the aquifer and protection of

our drinking water. Not cost. Cost should not play a factor here. Once it's all set up and the design standards are set up, it may be more feasible and better for the community to leave it running for another ten years and get it down to 50 parts.

Okay, of course we are not going to get it down to MCLS 5 or TAGMs. But 100 parts per million is a lot to leave. Especially when development continues to go and the accessibility of putting more treatment somewhere else, when we do have a problem, becomes unfeasible, as we are finding nowhere to set it up. Restoration is our business. 100 parts per million —

MR. COLTER: You got to understand.

This whole thing, those types of questions and
everything, there was a series of a lot of
alternatives that were presented way back.

MR. GRELLO: I understand.

MR. COLTER: We are now implementing the preferred remedy that was chosen and commented on by the public. I understand you're coming in at kind of like the home stretch here. Maybe what we need to do is meet with you separately. Because this has been a 10-year process.

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MR. GRELLO: I know that.

And it has been a MR. COLTER: process that has been going on. To answer all your questions that you have a valid point on every one, we've doing that for the last ten years. can't do it all right here. We will be here till midnight.

MR. GRELLO: Of course not. saying for the record is that once that system is set up and running, it pays to leave it running a few more years to get it below 100 parts.

MR. COLTER: But there's more contamination there north of this that continues to come through. And then you have similar levels on the western side. You can't put a system in, that cuts that off. I mean, we've done that up on Northrop Grumman property. This system, the plume that's left the property, is too wide. You'd have to -- we are having a hard time finding a spot to put this treatment system in.

MR. GRELLO: You know that that's what I'm saying.

> I offered you a spot. A WOMAN:

That's why I said at MR. GRELLO:

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the last meeting, maybe with these studies we should be looking at injecting the treated water upgradient so we create a flush.

MR. COLTER: That'ss all --

MR. SCHARF: If I might answer that part of your question. That's what we are doing right now with the containment system north of the area.

MR. COLTER: Talking about GM38 \*D2 remedy. The containment sump is on the Grumman site. We are pumping 4,000 gallons a minute of water and treating that essentially to non-detect and reinjecting that water through the recharge basins. Just north of Central Avenue, there's a series of recharge basins. In fact, they actually mentioned this at the last RAB meeting.

MR. COLTER: Yes.

MR. SCHARF: Injection in the sense of putting it through recharge basins. Part of the remedy, was to confirm that the containment system is working. And that work was performed by Tetra Tech as part of the ongoing process of implementing the ROD.

Not only did that show that the

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site's being contained but it also demonstrated that the groundwater is cleaning itself up south of the former Grumman facility.

A MAN: I have a question to ask you about the treatment. Now, the treatment of the water. If one well seems to get overwhelmed, does it shut down? Will it actually be able to handle it? Or if it breaks down, the well, and starts just dumping the benzene in our drinking water, does an alarm go off? Does it shut down?

MR. SCHARF: I'm not sure I follow you. You mean the treatment system Jim's talking about.

A MAN: I'm talking about our wells, our drinking water on the wells.

MR. SCHARF: You're talking about the treatment of wells.

A MAN: Yeah.

MR. SCHARF: If the well is impacted or actually if it's determined that it is impacted, in the event that a well will be impacted, the goal of this program with the outpost monitor ing wells is to put treatment on those particular wells before it gets there.

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That's not what I'm saying. A MAN:

But I'm leading MR. SCHARF: I know. up to that. There are -- as part of this program we have to sample monthly to make sure the systems are working. These systems are fairly routine. these airstrippers are packed towers, as long as their flow is working right, we can fairly safely assume the technology is working, to do what it has In fact it has been demonstrated that if the system fails, the whole system shuts down. are all sorts of system controls to do that.

If the packed tower -- the packing fails, we are going to know that by all the flow rates that we monitor by computer at the facility.

If it is only taken once a A MAN: month if you happen to go two weeks past, and you injected all that drinking water into our drinking pipes.

MR. COLTER: You need to talk to the water district. They have safeguards against that.

This is what I'm trying to A MAN: figure out and find out.

