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RESTORATION ADVISORY BOARD MEETING

Business Meeting

February 5, 1997.
Tarawa Terrace I
Elementary School,
Jacksonville, North Carolina

Reported by:

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WEDNESDAY EVENING SESSION

February 5, 1997

The Business Meeting of the Restoration Advisory Board convened at 7:05 o'clock p.m., in the Dining Hall of Tarawa Terrace I Elementary School, Marine Corps Base, Camp Lejeune, Jacksonville, North Carolina.

MS.KATHERINE LANDMAN: Let's all get going.

Neal Paul sends his regrets he couldn't be here tonight and he hopes that doesn't cause a problem for anyone.

I do want to welcome everyone. I'm glad to see you're all here and I just want to turn it over to Jennifer here.

MS.JENNIFER CASEY: I was going to give you an update on what we've been doing to find new RAB members.

In November and December, we advertised in The Challenger and the Wilmington Journal.

We advertised two weeks in November and two weeks in December and got absolutely no phone calls.

We do have one application that has been received. It was someone that had seen the ad a year ago and has been away for a year and called and he's still

interested.

So, he sent in an application and we have two other possible candidates that we have sent out applications to. We just haven't received them back.

So, hopefully, we'll have three applicants and then we'll all start the due process from there.

I guess in Tom Morris's last correspondence, everyone was sent out a draft of meeting minutes of the November 6th meeting and I just wanted to see if there were any comments anyone wants to make tonight so I can finalize those minutes in our next correspondence.

Anyone have any comments?

MS.ELEANOR WOOD: How is Tom doing?

MS.CASEY: Oh, he's doing fine. We heard from him yesterday. He's working very hard, not seeing much of Germany yet, he's working so hard right now. He doesn't have much time.

And, the final thing I wanted to ask about is our next RAB meeting.

We were interested in maybe May 20th.

Does anybody have a conflict with that date?

MR.JAMES SWARTZENBERG: I do.

MS.CASEY: It's a Tuesday.

Okay.

MR.SWARTZENBERG: I'll be gone--well, I may be here.

MS.CASEY: Okay.

MR.SWARTZENBERG: But, I'll probably be gone from around the 19th or 20th to the middle of June, so you'll just to do without me.

MS.CASEY: Okay.

Does anybody else have a conflict?

MS.TRACEY DEBOW: I would not be able to get here until at least seven because I work in Wilmington that day.

MS.CASEY: Okay.

MS.LANDMAN: Jennifer, would it be better if we went like we did before, the week before?

MS.DEBOW: Tuesday is the barrier for me.

MS.LANDMAN: Okay.

MS.CASEY: So, the Wednesday the week before might be better?

MS.LANDMAN: Wednesday wouldn't be good.

[Several people speaking at once]

I am scheduled for the 17th to be away so the 14th is out also. for me

MS.CASEY: Yeah, what about Thursday?

MS.LANDMAN: I think the problem was just with that Wednesday.

MS.CASEY: Thursday?

MR.JAMES DUNN: Thursday the 15th.

MS.CASEY: Thursday, the 15th, is it bad for anyone?

MS.DEBOW: I have a seven o'clock meeting.

MS.CASEY: Thursday at seven?

MS.DEBOW: I might be able to make it by six-thirty.

MR.MATT BARTMAN: Our meeting probably would be seven to nine.

MS.DEBOW: That would be seven o'clock?

MS.CASEY: Uh-huh.

MS.DEBOW: Either event, I can get here by seven.

MS.LANDMAN: Is that Thursday the 15th then?

MR.DUNN: Yeah, Thursday the 15th.

If I have a problem, I'll let you know.

MS.CASEY: We're okay so far.

MS.WOOD: Are we going to meet here regularly?

MS.LANDMAN: No, I'm going to try to get the Library again, because this is just an unfortunate circumstance that we ended up here tonight.

But, I'm going to try to book the Library as our primary place.

MS.WOOD: And, then that will be at seven p.m.

MS.CASEY: So, that's Thursday, May 15th, at seven p.m., okay.

Now, it's either Jim or Matt.

MR.BARTMAN: I'll take the floor.

Like we did last time, we'd like to give you a synopsis of the operable units and what Baker has been doing at all these operable units.

So, what I'll do is I'll go operable unit by operable unit and I'll mention the sites and what we are currently doing at these sites.

If I go too fast, just raise your hand, stop me and we'll go from there.

These will be in sequential order.

Operable Unit No.1 which is our Sites 21, 24 and

78.

This is also known as what we call the Hadnot Point industrial area.

Currently, we are conducting our quarterly monitoring at Sites 24 and 78.

That's going on right now as we speak. We have our field crews out there conducting groundwater sampling.

The partnering team, we made a lot of recommendations based on the first quarters of sampling that Baker conducted to change some of the sampling schemes within the quarterly monitoring program and this whole team agreed, based on the findings of those first two quarters, to implement those recommendations.

So, this particular quarter is going to be implementing some of those changes.

It doesn't change the alternative.

It just changes some of the wells that we are sampling, some of the analyses that we're sampling for because we've determined as a team that we no longer need to sample for those parameters.

We have enough conclusive information to say that we don't need to be looking for this particular

contaminant anymore.

So, those are the type recommendations that were enacted.

Additionally, Baker along with LANTDIV and OHM, we're going to beginning to look at the effectiveness of the north and south treatment plants on the chlorinated plume.

That's something that we've been running these treatment systems long enough and Neal Paul is getting pressure to evaluate the effectiveness of these treatment systems, so this team has taken that as an undertaking to begin to look at those.

