



DRAFT

MARE ISLAND NAVAL SHIPYARD

Restoration Advisory Board (RAB) Meeting Minutes

HELD THURSDAY, APRIL 30, 2009

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, April 30th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:05 p.m. and adjourned at 9:17 p.m. These minutes are a transcript of the discussions and presentations from the RAB Meeting. The following persons were in attendance.

RAB Community Members in attendance:

- Myrna Hayes (Community Co-Chair)
- Kenn Browne
- Michael R. Coffey
- Wendell Quigley
- Paula Tygielski
- Chris Rasmussen

RAB Navy, Developers, Regulatory and Other Agency Members in attendance:

- Marie Dreyer (Acting Navy Co-Chair)
- Jackie Dunn (Navy RPM)
- Jessica Beck (TTEMI)
- Steve Farley (CH2MHill)
- Sheila Roebuck (Lennar Mare Island)
- Neil Siler (Lennar Mare Island)
- Gil Hollingsworth (City of Vallejo)
- Paisha Jorgenson (Water Board)
- Josh Bernardo (Solano County)
- Cris Jespersion (Weston Solutions)
- Dwight Gemar (Weston Solutions)

Community Guests in attendance:

- Dijji Christian
- Russ Farnell
- James Hawkins
- David McMurtry
- Jeff Morris
- Mary Ann Parker
- Wendy Plank
- James Pollock
- Jim Porterfield
- Les Rich

RAB Support from CDM:

- Carolyn Moore (CDM)
- Wally Neville (audio visual support)

I. WELCOME AND INTRODUCTIONS

CO-CHAIR HAYES: Welcome. My name is Myrna Hayes, and I'm the Community Co-chair for the Restoration Advisory Board here at the Mare Island Naval Shipyard. And I've been the co-chair for almost fifteen years. So welcome to the 15th anniversary of Mare Island's Restoration Advisory Board, although environmental cleanup was certainly taking place before then. And I'll pass the microphone to Marie who's here in the place of Michael Bloom, my co-chair.

ACTING CO-CHAIR DREYER: Thanks, Myrna. As Myrna said, of course tonight is the 15th anniversary of the Mare Island Restoration Advisory Board. And I'd just like to invite everybody to, you know, stay with us tonight and partake in the cake that Michael Bloom provided -- even though he is not here, the Navy did come bearing cake and so --

CO-CHAIR HAYES: And balloons.

ACTING CO-CHAIR DREYER: And balloons, right, and table coverings.

CO-CHAIR HAYES: And tablecloths.

ACTING CO-CHAIR DREYER: So definitely have some of the cake with us, take some pictures with us. And before we get started tonight I thought we would just go around the room and introduce ourselves. My name, as Myrna said, is Marie Dreyer, I'm acting as the RAB Co-chair for tonight.

MS. TYGIELSKI: My name is Paula Tygielski, I'm from Benicia.

MR. COFFEY: Mike Coffey, RAB member from American Canyon.

MR. FARLEY: Steve Farley with CH2M Hill.

MR. QUIGLEY: Wendell Quigley, RAB member from Mare Island.

MR. HOLLINGSWORTH: Gil Hollingsworth, City of Vallejo.

MR. JESPERSEN: Cris Jespersen with Weston Solutions.

MR. BROWNE: Kenn Browne with the Solano group of the Sierra Club from Vallejo.

MR. JORGENSEN: Paisha Jorgensen with the Regional Water Board.

MR. RICH: Mr. Rich, Historic Ships Memorial, Battleship Iowa Project.

MS. ROEBUCK: Sheila Roebuck, Lennar Mare Island.

MR. SILER: Neal Siler, Lennar Mare Island.

MR. GEMAR: Dwight Gemar with Weston.

MS. DUNN: Jackie Dunn with the Navy.

MS. BECK: Jessica Beck, Tetra Tech.

MR. BERNARDO: Josh Bernardo, Solano County haz mat.

MR. MORRIS: Jeff Morris with Remedy Engineering.

MR. MCMURTRY: Dave McMurtry, Benicia.

MR. PORTERFIELD: Jim Porterfield, ex-Mare Islander.

MR. FARNELL: Russ Farnell, Historic Ships Memorial, Iowa Project.

MS. PLANK: Wendy Plank, Iowa Project.

MR. POLLOCK: James Pollock, Iowa Project.