MR. COLTER: I'm not going to speak for them, they have the capacity to shut a well down

and continue the --

A MAN: Not shutting a well down but how much contamination got into the pipes that we all started drinking. What is that woman in California? She left a glass of drinking water from that place would you like to drink that water? I didn't think so.

MR. GRELLO: If I may, what I think he's trying to project is what I said at the last meeting. We can, we cannot rely on mechanical well head extraction, because mechanical failure, and human error, I believe the best restoration that can be done is the best remedy. Take the blackout we had.

A MAN: We have a cogeneration power plant over here in Bethpage, and it knocked us all down, 60 thousand people were supposed to have power. How did Long Island get knocked out of power? It is garbage.

MR. GRELLO: If there's three to five weeks between testing the plume, there could be three parts per million of TCE, or something else.

We know two parts per million may not kill you over the three-week period we are drinking it, but we're

other contaminants are in our food we are eating, that is why I said before restoration is the name of the business.

MR. SCHARF: If you're asking a question, the state health department sent out regulations which are fairly stringent and conservative. The methods that are used are strict across the state not just on Long Island to demonstrate to the satisfaction of the health department they are providing water that is potable and safe to drink.

 $\mbox{ \sc CO-CHAIR KAMINSKI: We can put this } \\ \mbox{ on the agenda.}$ 

 $$\operatorname{MR}.$$  COLTER: We need the water district.

MR. MANGANO: Can you invite the water district down to the next meeting as a speaker on the subject. So you get it on the record.

A MAN: I'd like to take a walk to one of the treatment plants and see. There's a way that you can fudge things up.

MR. GRELLO: If you want, next time

I'll bring some water that has contaminants in it of

### Proceedings

two parts per billion, and see if you guys want to drink it.

MR. MANGANO: I'm sure they'll be receptive. We'll get them here for the next one. If you want those answers, the water district has been very receptive. You don't need to wait three months. You can all go over there and Andy, will be able to answer those question.

A MAN: Ed, between test periods, we can be drinking two parts, five parts, five parts, 10 parts per million because the well head treatment was not doing its job. It is like making a pot of coffee. Without that coffee filter, you're going to drink the grinds.

MR. MANGANO: I would love to get them here, I was not under the impression that we could get to the point it could get into our drinking water. Every meeting I ever attended, they always represented it can't get into the drinking water to reach our homes. We should get them, those that are responsible, for that care, to be here and perhaps they can explain in greater detail how they prevent something like that. I'd like to know that answer as well. That's a great question.

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MR. SCHARF: As a chemical

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24 25 engineering student in college, I studied process engineering, they run systems to work and they run tests on it. And the companies that design the systems, take samples probably every hour, sending contaminated water into a given tower and insuring it works that way. For example, when we start up a pump and treat system you start every month, we sample the wells and elevations. Once you get the system running, you have a certain level of confidence. Just like, I quess, just like anything else.

A MAN: Not to overwhelm your education, or your knowledge, but Three Mile Island still happened.

MR. SCHARF: Absolutely. It is a valid question. I'm trying to tell you these are designed into the system. Otherwise they wouldn't be putting these on.

What's the safety system? Ι A MAN: would say Three Mile Island would have a greater safety system, and it still happened.

MR. MANGANO: I was under the impression that we don't pump from the areas that

1	Proceedings
2	were contaminated, that was the impression that I
3	was under. We are not pumping drinking water from
4	those areas. So I think we should get the water
5	district.
6	MR. SCHARF: That is not exactly 100
7	percent.
8	MR. COLTER: For the southern
9	districts, that is true. For Bethpage water that's
10	not. That's Northrop Grumman Navy paid for the
11	treatment systems on this.
12	MR. MANGANO: We'll get them down
13	here, then.
14	A MAN: Venditto wouldn't want to
15	drink that water.
16	CO-CHAIR KAMINSKI: Jim, can we.
17	MR. COLTER: We'll invite John Malloy
18	from Bethpage water.
19	CO-CHAIR KAMINSKI: We'll make it an
20	agenda item for the next meeting.
21	A MAN: Get technical person that's
22	treating the water, who knows how the system works
23	and what's the reliability of it. We want to see
24	how the system actually works.