Operable Unit No.2, which is our Sites 6, 9 and 82.

As far as Baker is concerned, there's no further action planned.

MS.DEBOW: Would you back up to that comment--

MR.BARTMAN: Sure.

MS.DEBOW: --About evaluating the chlorinated plume in your treatment plants?

MR.BARTMAN: Sure.

MS.DEBOW: Does that fall within the Restoration

Advisory Board parameters because I've seen mostly, we've been looking at toxic substances as opposed to sanitation treatment facilities?

MR.BARTMAN: Chlorinated substance, I mean--

MS.DEBOW: Chlorinated?

MR.BARTMAN: --I'm talking chlorinated compounds - trichlorethene.

MS.DEBOW: Okay.

MR.BARTMAN: Cis-1-2-Dichloroethene, Vinyl chloride - not the chlorinated that you're thinking of with chlorinated water.

MS.DEBOW: So, when you're saying--

MR.LANDMAN: Contaminated groundwater.

MR.BARTMAN: I'm talking about--

MS.DEBOW: You're talking about--

MR.DUNN: Groundwater treatment.

MR.BARTMAN: --Groundwater treatment.

MS.DEBOW: Groundwater treatment plants, okay.

MR.BARTMAN: I'm sorry.

MS.LANDMAN: Specifically to address the contamination plume.

MR.BARTMAN: Yes.

MS.DEBOW: Okay, now I'm there.

MR.BARTMAN: Okay.

MS.WOOD: Then you have reached a point where you can do comparison data between what your study indicated was there and what is there today?

MR.BARTMAN: Correct.

MS.WOOD: If there's been a change.

MR.DUNN: Right.

MR.BARTMAN: Correct.

We're also looking at the effectiveness of how effective those plants are at remediating those plumes.

MS.WOOD: Well, when will we be able to share that?

MR.BARTMAN: We're hoping to be able to discuss it in March/April time frame and Rich is also preparing a demonstration with graphics and a lot of "bells and whistles" to show this partnering team the problems that we have with those systems.

Along with those treatment systems in those RI sites, we have many UST sites that are involved in that.

And, that's the problem that this team is facing and it's really Neal's problem, but it's really all--we've

all inherited this problem and it's a major undertaking for all of us.

MS.WOOD: So, you are now taking over the UST?

MR.BARTMAN: No.

MS.LANDMAN: No, we're trying to get a managed combined approach to look holistically at the entire area because what we have right now are a bunch of individual sites that are being handled through several different programs, yet we still have one physical location with intermingling problems.

And, so, someone needs to take a look at the area comprehensively to make sure that we're addressing all the issues rather than looking at just one little UST site or the particular contaminants from our RI sites.

MS.WOOD: Well, wouldn't that require a change in regulations or legislation?

MS.LANDMAN: No, we'll still probably be handling the individual sites as we are, but we want to make sure we get a comprehensive look and keep the perspective going on on the entire area so that we can work out some efficiencies--

MR.BARTMAN: Yeah, we--

MS.LANDMAN: --If possible.

MR.BARTMAN: We're trying to reduce the number of duplications of efforts, duplications in remediation systems and tackle this problem.

You cannot divide the groundwater and say, okay, you're associated with USTs, so you'll be cleaned up under this.

You're associated with the RI program.

We're going to handle the graoundwater problem within Hadnot Point, combining these two entities.

It's been long in coming, but it's going to be very successful.

Does that answer your questions?

MS.WOOD: Yes, thanks.

MR.BARTMAN: Again, Operable Unit No.2, Sites 6, 9 and 82.

There's no further action planned for Baker.

Operable Unit No.3, which is Site 48.

This site has had a no further action ROD sign on it for many years.

There's no further action for Baker.

Additionally, I believe there were five shallow

monitoring wells installed during the investigation and, under a separate contract, let out by the activity, not having anything to do with Baker, or OHM, those five monitoring wells have been abandoned because this site is a no further action site.

They're unsightly.

They were pulled out and regrouted.

[PAUSE WHILE SEVERAL MEMBERS TOOK THEIR SEATS]

If I could for our Court Stenographer, she's recording not only the meeting minutes for the record of decision, the meeting minutes will go into for what we'll talk about Operable Unit No.11, but also for this RAB meeting.

So, if you could for me, she has a seating chart, but if you could mention your name prior to a question you have, it would help her and I out tremendously.

So, okay, where was I?

Operable Unit No.4, Sites 41 and 74.

These sites are now undergoing the first semi-annual sampling. That's being conducted as we speak.

Some of the intricacies here, especially for

Site 41, in the record of decision we talked about surface water variants and a groundwater reclassification due to the chemical warfare materials and the difficulty with intrusive remediation.

We've had some unclear direction from the State, not with Base concerned, but with the Wilmington office about how to approach these variancies and these re-classifications.

So, Base has been assisting us, making some clarifications with the State as to which direction we need to go.

So, that's continuing, but at the same time it's not halting the remedial alternative which is the long-term monitoring.

Operable Unit 5:, which is our Site 2 is undergoing quarterly monitoring and it's part of the recommendations that this team, the partnering team, implemented in our January partnering session.

We again have enough data we feel sufficient enough that we will change our monitoring program from a quarterly sampling program to a semi-annual sampling program.

There's also been a number of additional recommendations added to this semi-annual sampling and these are including well abandonment of some wells that have deteriorated over time.

They're no longer valid sampling points.

The installation of new wells, both shallow and intermediate, and some changes in the analyses that have been requested because, again, we feel we have sufficient data to demonstrate to State and Federal regulatory agencies that these analyses are no longer needed.