MS. CHRISTIAN: Well, I had a terrible day. I was giving a tour of Mare Island and we came to a place in the temple where there's a ramp and then there's a step, and this man who was with me, he went from one to the other and fell backwards on me, and we both went down. And I have already lost a vertebrae in my back and I hit right there. So I spent my day in Kaiser, my afternoon in Kaiser.

MS. MOORE: And your name?

MS. CHRISTIAN: My name is Diji Christian.

MS. MOORE: I am Carolyn Moore with CDM.

CO-CHAIR HAYES: Diji, I almost did that same thing on Sunday at the Daffodil Tea. I stepped off of that ramp backwards onto the top stair, but I didn't have any gentleman tourees with me. So I wish you health. And here's Chris Rasmussen. So I introduced you Chris. He's a member of the Restoration Advisory Board. Our first presentation will be Investigation Area K Offshore Sampling Summary, and that will be given by Marie Dreyer of the Navy, and she can introduce Tetra Tech.

**II. NAVY PRESENTATION: *Investigation Area K Offshore Sampling Summary*
Presentation by Ms. Marie Dreyer, Navy and
Ms. Jessica Beck, TTEMI**

MS. DREYER: Thanks, Myrna. As Myrna said, tonight's Navy presentation is on the offshore field work summary on the field work that happened here recently in February and also late in 2008. I will be co-presenting this presentation with Jessica Beck.

So tonight's presentation will cover the following: We'll give you a brief history of the investigation area, Investigation Area K, the offshore sediments area here at Mare Island. We'll go over the sampling objectives of the two investigations that happened here most recently; that is the baseline ecologic risk assessment investigation, or BERA investigation; and the Outfall and Supplemental Sampling Investigation or OSSSI. We'll give you a brief summary of the sediment and tissue data that we gathered from those two investigations. As well as outline the next step for this site here at IA-K. I know this is really small, so what I encourage everybody to do, if you could grab your handout, and inside it is a eleven by seventeen fold-out figure.

MS. BECK: It's at the end.

MS. DREYER: It's at the end of the presentation. Thanks, Jessica.

So basically what you see here is the IA-K Investigation Area is comprised of 66 cells and they're broken into what we term as six focus areas, if you will. These focus areas were determined by the past uses of what the particular area or adjacent onshore area was used for. So what you see is from cells one through ten, this is the Fleet Reserve Area. This area was typically used for mooring inactive vessels. The cells 11 through 16, that's the North Building Ways Area. This area was used for construction of new ships, new ship building construction. Cells 17 through 22, this is the Berths 1 and 2 Area. Typically mooring, ship mooring and light

ship repair took place here. The cells from 23 through 41 there by Berth 24, this is the North Mare Island Strait area. Typically ships were moored here for overhaul, conversion, and repair. Rounding out the rest of the cells is cell 42 all the way through cell A1. Adjacent to this area abrasive blasting occurred as well as ordinance manufacturing and ordinance Demilitarization.

Now, because of these activities, potential contaminants may have been released. And our current contaminants of concern include metals, Semi-Volatile Organic Compounds or SVOCs, pesticides, Polychlorinated Biphenyls or PCBs, organotins, and TPH, Total Petroleum Hydrocarbons. The sampling objectives for the two investigations are as follows: First, for the Baseline Ecological Risk Assessment investigation, what we wanted -- our main objective for this investigation was to revise the 2002 Ecological Risk Assessment, and also fill in any data gaps for the upcoming RI report or Remedial Investigation report. And we'll get into the plan for publishing this Remedial Investigation report in the next steps slide at the end of this presentation.

And then the sampling objectives for the OSSI or Outfall and Supplemental Sampling Investigation were two-fold; it was to characterize the nature and extent of site related contamination resulting from discharges from storm water outfalls. And also to characterize the nature and extent of just the historical activities that occurred at these various cells that I outlined in slide three. And also just what the activities that are -- or what may have happened -- the potential outfall runoff, etcetera, from the offshore activities adjacent to those cells. I'll pass it over to Jessica now to go over the specifics of the two investigations.

MS. BECK: The first of the two investigations was the Baseline Ecological Risk Assessment investigation which looked at evaluating the habitat for ecological receptors along the shore of Mare Island. We collected 47 sediment samples from the top zero to half foot surface of the sediment, which is the biologically active zone for ecological receptors. And we used, we collected those sediment samples using a Van Veen sampler, which is kind of one of those clam shell samplers that gets lowered into the water, and as the cable goes slack the clam sampler opens up, and then when it hits the surface of the sediment and they pull back it kind of closes up and collects the sediment in there.