MR. SCHARF: John Lovejoy from the

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county health department told me the county has a working model air stripping tower they can bring to public meetings to show people how it works.

A MAN: That should be done at one of those poster things you're going to have at the school so they can explain how the treatment is done. Because we are going to relay this stuff. We have to give everybody, the truth. In case of something happens, we got to show them. We are not going to go on this is what they say you might as well get up there and speak and let us stay home.

MR. SCHARF: Given the number of municipal wells on Long Island, for example, that have been impacted and those wells that have air strippers on them and have undergone sampling at different times, only a couple of companies make these systems, and they're all performing up to par. I would say it is a fairly good level of confidence that we are in good shape. But that's a good question. You want the people who do work on the design to answer that question.

A MAN: Erin Brokovich once said that too, we are in good shape. Drink the water.

MR. COLTER: That wraps up what

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we've done in the last three months. Not a whole lot has been accomplished because of the funding issue, but we're making progress. Once the funding comes in this fiscal year, by the next meeting, which we'll talk about a little bit later, there should be some reports out. You'll see some progress.

CO-CHAIR KAMINSKI: You want to summarize what Ed missed on preliminary results for the Hempstead Parkway.

MR. COLTER: Before you got here, Dave from Tertra Tech gave us an update on the status of the installation of the outpost wells that we are putting in upgradient of South Farmingdale well field, New York service well field, and Levittown well field. Right now, all four wells are in. Either two or three wells are at each location monitoring at different depths. We should be, we completed one well today at the South Farmingdale well furtherest to the east. And we should be finished with the third well in that cluster within a couple of weeks. So after, by the end of November, all of the outpost monitoring wells will be in. Upgradient of the water supplies for the New

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York Water Service water well, that was shown by the model to be already within the five year time frame. That contamination should already be at the outpost well location. That well went in when we sampled We didn't find any site-related contaminants, the TCE or the PCB that we've been tracking. we did get a hit of benzene, but it wasn't in a typical well sampling technique that we found it. When we were sampling the well water after we purged the well? Before we dump the water, we have to sample it before it goes into the POTW. In that frac tank, we found benzene. So not knowing where it might have come from, we weren't back two weeks later into that well and we resampled it using sampling techniques. So it is actually a repetitive sample of the aquifer, not in the frac tank, and we found non-detect for benzene. We are going to go back out in two more weeks and we're going to resample the well again.

MR. MANGANO: On all of that, you work with the local water districts, they're aware of those resamplings in those districts?

MR. COLTER: I foward them progress reports and things like that. Gary Loewshirt of H2M

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has asked for those results. We resampled, and we just got the results yesterday. So I'm going to forward the results to him. I'm also going to let him know we are going to go back in in two weeks to resample just in case. That not being a site-related contaminant. We didn't detect it. It looks like that well is free of site-related compounds so there's not as much urgency as the model may have been predicting. So it is some good news.

CO-CHAIR KAMINSKI: We'll get you a complete report by the next RAB meeting.

MR. MANGANO: Traffic, motor vehicles.

MR. GRELLO: When we find hits like that and it's confirmed that it's not laboratory error, is the DEC going to investigate where the source is coming from, if it is not site-related?

MR. SCHARF: Absolutely. If we find benzene from an oil spill, from a tank that's leaking, we have to track that source of the spill in Stony Brook. We refer that information to them.

MR. GRELLO:Mike I had this same problem with the Liberty site where they found

petroleum floating in one of the wells and it took
nine months until they decided to go after the gas
station that it was obviously coming from, which was
a block away. By the time you go through your
remedial design phase and you set everything up, you
just made the problem two or three times as bad. So
when we do find something like that by accident or
through an act of God, we need to act on it quickly.
Thank you.

MR. SCHARF: Absolutely.

MR. GRELLO: Thank you.

MR. SCHARF: You're welcome.

Appreciate your input.

MR. COLTER: The last item on the agenda is an update from your TAPP contractor, which is H2M. Gary Miller is here. He's been reviewing the dry well report for the Navy site that the TAPP -- or the RAB had requested, that the report be reviewed by an independent consultant. You guys chose H2M as your independent consultant. He has been doing that over the last several months and I'll turn it over to Gary to give you guys an update of where they are at with their review.