The first semi-annual sampling will be completed in April of 1997.

And, I'll start with Operable Unit No.6, but if there's anything I say, Rich - Rich is the Project Manager for Baker Environmental - so I'll let him kind of fill in the gaps.

Operable Unit No.6 is consisting of Sites 36, 43, 44, 56 and 86.

MR.RICHARD BONELLI: 54.

MR.BARTMAN: I'm sorry, 54.

Don't by shy!

At our January partnering session, there were

lengthy discussions on Sites 36 and 86.

And, as part of that meeting, there will be discussion during this meeting regarding Site 36 and the implementation of what is known as a time critical removal action for the removal of PCBs at Site 36.

Additionally, the alternatives for remediation at the Site 36 are under review from this partnering team and if you want to go into it, Rich, why we're under review.

Basically what we had mentioned in the feasibility study and what we're now looking at have kind of changed and this team is basically looking at why they need to be changed.

MR.BONELLI: The two main problems at Site 36, as Matt alluded to, one was the problem with the PCBs in the soil.

And, as Matt said, that will be handled during the time critical removal action.

The other issue is a volatile plume which is located on the northeastern portion of the site. It's very limited in extent and we are recommending institutional control, or in other words to monitor the

plume over time.

We don't suspect that this plume has migrated downward into the drinking water aquifer.

In addition to that, the plume is rather small in size and is bounded on one side by Brinson Creek.

Sampling from Brinson Creek has not revealed any of the compounds found in the groundwater.

Therefore, we feel as though when the groundwater is discharging into Brinson Creek, there may be a lot of dilution going on.

So, we're recommending just a monitoring program for that site.

MS.DEBOW: What's the concentration of this plume?

How much substance is down there if we're going to just monitor?

MR.BONELLI: I believe the highest level is TCB in about 70 parts per billion.

I'm just going off the top of my head because I don't have that report in front of me.

And, it's limited to the surficial aquifer.

The size of the plume is about half-an-acre so

it's very small.

MS.DEBOW: And, in depth?

MR.BONELLI: The deepest contamination is down to about 35 feet.

At or about 35 feet, there is a semi-confining unit and we have installed wells below that semi-confining unit and have not found volatiles in the deep wells.

So, it's primarily a surficial aquifer problem at the site.

MR.SWARTZENBERG: Do you know what the source of it is - how it got there in the first place?

MR.BONELLI: Actually, it's kind of interesting.

We encountered the problem during the study that is located in a well that was sort of outside the site boundary, what they thought was the site boundary.

So, they kind of found it by accident.

After going back and looking at the aerial photography, it did show a rather large ground scar as though some activity may have occurred in that area.

But, as far as finding a source now, we took a number of soil samples in that area and found nothing.

So, it's probably telling us it's a very old

source that happened years ago. It's now not in the soil but it's a groundwater problem.

MS.LANDMAN: And, like tonight we're talking about Site 7 and 80, we will have a meeting that will go into greater detail on this later on.

We're just in the early stages of formulating what we would like to do at the site and it will be presented to you as we present the other sites.

So there will be a lot of future opportunity for open debate.

MR.BARTMAN: I'll continue.

Operable Unit No.7 which is Sites 1, 28 and 30.

Currently, there's no action planned, nor needed on Site 30, but Sites 1 and 28 are currently as we speak being sampled under the semi-annual sampling program.

And, again, there were some slight modifications to the sampling program that were discussed and implemented at our January partnering session.

Operable Unit No.8, Site 16.

This is a no further action site.

The record of decision I believe was signed in September of '96 and this site again under separate

contract, the monitoring wells that were installed by Baker have been abandoned and this site has been returned basically to what it was prior to any remedial action or remedial investigation being conducted there.

Operable Unit No.9, Sites 65 and 73.

This investigation is still in the report writing stage.

Currently, we are preparing a feasibility study for Site 73 and this feasibility study will involve some groundwater modeling to determine the amount of contamination and the possibility of contamination entering Courthouse Bay.

Operable Unit No.10, Site 35.

These reports are also in the preparation stage.

We've performed a treatability study, an air spargi-treatability study at this site.

There's also been a supplemental groundwater report, but we went out and completely delineated the groundwater contaminant plume.

And, also a feasibility study is being prepared for this site.

Operable Unit No.11.

We'll be talking here tonight on the final PRAP many of you should have received.

I think I remembered to send it out regular mail this time.

Again, we'll be talking about it this meeting and hopefully we'll have a final record of decision signed sometime in April.

Operable Unit No.12, Site 3.

This is one of the sites we discussed at the last RAB meeting.

The initial baseline groundwater monitoring is being conducted also during this time.

And, a treatability study and work plans have been put on hold basically because we're, amongst this team, we're discussing the possibility of constructing a biocell at Lot 204 using the biocell at Lot 203 which is currently constructed.

Or, based on projections of the amount of petroleum wastes that are going to be generated at the Base, potentially building another biocell using that biocell to treat the PAH waste and then have it permitted to handle POL wastes.

And, the Base would have to provide justification to potentially build another biocell prior to this.

So, before we finalize work plans, we're going to hold off and decide in which fashion we really want to go to.

This final ROD was submitted on January 6th and that, along with Operable Unit No.13, the final record of decision was submitted.

Operable Unit No.12 is Site 63.

The final record of decision was submitted on January 21st and there's going to be a debriefing to the Commander and then looking at somewhere by the end of February to have both records of decisions signed.

If you remember, Operable Unit 13 was also part of the RAB meeting last time.

That's going to be a no further action site.

Operable Unit No.14, Site 69.