We analyzed that for metals and semi-volatiles compounds, organic compounds, pesticides, polychlorinated biphenyls, and organotins. And then we also took samples to analyze for grain size, salinity, pH, and total organic carbon. Also while we were out there we collected sediment to run 28 day bioaccumulation tests which measures concentrations of chemicals in the tissue and the uptake of those chemicals. And we also collected sediment for a ten day whole sediment bioassay testing which measures whether chemicals can revary or survive in that sediment. It tests the toxicity of those against the creatures that live in it.

MS. TYGIELSKI: And the creatures are called all the amphipods?

MS. BECK: Yeah. We looked at amphipods which are crustacean like -- shrimp like crustaceans. The lab takes them, they have like a -- they put it in order, they grow them elsewhere and then they put them into our sediment to see if they can live in our sediment. While we were out there we also collected fish. And we used an otter trawl to collect the bottom dwelling fish. We caught mostly Sculpin and some Bay Gobies. We also collected clams. And we used the Van Veen sampler to collect the sediment, and then we put the sediment through a sieve which then we could collect all the clams off the top and submit them to the lab. And then

the tissue of the clam was taken out and processed and sent back to an analytical laboratory to determine what amounts of chemicals were in the tissue.

So this is a picture of the sampling vessel we used. And rigged up front is the van veen sampler. There's another picture of it as it comes back onto the boat. This is a picture of the clam sample we would send in, so in that sample there are about three hundred clams.

MR. COFFEY: Tiny.

MS. BECK: Very tiny, quarter to a half an inch. There's a relative size. This is really the largest thing we saw out there. And we turned into the lab more typically those two sizes there. This is a picture of the Bay Gobie and then the rest are all Sculpin, but that's a typical fish sample that we would send into the lab. And there's just the relative size in the palm of your hand.

So the second investigation we conducted this February and we collected sediment cores along the shoreline of Mare Island. There were two investigations. There was an outfall investigation where we were trying to target the mouth of the outfalls or within ten or twenty feet out from the outfall just to get a feel for what the concentrations of sediment, of chemicals are in the sediment as they came out of the outfall. And then also we did a supplemental sampling investigation which was to take cores from offshore areas deeper in the strait. Overall we looked at 49 different locations.

So this is a picture of doing a push core sample near an outfall location near the Coast Guard pier. And this is a picture of what it's like at low tide along the south shoreline area. And they're doing a push core here. It's a step-out sample from one of the outfalls that was sampled during the 2007 pilot study. And this is a vibracore that's at the back end of the sampling vessel. And it goes down to whatever depth that you need it to go, they can measure it, and it pulls up the core. It vibrates down and they pull back out and there's the core. And that's basically what you see out there, it's silt and it's gray and soft.

MR. COFFEY: Slimy.

MS. BECK: Here's Marie on the boat, she got to come visit. And they're just sampling one of the cores there. They put the core into these plastic trays and then we mix it all around and put it into sample jars to submit to the lab for analysis. So the data came back and we haven't --

MS. TYGIELSKI: What mix the whole core -- mix it all around? What's the point in mixing up the core?

CO-CHAIR HAYES: Yeah, what does that mean?

MS. BECK: I'm sorry. We were pulling up like five foot intervals, and it was decided during many discussions for the project.

ACTING CO-CHAIR DREYER: Between us and the agencies.

MS. BECK: The agencies, yeah. Getting a representative sample from that whole five foot interval was going to help determine just the presence or absence of a certain chemical group, and in the Remedial Investigation those results would be taken to kind of figure out the vertical nature and extent of what's out there at these outfalls or out deeper in the strait. So it's just to -- so that every five feet you'd have a sample that would represent that interval.

ACTING CO-CHAIR DREYER: Well, how much mixing? How -- you mix the whole five feet core up?

MS. BECK: You would take enough that you would -- that you need for your sample. So we'd fill up three soil jars.

ACTING CO-CHAIR DREYER: But how did you decide where you took it from in the core?

MS. BECK: You take it all along. So you try to be very consistent about how much you take along the whole length of that core.

MR. COFFEY: Length, not width.

ACTING CO-CHAIR DREYER: No, I know.

MS. BECK: Well, we needed quite a bit of sediment, so I mean we ended up taking a good amount from the whole length.