MR. MILLER: As Jim pointed out

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several months ago, H2M was tasked with conducting an independent review of the investigative study work done at two drywells at plant three. These drywells were previously identified as having been impacted with PCBs. While there were some remedial efforts taken in these drywells, soils were excavated down to 28 to 30 feet, which was the limit of practical investigation. The remediation stopped at that point. Additional study was done to determine, to gather information on the extent of the PCB contamination, moving downward and laterally, looking at the groundwater and then looking at what options were available to remediate these drywells further.

At this point in time, H2M has reviewed all the reports. We are in the process of preparing our own report and we will summarize our findings and conclusions. For the purpose of this meeting tonight, we prepared an executive summary which highlights what we looked at and what our findings are. I'll let Paul Lageraaen touch on some of the highlights. We have copies. I think we may have just enough to hand out to everyone.

MR. LAGERAAEN: What I have here, is

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a draft copy of the executive summary for the evaluation report. The evaluation report again is our review as far as the investigation and remediation of these two drywells over at Plant 3.

There were two main reports that we reviewed, and they were performed by Roux Associates. The first report was a site characterization report. That report was essentially an investigation as far as the extent of PCB contamination at these two drywells. investigated the soil contamination and groundwater contamination around the two drywells. investigation was comprehensive especially for the soil investigation. They determined -- for the PCBs, they went a radial distance 20 feet down to pretty much the groundwater table. They checked the soils for contamination above the recommended soil cleanup objectives for the DEC. And they determined an area that was impacted with the PCBs and then they also did groundwater sampling, by the drywell, as well, 75 feet away. They found minor impact of PCBs in the groundwater, and they also, after preparing a site characterization report, did a focus feasibility study on available technologies

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for treating PCB contamination in the soils, to determine what is available commercially, and what might work for addressing the PCB contamination in the soils. They evaluated a number of different technologies and we reviewed the different technologies that Roux evaluated.

And upon review of their focus

feasibility study, we feel it was a fair report and
they evaluated the technologies that are
commercially available. We also looked for ones on
our own. We couldn't find any that were applicable
to PCBs in soils.

As far as the soil contamination went, they evaluated a no action alternative, no action meaning they'd leave the soils in place, versus excavation. And treating the PCB soil contamination in place. And the conclusion of that report in the focus feasibility study was that there really is no exposure, potential human exposure, to the PCBs, and a no action alternative was selected. Our evaluation of that is we don't find any fault with that conclusion. We don't disagree with it. Leaving PCBs in place, seems, based on the exposure assessment, that they had conducted, that there

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really was no exposure pathways for human contact. As long as the area drywells are paved over, there is no potential human exposure to risk. So we don't disagree with the conclusions of the feasibility study as far as the no action alternative for the PCBs.

As far as groundwater goes, the focus feasibility study looked at remedial alternatives, it didn't address groundwater. They did find minor groundwater contamination above class GA groundwater drinking standards, which for PCBs is .09 parts per billion, and the highest concentration they found was about 12 parts per billion, that's still low numbers, but they were above the GA drinking standards about 75 feet away. They did not do a feasibility study for treating the groundwater, because there was no exposure hazard for groundwater. Which really is true. And also, there's an extensive, as we know, groundwater treatment and remediation system on-site. So, the one recommendation that we would have, as far as groundwater goes, and their evaluation is, that the on-site treatment and monitoring program for groundwater actually incorporates PCBs in select

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wells, since PCBs were detected in the groundwater.

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Just in the future, it might be worthwhile to look to monitor for PCBs. As far as it is our understanding PCBs aren't looked at in the groundwater monitoring program. A no action alternative was recommended for that, and we can't find fault for that, because there is no exposure pathway for a contact with the groundwater. But with something like that, if you just monitor for PCBs, in the groundwater treatment or monitoring program at a few select locations, where you think it might go downgradient from these locations, that might be advisable.