I'm sure many of the people in this room are tired of hearing about it because we spent a full day with the treatability study subcontractors discussing the treatability study, what we've learned so far, what we

still need to learn.

And, so the treatability study for that which includes the UVB and the KGB systems.

This is still ongoing and will continue to ongo with some modifications.

But, so far, results of the UVB seem to be very positive.

Results of the KGB are not so positive and those are where many of the recommendations for changes and alterations to, I guess, recertify the system are going to take place.

Operable Unit No.15 which is Site 88 and

Operable Unit No.16 which includes Sites 89 and 93.

Baker submitted a Phase I report in November.

The Phase I report included information based on installation of temporary monitoring wells and trying to delineate the groundwater contamination at all of these sites.

Using that information and at our January meeting, we discussed what plans or what scope of work we needed in the Phase II investigations and came to the

consensus as a team on the number of wells, locations and what we needed to finish as far as delineation and possible remedial alternatives and what data we could gather during the investigation phase to assist in developing the remedial alternatives.

We know we have some problems at these sites and since we know that and we know our types of contamination, we figured we'd gather the data here which would assist us in developing those alternatives.

Those project plans for the second phase of the investigation will be submitted the third week of February and, hopefully, with funding, we can be out here sometime in the spring of '97 completing the Phase II portion of those investigations.

Operable Unit No.17, Sites 90, 91 and 92.

We have submitted draft project plans and are awaiting government review on those plans.

Then hopefully we will implement work sometime in late '97.

Operable Unit No.18, last but not lease, Site 94.

No work has been started on those.

Funding is not currently available.

And, a lot of information that's going to be dealt with on Site 94 will probably roll in because Site 94 is within Hadenot Point Industrial Area.

That information will probably be handled under this Hadnot Point evaluation.

So, it's still going to require some additional work, but we're hoping to answer a lot of the questions regarding this site with the Hadnot Point evaluation.

I think I'm done, unless there's questions.

MR.RAY HUMPHRIES: I've got a question.

MR.BARTMAN: Sure.

MR.HUMPHRIES: The 40,000 acres out at Sandy Run, is it going to be a sound and operable unit, or a site or what?

The Base recently acquired 40,000 acres there.

MR.BARTMAN: Right.

MS.LANDMAN: Right.

MR.BARTMAN: Now, you're talking about the Bostic properties?

MS.DEBOW: Yes, Sandy Run.

MR.BARTMAN: And, all those, yeah.

We have done baseline assessment, realty assessment on those.

MS.LANDMAN: Right, and the particular sections of the properties that were determined to possibly have some problems relating to contamination were excluded from the acquisition process right upfront.

So there are some limited parcels which were not included in that overall acquisition because of potential environmental problems.

That's why that baseline screening was done to make sure that the government didn't incur a liability by acquiring properties that might have a problem.

So, the assumption right now - and Jennifer can correct me if I'm wrong.

MS.CASEY: No, you're correct.

MS.LANDMAN: That there isn't a problem with that property because of the assessment that was done prior to the actual purchase of the land.

So right now, there are no plans for including any of those properties as an additional operable unit.

Now, if we should encounter something in the future activities out there, run across something, just

like we would identify a new site here, which is kind of the way we identified our Operable Unit 18 in '94 was a problem, you know, we would then benchmark as appropriate.

Right now, there are no particular conflicts.

MR.HUMPHRIES: Thank you.

MR.SWARTZENBERG: You all own that property.

Has anything ever been done? Has it been given an operable unit or a site designation?

That area by Dixon High School, that junk yard there, there was a question about whether the Base owned it.

MS.CASEY: I can find out, but I don't know but I think it's been assigned to an operable unit. It hasn't been made to a site yet.

MS.LANDMAN: It definitely is not on the plan.

MS.CASEY: If I know the area you're talking about, it's not a site.

MR.SWARTZENBERG: Anybody know where I'm talking about.

MS.CASEY: I know where you're talking about.

MR.SWARTZENBERG: And, it's Base property or is it still in limbo?

MS.CASEY: I thought it was off the Base property, just that corner right there is off-Base property.

I could find out and give you the answer.

MR.SWARTZENBERG: I was curious about that being Base property.

MR.CALLAWAY: I think when we went on our field trip, Tom discussed that with us--

MR.SWARTZENBERG: Yeah.

MR.CALLAWAY: --And, said that he'd just squatted on it so long that the Navy never decided to do anything.

MR.SWARTZENBERG: Yeah, I don't know, I don't want to open a can of worms here.

The way I understood it, that originally was Base property.

MR.CALLAWAY: It was Base property.

MR.BARTMAN: Is that near Verona Loop?

MR.SWARTZENBERG: Yeah, well, no, no, it's down by Dixon High School.

MR.BARTMAN: Okay.

MR.SWARTZENBERG: The junkyard there.

MR.BARTMAN: Yeah, okay, I know.

MR.SWARTZENBERG: Cars and everything.

MR.CALLAWAY: But, there was something about the--

MR.SWARTZENBERG: Just a little tiny corner.

MR.CALLAWAY: --Easement for the highway, the power lines and the government's property.

MR.SWARTZENBERG: Yeah.

MR.CALLAWAY: And, he was just in between all of it or something.

MR.SWARTZENBERG: Maybe they're just going to let him sit there, I don't know.

All right, I'll withdraw anything on that. I was just curious.

MS.DEBOW: I've got one question that probably has been answered before - Tracey Debow - concerning Op.Unit 14.

When you were talking about in the executive summary the need for institutional controls because there would be no residential use in the future, is there any chance that those volatiles will impact the Castle Hayne off-Base; i.e. the wells that are owned by the homes

outside the Base?