ACTING CO-CHAIR DREYER: Basically they measured it out and they partitioned off certain sections, and within those sections that's what they would mix and send to the lab.

CO-CHAIR HAYES: And you were not looking for quantity, only presence of?

MS. BECK: Well no, we got an actual number.

CO-CHAIR HAYES: Not concentrations of it.

ACTING CO-CHAIR DREYER: We got a concentration.

MS. BECK: Yeah.

CO-CHAIR HAYES: But a mixed concentration on a five foot core, right? And a sample of a mixed on a core?

MS. BECK: Well, we would mix the whole amount we could, and it would pretty much go all go into the samples. So anything we gathered got sent off to the lab, but we mixed it around, so -

CO-CHAIR HAYES: Oh, boy, it doesn't sound very scientific saying, "Oh, we just sort of mixed it all up and we got what we could." And what I think Paula might have been asking, at least I am, you have five feet, and then you just like randomly grabbed some or you put all of it - all that five foot in a mixing bowl?

MS. BECK: About half of it. Say you have a core, a round circle, and you take out the top half of it and throw it into a bowl, you mix it around and you put into your sample jars.

CO-CHAIR HAYES: So you didn't slice all the way through, you just took some off the top?

MS. BECK: We got a good amount, halfway down, three quarters of the way down. We needed a lot of sediment to send into the lab, so --

CO-CHAIR HAYES: And you're not going to be, you said, I think, a little bit earlier that you're just going to be using this information from the lab; these, I guess, composite samples, not to say what the levels was of contaminants.

MS. BECK: No, there's actual --

CO-CHAIR HAYES: There's going to be a future --

MS. BECK: So there's actual concentrations that we have, and then in the RI they'll look at that whole core and see where along that, you know, some were 30 feet, they can see that maybe between five and ten feet there was something going on there, so they would need to look into that further.

CO-CHAIR HAYES: At the same locations? You'll be taking at the same locations?

MS. BECK: Yeah. So we drilled down to 30 feet in some locations, six in others, fifteen in others. So we have up to six samples from that entire depth, so they can see in those five foot intervals.

CO-CHAIR HAYES: You should probably in the future make a little chart that shows us what you did.

MS. BECK: Okay.

CO-CHAIR HAYES: Yeah. And what you're going to do with this thing.

MS. TYGIELSKI: It's just the idea of mixing the sample up makes it look like if you find something you're not sure where you found it.

ACTING CO-CHAIR DREYER: No. No. No, it's not like that at all. For example --

CO-CHAIR HAYES: It could be like that at all.

ACTING CO-CHAIR DREYER: This thing could take up to -- I forget the name of it.

MS. BECK: The vibracore.

ACTING CO-CHAIR DREYER: Thank you. The vibracore can take up to a 30 foot core. They lay it -- you know, once they pull it out they lay it down on the boat and they basically -- I mean, I was there. They basically ran a tape measure all along the 30 foot core or whatever it is, fifteen or six like Jessica said, and they chunked it up in five foot increments. And from that five foot increment they would mix it up and submit three jars full of that sediment sample to the lab for analysis. So it wasn't just random sampling, you know, there was a procedure, there was a work plan in place that specifically stated what our intentions were and what kind of results.

MS. TYGIELSKI: So if you find a contaminant you have --

CO-CHAIR HAYES: Paula, use the microphone please, please, please.

MS. TYGIELSKI: So if you find a contaminant you've got its depth isolated within the five feet range?

MS. BECK: No, but it -- we'll know that it's within that five foot range.

MS. TYGIELSKI: Right.

MS. BECK: So we'll know to go back to that five foot range later to do something about it.

MS. TYGIELSKI: Okay.

MS. BECK: So we did not -- we know where it is within that 30 foot core.

ACTING CO-CHAIR DREYER: Right.

MS. TYGIELSKI: Okay.

CO-CHAIR HAYES: And you will be going back to those exact same spots to take another -- to drill again in your RI?

MS. BECK: Well, during the RI they'll do an evaluation of all the samples that have been collected to date, not just this investigation, but 2002, 1997, all the way back in time. And then they will basically compile it in the Remedial Investigation. And in that report they'll look at the nature and extent of contamination; how deep does it go? How far out from the shoreline does it go? And in that evaluation they'll determine what screening criteria these concentrations have to be at in order not to have to do more, levels that are okay for the future or need more investigation or need to be cleaned up. And at that time in the Remedial Investigation they'll decide if they have to go out and collect more samples to be more exact, or maybe it found out it's okay and so then they don't have to go back to that location.