MR. SCHARF: I would like to add that the focus feasibility study was done under, by direction, by Northrop Grumman at the time, as part of turning the Plant 3 government-owned contractor operated facility back to the Navy. The conclusion that they came to report about no further action, I did not concur with that conclusion. I put in writing that the department wanted the PCBs to be addressed in the drywells, concurrent, as part of the Site 1. This has now been made an extension of the Site 1. And that was how I left it. And have

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you ever responded to that, Jim?

MR. COLTER: Not yet.

MR. SCHARF: That is -- just to let the community at large know that. That the work was done by Northrop Grumman as part of the process of turning the plant back over to the Navy. And those work plans were reviewed by me and approved by me, to implement, to derive data that went into this report.

MR. LAGERAAEN: Okay. Roux Associates had conducted, the initial report was a site characterization report. The purpose of that was to, basically, to determine the extent of potential contamination in soil and groundwater in between formulating the site characterization report and doing the feasibility study, which evaluated treatment for the soil, they did formulate an exposure assessment independent report. That report was a risk assessment evaluating the potential hazard of PCBs in the soils, as well as in the groundwater. It was conclusive in that exposure assessment report and they did the next step and did the feasibility study for potential remedial options.

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MR. MANGANO: My only question is when will you have the Navy determination on monitoring PCBs.

MR. COLTER: The first thing we wanted to do, was to get your TAPP contractor's comments.

> MR. MANGANO: Okay.

MR. COLTER: And address those comments as part of our decision-making process. are almost there but we are not quite there.

MR. MANGANO: In the next meeting in that three month period you'll have a determination.

A MAN: We had hoped to meet with the smaller committee, yourself, and Jim McBride, to go over our executive summary and from there prepare our final report. We want to have that final report well before the next meeting in April.

A MAN: Jim, could you explain compared to some of the other contaminants, the way PCBs move or don't move? Because it was my understanding that as a contaminant, PCBs don't move, or move very little, compared to some other contaminants.

> That is correct. A MAN: PCBs are

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considered relatively immobile compared to the other contaminants. The volatile organic compounds tend to move at or about the same speed as groundwater. PCBs are considered relatively immobile. The fact that Roux did find them in a well downgradient from these drywells would lead us to believe that they have moved a bit.

A MAN: Okay.

One of the mechanisms MR. COLTER: that we think may have happened in the process is that Northrop Grumman was using, they were using TCE as a cleaner for some of their equipment that used PCB as a heating medium. And it is just a theory that you know, upon routine maintenance using TCE to clean out their equipment, that the PCBs bound onto the solvents, which does migrate pretty readily through the -- soils, that is our only theory how it Normally, you're right, if you got so far down. have a release of PCBs at the surface, they'll go down to some depth and then they'll get bound up and won't go any deeper. So there is some mechanism that got them down to this depth. We think it had something to do with the TCE, that was also found in that area.

MR. GRELLO: The impacted soil that's impact with the PCBs, what depths was that at?

MR. COLTER: In the report, Northrop Grumman, when they first discovered the drywell, which the depth of the drywell itself I think was eight feet below ground and it was a soil earthen bottom, and that is how it got into the soil.

Northrop Grumman dug down to between 38 and 35 feet, which is as far as their boom could go for a typical excavator. Right now they backfilled that with clean soil. Right now, at 30 to 35 feet, there is no PCBs around the drywells. Contamination starts again from below 35 feet down to the water table, which is about five five feet.

 $$\operatorname{MR.}$  GRELLO: All the impacted soils are below 35 feet.

MR. COLTER: Yes.

MR. GRELLO: Being there might be future construction on the site, that means there has to deed restrictions put on the property so we know what is going on.

MR. COLTER: That is one potential way of handling it, we'd definitely have to call out the locations of these soils for future

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construction, but there's not too many footings that go down 35 feet. There's not too much risk with worker exposure, but the locations of these soils will need to be called out in any transfer document. That's one way of handling it.

MR. SCHARF: Mike, for your information the area of these drywells is not going to be transferred. For property that is slated to be transferred. There is a ROD. It's written to address soil contamination, one of which is PCBs.

Most of that PCB contamination is at shallower depths. The DEC made its response to the ROD in its report to the Navy, and they haven't gotten back to us yet. It is one of those things out there, given all this.