MR.BARTMAN: Uh-uh.

MS.DEBOW: Those volatiles - that's my biggest concern is for the homes off-Base because, of course, they're using the aquifer right near that area.

And, that's not addressed in the executive summary.

MR.DUNN: That water flow is toward the river or toward the ocean.

MS.DEBOW: Will it go under the creek? Will it impact the folks on the other side towards Stone Bay across Whiskey Creek?

MR.DUNN: Site 69?

MS.DEBOW: Yes, Site 69.

MR.DUNN: I don't see how it could, do you, Rich?

MR.BONELLI: Well, what you're describing is something that's kind of up-gradient.

MR.DUNN: Right.

MS.DEBOW: Okay, well, if it's up-gradient, I didn't see that addressed but I did see residential addressed, so I wasn't sure how far there could be impact

on that Site 69.

Same scene there, homes being built back in there, too.

MR.BARTMAN: He done it the right way.

MR.DUNN: I think Site 69 is about right here--[referring to overhead projected slide].

MS.DEBOW: Everett Creek?

MR.DUNN: Everett Creek.

Groundwater flow is either to Stone Bay or towards Courthouse Bay and it surfaces, for lack of a better word - it comes into out of the ground in one body of water or the other.

MR.BARTMAN: If it gets there.

MR.DUNN: Yeah, if it gets there.

MS.DEBOW: Okay.

MR.BARTMAN: Yeah, I mean contamination.

MS.DEBOW: If it gets there and at this point it's not there.

MR.DUNN: Right.

MS.DEBOW: But, that was my concern in the executive summary that we will not have to address whether that contamination can impact the homes across Everett

Creek in that area that are being built now.

MR.DUNN: It doesn't flow this way.

MS.DEBOW: Okay.

MR.DUNN: It flows--it goes to the nearest point of relief, in this case Stone Bay is a much bigger relief point than Everett Creek.

MS.DEBOW: Okay.

MR.DUNN: That's just a generalization but groundwater can flow anywhere it's going to follow. It's going to come to the easiest place of relief.

MS.DEBOW: And, at this time, we don't have any sampling data that indicates that it's off-site?

MR.DUNN: No, it's still unavailable.

MS.DEBOW: Okay, thanks.

MR.DUNN: There's a road right around the fence and the well's outside the fence in between.

MS.DEBOW: Okay.

MR.BARTMAN: And, I believe there was sampling, surface water sampling conducted in Everett Creek that demonstrated that there wasn't contamination in there.

MR.DUNN: Way back.

MS.DEBOW: Yeah.

MR.DUNN: Yeah.

MS.WOOD: Not on that same material, but on that Operable Unit 9, that he's doing a study on contamination entering Courthouse Bay, is that including the water flume or the water underneath that was mentioned when we went out that there had been a problem, you know, where the old washing area was?

You know, people looked at where they used to do washing.

MR.BARTMAN: Oh, yeah.

MS.WOOD: What about--does this feasibility study going also to cover the water underneath the Bay there?

MR.BARTMAN: This feasibility study will be, we'll have modeling conducted in it to determine where that groundwater that's going into the Bay.

It's really not water going under the Bay.

MS.WOOD: Oh, then I misunderstood you then.

MR.BARTMAN: Into the Bay.

MS.WOOD: Because I understood it was water underneath the Bay--

MR.BARTMAN: Right.

MS.WOOD: --That was the problem.

MR.BARTMAN: We know that that contamination plume is right at the Bay. I mean, it's getting in there. I mean, we're not 20 feet back, a 100 feet back, we're right at its borders.

And, that feasibility study and those models in the remedial alternative, we'll need to address preventing that groundwater from getting into that Bay.

That's what we're going to be addressing in that.

MS.WOOD: Then I misunderstood.

MR.BARTMAN: Yeah.

MS.WOOD: It's not a problem then.

MR.BARTMAN: It's not getting under the Bay and going to the other side.

MS.WOOD: Okay, or down?

MR.BARTMAN: No.

MS.LANDMAN: It discharges into the Bay.

MR.BARTMAN: Yeah.

MR.DUNN: It discharges into the Bay, but it does go under the Bay and then comes back up into the Bay.

MR.BARTMAN: Right.

MS.WOOD: Thank you.

MR.DUNN: If you've got deeper water, it's going to act like it's going to go under the Bay, but when the Bay gets above it, it comes up and surfaces.

MS.WOOD: Thank you.

MR.BARTMAN: It's a receiver.

Okay.

MS.CASEY: SI sites.

MR.BARTMAN: SI sites, I'm sorry.

MS.CASEY: The sites we done some work on that have not been assigned to an operable unit, yet.

MR.BARTMAN: Right.

And, if we find some problem with those sites, they then become brought into an operable unit and become RI sites instead of SI.

One of the sites that was not part of the original seven is Site 10 which is the old Base landfill which is directly across the street from Lot 203.

A site where we haven't done any investigation--or, I'm sorry, we did do very minor investigation just to get it on LANTDIV's Risk Ranking System.

MS.LANDMAN: So that we can spend money to

investigate it.

MR.BARTMAN: Right.

In order to become a priority with LANTDIV, we had to find some type of contamination there in order for it to get ranked high enough to spend money on it and put on the priority list.

We have developed project plans which are now under review by the agencies.

And, whenever we get those back, then we'll finalize those project plans.

The investigation date for that, I really couldn't tell you. That'll be based on funding and availability and all the other good things in prioritization.

The other seven, Rich?

MR.BONELLI: Yes.

MR.BARTMAN: See, we both have to count them.

The other seven SI sites, the investigations have all been completed on those sites.

And, the investigations at these sites were a little bit unique because mostly in what's commonly known as an SI, you got out and put like three soil samples in

and three groundwater samples.

Well, this team approached it a little bit differently.

And, we said we do these SIs, let's go out and get enough data so that we have sufficient data to write the site off if we don't have to bring it into an RI, or if we have to go into an RI, we only have to collect a limited amount of data to finish the investigation.

So, I believe there's only two sites, Rich, that won't become--or, none of the sites will become RI sites, if I'm correct.

MR.BONELLI: The way it stands right now, two of the sites will have some type of removal action.

One of the sites, there are PCBs in a small lagoon and that was at Site 84.

Site 85, there's several piles of old batteries which will have to be removed.

But, the other five sites, based on the draft report, indicate that there's really no further action at this point.

MS.LANDMAN: These sites, just for the record that we're talking about, are Sites 12, 68, 75, 76 and 87

and then of course 84 and 85 which were the sites that we'll do removal action at.

Those will be a subject of a future meeting before we can determine that there's no further action.

Again, the data will be presented for you to understand.

MR.BARTMAN: It's all yours, Jim.

MR.JAMES DUNN: Mine's a little different.

[Whereupon Mr.Dunn then supplemented his presentation with the use of overhead projected slides.]

We've got right now we're in an OHM mode, operation and maintenance.

We're operating and maintaining three groundwater treatment plants, one at Lot 203 and the north and south plants at OU.1, Hadnot Point area.

During the month of January, the Lot 203 treatment plant operated all but 36 hours. The 36 hours of downtime is an aggregrate total of all the cartridge filter changes, two electrical outages.

And, one instance on just the shallow train, we had a problem with a couple of the wells.

These wells are all remote from the site and all

are operated by telemetry.

We had a bug in the telemetry for about four or five hours on the shallow side.

The north and south plant was restarted on the 8th of January and ran the rest of the month with no downtime.

The south plant was taken out of service on the 9th of January for cleaning, was restarted on the 31st.

We installed 40 pumps in the south plant.

We reconditioned and reinstalled sand in the sand filter.

New carbon in both carbon filters.

Just a general cleaning.

The south plant is operating at design capacities on its second phase of the treatment train.

On the first phase of the treatment train we only got about 15 gallons a minute coming into the plant from the four wells that are online.

So it has excess capacity of about 60 gallons a minute.

The biocell in Lot 203 is being operated but this being winter and it's being rainy, the bugs are very

sleepy and tired.

We have seen a little bit of decrease in the diesel fraction. We don't have a gasoline fraction.

And, oil and grease fraction has not changed.

So, we're hoping that it'll get a little warmer and a little dryer, we'll soon speed that process.

We're within, I would say, one good month of being completed on the soils that are in there, but when we'll get that full good month, we don't know.

The other action items.

As of today, we were at Camp Geiger with the people from State to get an approval on the site for the biocell at Geiger.

That permit has been applied for an I would guess we'll be receiving it within the month of February.

That's it.

MR.BARTMAN: I have to talk again?

MR.DUNN: Pardon.

MR.BARTMAN: I have to talk again so soon?

Do you want to start on eleven because I have to kind of lead into Rich.

MR.DUNN: Let me give you a little lead-in

before he starts.

There was some discussion about 70 PPB of TCE.

To give you an idea of what 70 PPB is, one PPB is equivalent to one second in 31 years.

One PPM is a minute in two years.

Although these sites are contaminated, the levels of the contamination are very, very small.

They're above the State limits, but they're still very, very small quantities of contamination in almost every instance.

MR.BARTMAN: Just to use another analogy, think of 70 red ping-pong balls and a billion white ping-pong balls in a big box and that'll tell you how much contamination is out there.

MR.SWARTZENBERG: Is that above the State and above the Federal limits too?

MR.BARTMAN: Yeah.

MR.SWARTZENBERG: Then why are we fooling with it?

MS.WOOD: Because maybe it doesn't take an awful lot.

MR.DUNN: No, it's required.

MR.BARTMAN: That's true, too.

MR.DUNN: It's above the actual level of both State and Federal, but still the level of contamination is not tremendous and that's why it's very difficult to find it and chase it to get your hands around it and then to determine is it financially feasible to do anything other than just monitor.

MR.SWARTZENBERG: Yeah. It seems to me we're spending an awful lot of money to get 70 ping-pong balls out of the Bay, but, you know.

MS.DEBOW: Well, but that was my whole thought because I was thinking along the lines of if it's something like seven micrograms and it's a half-acre by 35 feet, then we're probably chasing ten gallons worth of whatever spill that was.

MR.BARTMAN: That's not necessarily so because you're looking at a point source concentration.

You're looking at one well in that acreage, so without putting wells everywhere, you don't really know the volume of water that you're getting.

MS.DEBOW: Yeah, well, what I was trying to perceive was how much possible volatile there was in the

ground.

And, 70 micrograms or 70 parts per billion is not that much covering a shallow depth over half-an-acre, I can perceive what that is.

MR.BARTMAN: Right.

MS.DEBOW: But, covering 20 acres down to 135 feet is an entirely different issue.

That's where I was putting those measurements.

MR.BARTMAN: Yeah.

MS.DEBOW: I mean, you're right. I mean that kind of result could be from one bucket--

MS.WOOD: Right.

MS.DEBOW: --Of solvent getting poured onto the ground 40 years ago.

MS.WOOD: Right, exactly.

MS.LANDMAN: Absolutely.