MR. COLTER: Because we are retaining that parcel, we haven't put as much urgency on that. As we have trying to transfer the remaining 96 acres, we are trying to do, to Nassau County. We are trying to do all that in the immediate future. Since we are retaining that property and we are not going to allow use on that property, it's not as high a priority right now. Once we get the property, the remaining Navy property transferred,

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and we get some more of this groundwater system in place, we are going to -- that's another one of our items we have to submit.

MR. GRELLO: Impacted soils 0 to 15 feet would be a big question, but at 28 feet, the chance of human exposure are next to nothing. Like you said it would just be for the worker, which would probably be trained in it anyhow by then.

MR. COLTER: That is some of the things we have to evaluate when we get back into it.

MR. SCHARF: Which includes possibly monitoring the groundwater monitoring program, as H2M mentioned, as part of their review.

There is going to be an excavation right next to that in Site 1 for PCBs. And that is going to have see.

However, the drywell was dug down to 20 feet with the sheet piling and they hit pretty much the limit of excavation considering they are next to Plant 3, it is right next to the building.

MR. GRELLO: From my knowledge of deed restrictions, if a deed restriction is put on any portions of property, it has to be filed with both town, county and if there's a village involved,

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there has to be some program where a flag goes up, otherwise a village or town grants an okay to do something because only the county knew about it. So we have to make sure those procedures are put in place.

MR. SCHARF: It is possible. For one thing the Navy may never transfer these particular parcels.

Also.

CO-CHAIR KAMINSKI: No, that's not possible. It is absolutely not possible.

MR. SCHARF: Jim has also mentioned.

CO-CHAIR KAMINSKI: For the record, that's not possible or I'll lose my job.

MR. SCHARF: Jim has agreed to go back and look at the possibility of new innovative technologies as they come around, that are cost effective, to lower the numbers in the soil. The Navy does have a research center out in California where they maintain a data base of all different technologies that they are using as a different base of clean up. Jim will go back and look at that, at feasibility, what's there, what they found, where it is located and come up with a response to the

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Department's letter.

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study and see if it works. Bioremediation has come

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a long way.

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MR. SCHARF: PCBs are tough for

MR. GRELLO: You could do a bench

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bioremediation.

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MR. COLTER: We actually have, I'm

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not sure what you call it, but it is generally

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something out to the technology community out there

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for requests for any, again that is from our service

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center out in California, we put out a standard

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issue saying if anybody has anything innovative with

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PCBs at deep depths, we'd be interested in seeing

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your proposal. So that is out there. We'll see if

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we get any responses, or anything like that.

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seems something, we might want to use this site as a

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test case, we would consider that.

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That's kind of where we are at.

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Since the last meeting. I don't have anything else.

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CO-CHAIR KAMINSKI: Right now I think

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we've talked about action items for the next

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meeting -- not action items but agenda items, which

relate to some action items. And the Navy is going

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to ask the Bethpage Water District if they'll come

1 Proceedings 2 and make a presentation. 3 MR. COLTER: Yes. CO-CHAIR KAMINSKI: We'll let you know 4 5 on the agenda. MR. GRELLO: 6 If I may, make the recommendation to put in a cluster for South 7 Farmingdale and their potential for future impacts. 9 That South Farmingdale also be notified considering 10 we weren't involved in directing the decision, 11 because we did not know we were going to be 12 impacted. 13 No, that is not true. MR. SCHARF: 14 We had a meeting. What happened --15 MR. MANGANO: Why don't we write to 16 South Farmingdale. 17 MR. SCHARF: Before the ROD was 18 written, we had meetings with South Farmingdale, 19 Bethpage Water District, New York Water Service, 20 Town of Hempstead Water District, which is Levittown 21 Water District, and Massapequa Water District. And 22 we had meetings just to discuss at the time the 23 information that we had as to what the extent of the

plumb -- what we felt the extent of the plume was.

But we had already asked and answered these

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alternatives and we made a selection based on the fact what was feasible and what wasn't. It's part of the program, that once a ROD was signed, to do a predesign study. The Navy has taken on that task and completed that work. We found, as I said earlier, the plume was further than we thought but it's still not at the point where it will impact any wells other than Bethpage at the current time.