MS.DEBOW: That's where I was trying to get the idea.

MS.LANDMAN: The quantities are that small. I mean, it could have been something that happened in your back yard.

MS.DEBOW: Yes.

MS.TOWNSEND: But, keep in mind that we are following a regulation in the State of North Carolina all waters are drinkable, so although it may not be useable aquifer meaning shallow that in the State there is the potential that anyone can sink a well and start drinking the water.

So we have to look at it as a drinking water level.

However, that's why we're adding institutional controls to our record of decision restricting that land use for any drinking water, potable water source.

And, also putting in the monitoring where we'll watch it and make sure that this is the level we have and that there's not a bigger problem that was undetected.

And, that it is, if you want to use the term naturally attenuating or biodegrading before it reaches a useable source.

So, that's why we have a lot of institutional controls and we're doing the monitoring.

MS.DEBOW: Correct.

MR.BARTMAN: Why is everybody looking at me?

MS.LANDMAN: Because you're next.

MR.BARTMAN: I'll try to make it light. I think when Neal's here, everybody's a little bit apprehensive, so I like to run things light.

Jennifer is cracking the whip.

If you want me to stand, I'll stand.

MR.DUNN: As long as everybody can hear you.

MR.BARTMAN: Okay, I'll sit, that's great.

He's a community coach here, so he has a role to meet, right.

[Whereupon discussion followed regarding Operable Unit 11, Sites 7 and 80.]

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The lead-in was supposed to go from the sessions on the time critical removal action to Rich's discussion.

We have a Site 36 which is based on our recent partnering meeting in January, this Site 36, there's been findings of polychlorinated biphenyls, PCBs, in the soil there.

So, in order to take care of this, to remedy this concern, this team has come up with implementing a time critical removal action.

So, at this time, I'll turn it over to Rich.

MR.BONELLI: I think I'm done. You just said it!

MR.BARTMAN: I'm good, as long as I'm not asked ecological questions.

MR.BONELLI: I have a few maps I want to hand out before I start, if you could just pass them out.

[Distribution of documents followed]

As Matt said, the site we're talking about is Site 36.

Site 36 is located within the Camp Geiger area.

Site 36 was part of an RI we did at Operable Unit No.6.

As Matt said, we have been advised of PCBs out there and as a group, we have decided to move forward with the time critical removal action.

To give you a little bit of history on Site 36, if you look at the second figure, Site 36 is about 25 to 30 acres.

The contaminants that were initially believed to have been disposed of out here were typical residential waste and possible sawdust.

The original site was down in this area of Site

36.

The pesticide problems that we have encountered are up here.

MR.BARTMAN: PCBs.

MR.BONELLI: PCBs up in this area.

What had happened was during the RI investigation, we had taken a soil sample and we had found some PCBs in it.

Subsequent soil sampling indicated that the PCB problem was more extensive than what we thought.

And if you look at the third figure in the packet, the original sample that I'm talking about is up in this area here.

And, subsequent soil sampling episodes found the PCBs further to the east.

The color scheme you see in my figure here, this relates to different sampling episodes.

But, what had happened was after the third round of sampling, at that point we decided we'd better start looking toward a time critical removal action.

At that time, in December, we went out and on my figure it kind of shows up here in purple and did a very

large grid over this area.

At that time, we used ENSES which is a field test kit and a real nice way of determining what your PCB levels are in the field.

But, just to confirm that, we did send samples off to a laboratory to confirm what we'd found.

In general, what we did find was PCBs are generally to the east of where we initially found it.

There are three lines drawn on your figure.

The first line represents the outer boundary of 10 PPB and PPM.

The second line here represents the boundary of 25 PPM and the inter-line here represents 50 PPM.

Right now, we are in the design phase of the time critical removal action which means that we are taking the data and we are determining the volume of soil that Jim will be involved with in the clean-up.

One thing to note is that you'll notice that the lines are not completely enclosed in this area on the road.

What we decided to do as a team was during Jim's excavation process, he'll be taking additional samples and

running them to close out this loop.

So, by the time Jim runs those samples, we will have a much better handle on the total volume that will have to be removed.

Why was the time critical removal action such a big push?

Well, if you look at the last one, the overwhelming reason was that the route 17-Bypass is coming through the site, or very close to our site.

And, in fact, if you look at the way the map is set up, you'll see that right here is where PCBs were found.

This is about where we think the Bypass is going through, so we want to make absolutely sure that the PCBs have been removed prior to construction of the highway.

The time frame we're on right now looks like the initial design will be completed probably early March.

The final design will be late spring and we're hoping that Jim takes over sometime in the early summer.

Later on in the summer, I'll probably come back again and talk to you about the actual removal, similar to what we did tonight on this site.

So, are there any questions?

MR.SWARTZENBERG: That's pretty close to the water, too, isn't it?

MR.BONELLI: Yeah, in fact, Brinson Creek.

MR.SWARTZENBERG: Brinson Bay or something.

MR.BONELLI: Brinson Creek is right along here.

MR.SWARTZENBERG: Do you have any problem with ditching any place?

MR.CALLAWAY: No.

MR.BONELLI: It's very, very far.

As Matt alluded to earlier, some compounds just don't tend to move very far.

PCBs fall in that category and--

MS.LANDMAN: We have not found PCB in the groundwater--

MR.BONELLI: No.

MS.LANDMAN: --At our particular site and that's consistent with their normal behavior.

MR.SWARTZENBERG: Okay.

Do you know the source of this?

MR.BONELLI: We don't.

You know, we looked at some aerial photography

of that area and, you know, a ground scar kind of shows up here.