MR. GRELLO: Back then, they didn't feel we were ever going to get to this point where this could be a potential impact of what we are talking now. That's why I'm saying we weren't so involved with the ROD back then, because we didn't feel we were going to be impacted. From that perspective, that is true. The districts were notified.

MR. GRELLO: Yes, I spoke with them.

MR. COLTER: What I would offer, in lieu of inviting them to the next meeting, New York State, semi-routinely we meet with the water districts at what we call technical advisory committee meetings and we go over the status of the technical plan with the Hicksville Water District, the Bethpage, Plainview, and we have them here.

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2 Have them all here so they can all answer the questions.

MR. COLTER: If we have a TAPP meeting, and it's up to Steve, we can invite the RAB members to come to that meeting which may be before the April meeting.

A MAN: But we seem to have to have all the water districts and see how they actually treat it. Because no offense, I don't want no oil changer going ahead and allegedly cleaning these things out and having accidents occur because I've seen it.

CO-CHAIR KAMINSKI: There's two different agenda items here. One is to have a water district with the treatment system such as Bethpage explain how they operate.

A MAN: Not just.

CO-CHAIR KAMINSKI: They are the only ones with the treatment system right thought.

The second agenda item, is for you to listen to the discussions that Steve routinely has with all the water districts so that you understand what they understand.

MR. MANGANO: For the record, are the

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water districts, you're saying are communicating on a regular basis about this issue.

> MR. COLTER: Yes.

MR. MANGANO: Both Bethpage, that is affected, and those that may be affected, they have been doing that for how long.

MR. SCHARF: Two years now.

There's two consultants that represent all the district, D&B and H2M. I'm sure they routinely discuss what's going on here amongst themselves and also with each other, the two different consulting firms.

Keep in mind, this is a state ROD for the overall Navy and Grumman site. In order to get funded for their work, the Navy had to write their own ROD specific to their site. It incorporates everything that's in the DEC ROD, but it spells out parts that the Navy need funding for to implement.

As part of the overall ROD, one of the things it calls for is this meeting, periodic meeting with the water districts. Technical advisory committee meetings. These were set up to advise the state of what's going on. However, these meetings we have on a semi-routine basis have grown.

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When we have these meetings we get 30, 40, 45 people Unfortunately we do them during the day, coming. which makes it difficult for the afternoon person to attend.

> I'll be retired. A MAN:

MR. SCHARF: There you go.

It kind of has developed a life of its own, these meetings. They weren't originally envisioned to open them up to the public, but I don't see why we can't. Everything we discuss there, is everything we discuss here. It is the ongoing updates. It give us updates what's going on with the overall process.

CO-CHAIR KAMINSKI: So, we have an action item for Steve to invite the RAB to the next water district meeting, to a water district meeting as you see fit. I don't know that you need to bring the whole public in. If you bring the RAB members in, that would make sense, because they represent the public.

MR. SCHARF: What Jim and I were talking about is, was sometime in February we were going to have this public availability session.

CO-CHAIR KAMINSKI: Its going to get

2 too confusing.

MR. SCHARF: In terms of time.

CO-CHAIR KAMINSKI: It will get

confusing.

To have them come and listen to the water district, that is one item.. A water district with a treatment system can come here and explain how they operate it. That's two items the.

The third item is going to be for you, to review this process we know about, because we have been at it so long, could you make a presentation at the next RAB meeting that reviews the whole thing.

MR. SCHARF: I can do that.

things that shouldn't be confusing. We shouldn't also confuse that with this neighborhood workshop, which is all about there's going to be people in your neighborhood drilling wells and putting up stuff and don't misunderstand what's going on. That is four different things.

MR. SCHARF: I don't mean we should have them all exactly during that time, the TAC meeting and to have the RAB meeting. We're all

2 | shooting toward the date in February.

CO-CHAIR KAMINSKI: Sometime in February will be cool. It doesn't have to be a RAB meeting.

MR. MANGANO: You want to get the water district at the RAB meeting, for the RAB record, about the questions you have raised about the drinking water. That's we are going to do that one, right?

A WOMAN: In April.

MR. GRELLO: To tell us about the operation of the system. We want to know about the possible failure and how long it had to detect.

MR. MANGANO: You need the water district to do that.

MR. GRELLO: Testing done on Monday the 22, when is the next testing done? What is the possibility for failure in between testing, how long does it take for the samples to get out and the results to come back, is there a backup generation for the well head treatments?

CO-CHAIR KAMINSKI: Right. That can be conveyed to Bethpage. Although this is a Navy RAB, and we cannot cause Bethpage Water District to

2 present that to you.

A MAN: We'll get a hold of you.

MR. MANGANO: I feel confident if they say no, can you alert us if they're saying that they won't. If they say no, can you alert us well in advance and we'll try to appeal to them.

MR. SCHARF: Dave, can you put something together how an air stripper works.

MR. BRAYACK: Why don't we have the water districts do it.

MR. GRELLO: The question is not so much how it operates, it is the possibility for failure and how long our, exposure would be and maybe even a human risk assessment. If we had 10 failures in a 10 year period and we drank two parts per million of TCE and threes part per billion of PCBs or whatever, what would be the health risk assessment over a 10-year period if it happened 10 times, to an eight year-old, 20-year old and an 88-year old.

MR. SCHARF: I think Gary Miller may be able to address the issue. If they didn't feel a high degree of confidence these things worked well and did what they were designed to do, they wouldn't

be putting the systems on.

MR. MILLER: I'm not an expert in the design of stripping towers but there are other folks in our firm that do that. As far as I'm aware, most if not all water districts do have backup water generation. When we had a blackout a month or two ago, the water kept running. So they do have backup generation. But as with any mechanical system, there's always a chance of failure. There are safeguards built in so the treatment system keeps working. I'm not an expert. John Part (ph) of the technical advisory committee would be happy to come down and go through the details.

MR. GRELLO: I agree with 100 percent of what you're saying. But if you ask any water district if they'd rather have restoration of the aquifer or well-head treatment, you know what the answer's going to be. That is what brought up the conversation leaving 100 parts per billion.

A MAN: We run into problems with shifting breaking pipes. They have pipes right now that are copper pipes that are getting pin pricks in them and nobody knows where it's coming from. It's not low voltage. We took houses, separated

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2	everything from it, and tested it.
3	Then they claim it is from the flux.
4	It it is not from the flux.
5	A PERSON: Pinning occurs in copper
6	pipes. It is very well-documented.
7	CO-CHAIR KAMINSKI: Agenda item is
8	going to be get Bethpage Water District down to get
9	your question answered.
10	MR. SCHARF: They're good questions
11	and we'll get them to answer your questions to your
12	satisfaction.
13	CO-CHAIR KAMINSKI: Another action
14	item.
15	MR. SCHARF: They're going to review
16	the whole nine yards for us. Start us from the
17	beginning.
18	We'll have to have those
19	presentations that Gary Miller put together and work
20	on something. Have to modify something.
21	A WOMAN: I have been to water
22	treatment plants, and they seem to be checking stuff
23	every single day.
24	MR. COLTER: That's good news.
25	Thank you every one for coming.

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1	Proceedings	
2	CO-CHAIR KAMINSKI: One of you guys	
3	will have to substitute for Jim before the meeting	
4	is over.	
5	Would you all like to know when the	
6	next meeting is?	į
7	MR. GRELLO: Yes. When is the next	
8	meeting?	
9	MR. COLTER: April?	
10	CO-CHAIR KAMINSKI: First Wednesday	
11	in April.	
12	(Time noted: 8:37 p.m.)	
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CERTIFICATE

STATE OF NEW YORK ) ss. COUNTY OF SUFFOLK

I, JENNIFER MAUE, a Registered

Professional Reporter, do hereby certify that the foregoing Matter, taken at the time and place aforesaid, is a true and correct transcription of my shorthand notes.

I further certify that I am neither counsel for nor related to any party to said action, nor in any wise interested in the result or outcome thereof.

IN WITNESS WHEREOF, I have hereunto set my hand this 14th day of March, 2004.