You know, what it could be, it could just be, you know, accidental dumping. It could be they used PCB oils to suppress the dirt, you know the dirt roads. They may have just dumped it there.

It's a hard thing to say because it happened such a long time ago.

MR.BARTMAN: That gives you an indication of the mobility of PCBs or the immobility of PCB.

It's such a long ago dumping, you don't find it in the groundwater. You're still finding it in surface soil, not the subsurface soil.

They tend to stay around for a long time, but they don't go anywhere.

MS.LANDMAN: Unless there's continued disturbance to the surface soil--

MR.BARTMAN: Right.

MS.LANDMAN: --You know, it's in the middle of a road where dust is getting kicked up all the time, or it's being, you know, it's being physically graded with heavy equipment, it'll just sit there.

MR.BONELLI: That's one point I should bring out is that PCBs we found are pretty much restricted to the surface soil, which means down to a foot.

I'll turn it back over to Jennifer, our host.

MS.CASEY: Okay.

Does anybody have any more questions?

[No response]

I guess we're done for the night.

MR.SWARTZENBERG: Could we just for a second talk about our new members?

MS.CASEY: Oh, sure.

MR.SWARTZENBERG: I called a few people since we weren't getting any candidates and got two people to volunteer.

Now, they both have letters now, I believe, right?

MS.CASEY: They have had applications. I haven't received the filled out applications back yet.

MR.SWARTZENBERG: And, one guy just gave the wrong address?

MS.CASEY: Yes.

MR.SWARTZENBERG: And, he just got it today.

We are going to get those back.

MS.CASEY: And, we do have the additional applicant that had seen our ad and so I don't know if we select all three.

I thought we had talked last time of selecting two additional members.

MR.SWARTZENERG: A member and a shadow member, or two members?

MR.CALLAWAY: I thought it was the prospective member that you all sent an application to that I requested.

MS.CASEY: What's that?

MR.CALLAWAY: That you all had sent an application to a member that I had recommended.

MS.CASEY: Yeah, I sent the application and nothing ever came back.

MR.CALLAWAY: All right.

MS.CASEY: So, I don't know if you--had you talked to him about it?

MR.CALLAWAY: I talked to him. He said he received it and I thought he'd possibly sent it back.

MS.CASEY: Yeah, I think his name is--I can't

remember off the top of my head, but I did send an application. That was about the same time Tom was leaving and I never received anything back.

I don't know if I have his phone number. I could try sending an application again.

MR.CALLAWAY: I'll get up with him tomorrow.

MR.SWARTZENBERG: Will they have to go through some great big process to select these people or can we do it before the next meeting?

Is everybody going to get to review the applications? Did we decide on that?

MS.WOOD: I think we decided that you and I would do it.

MR.SWARTZENBERG: You and I would do it.

MS.WOOD: We would go through the same sort of criteria as we did last time.

MR.SWARTZENBERG: All right.

But, I mean, if we did it before the next meeting, would that be all right with everybody?

MR.CALLAWAY: Sure.

MS.DEBOW: Yeah, that'd be fine.

MR.SWARTZENBERG: Can we do that, do you think?

MS.CASEY: Yeah, that sounds fine.

I thought we had decided not before the next meeting but that sounds good, too.

MR.SWARTZENBERG: As long as we get the paperwork in.

MS.LANDMAN: You have the list of the criteria that we used which was basically just a blind scoring with the application and identify, you know, the different criteria and just add up the score.

MS.WOOD: Okay.

MR.SWARTZENBERG: Okay.

MS.CASEY: Okay. Eric, did you say you were going to try to contact him again?

MR.CALLAWAY: Yeah, I'll contact him tomorrow.

MS.CASEY: Okay. And, if he needs another application, I'll be happy to send it, just let me know.

MR.CALLAWAY: All right.

MS.CASEY: Okay.

MS.WOOD: Now, who's going to be Tom's replacement?

MS.CASEY: I'm Tom's replacement.

MS.WOOD: Oh, that's right.

MS.CASEY: Until Tom gets back.

MS.WOOD: Okay, good.

MS.CASEY: I don't have anything else.

Matt!

MR.BARTMAN: I think it was at the last partnering session there had been a request and I'm not sure from who, but it was relayed to me, that the community RAB members wanted a presentation and discussion about how human health risks are calculated and estimated.

And, I think because they talked about only twelve last time and something else, and only eleven this time, I kind of begged off and said, you know, these people will already be tired of hearing me talk, number one and I don't know if I have the time to prepare for that talk, too.

But, if there is time on the next agenda and that's still somebody's concern that they want to discuss how we conduct human health risk assessments, if you're not tired of hearing me talk, I certainly would be glad to present something for that.

MR.SWARTZENBERG: I'd like to hear it.

MR.BARTMAN: Okay.

MR.SWARTZENBERG: If we've got time.

MR.BARTMAN: Don't ask me any ecological questions.

MS.DEBOW: You present very well.

Don't worry about it.

MR.BARTMAN: Thank you.

MS.WOOD: And, may I ask was it on twelve, I don't know why but that just seems to me clearer and better written than some of the other ones we have.

I don't know what's the format.

MR.BARTMAN: Which, the risk?

MS.WOOD: This whole--

MR.BARTMAN: The PRAP?

MS.WOOD: --Report and I don't know whether we had a different author for this.

MS.LANDMAN: That was Matt.

MS.WOOD: Oh! I noted the change.

MR.SWARTZENBERG: I move we adjourn.

MR.BARTMAN: I appreciate your time.

Thank you, very much.

[Whereupon the proceedings concluded at 9:15 P.M.]