CO-CHAIR HAYES: Just one more question and then I'll let you go onto your presentation. In the 30 foot or fifteen or six, how many five foots did you take and where did you take them to do your sample for that -- for a 30 foot core? I assume you took more five foots out of a 30 foot than you did out of a six foot?

MS. BECK: Right. Exactly.

ACTING CO-CHAIR DREYER: For example, so for 30 feet we'd have six five-foot increments.

MS. BECK: So during the RI, the Remedial Investigation, all the new data we collected plus the old data will be looked at and evaluated in further detail. But initially I just wanted to share what was detected and kind of the frequency. Metals were detected in all the samples. All the metals were detected in every sample, it was pretty much a hundred percent across the board. But organotins, 34 percent of the samples have it detected, and so it's not very widespread compared to metals. Pesticides, the DDT's were the most commonly detected. They were detected in 40 percent of the samples, but all the other pesticides such as dieldrin or Chlordane, they were just 10 percent, a lot rarer than the DDT's. The polycyclic aromatic hydrocarbons, depending on the compound or the chemicals it was 95 percent detected, but some of them were only detected in five percent, so it just kind of ranged. For the polychlorinated biphenyls, Aroclors, were detected very rarely, around six percent. And we did specific congener analysis on the top two feet of our sediment samples, because that's the most biologically active zone, and that was detected pretty much in half of the samples. Semi-volatile chemicals were pretty rarely detected, at three percent. And total petroleum hydrocarbons were detected between 30 or 95 percent of the time. It's pretty frequent at some locations, or there are a number of locations where it was detected.

MS. TYGIELSKI: That is a huge range.

MS. BECK: Well, it was motor oil and then diesel. So I guess diesel was 30 percent, and motor oil was 95 percent detected.

MS. TYGIELSKI: So the percentage depends on which hydrocarbon you're testing?

MS. BECK: Yes. We looked at diesel and motor oil. The diesel was detected in 30 percent, but the motor oil was detected almost everywhere in some form. I mean it could be a low level, it could be high levels, but it was -- I forget the exact number, I'm sorry. We took a total of 149 sediment samples, so we took quite a few.

The tissue data -- the results of the tissue is going to be evaluated in the Remedial Investigation. What they do with that data is they look at -- we collect the tissue data from specific locations, and they will take the sediment sample that was collected at that same location and compare it against what concentrations of chemicals were detected in the tissue. That will help them determine how much bioaccumulation or uptake of that chemical was detected in the tissue. And then they'll also take the tissue results and model them into food chain models in the risk assessment, which will help determine if there's a potential risk to other organisms that eat the clams or the fish, such as like birds or mammals. And any results from that investigation -- or from that evaluation will be dealt with in the Remedial Investigation or further if they find any issues.

The next steps for IA-K, the full dataset is going to be published in the Data Validation Report which will be coming out in late May of this year. The data will be integrated and used in preparation of the Draft Remedial Investigation Report. This is where the new data will be added to the old existing data from 2007 or 1997, 2002. And then the Draft Remedial Investigation Report is scheduled right now for mid-October of this year.

Questions?

MR. COFFEY: When you guys have a sediment data, were there any surprises in this or was this what you expected to find?

MS. BECK: That's what we expected to find. Those are the chemicals of concern just over time that -- we've sampled out there before so we knew what was detected.

MR. COFFEY: So there were no surprises?

MS. BECK: Huh-unh.

MR. COFFEY: What were the metals detected? If you had a hundred percent metals in all of the samples, what metals and they're all over the place?

MS. BECK: Arsenic, iron, it was like 21 different metals. Thallium was detected the least amount, for whatever reason, but usually everything was detected.

MR. COFFEY: And DDT's too?

MS. BECK: Yeah.

MR. COFFEY: After all these years?

CO-CHAIR HAYES: Oh, yeah.

MR. HOLLINGSWORTH: Do you have something or do you have like a baseline that you can say no matter where you went in the Delta, up the Napa River or something, you're going to find DDT, you're going to find arsenic and what have you, so that you discount that particular chemical and/or product?

MS. BECK: Yeah, definitely San Francisco Bay ambient values are available for comparison against the metals. I'm not familiar with what we would compare for DDT's, but I'm pretty sure we have something out there.

MR. HOLLINGSWORTH: Because I've been told over and over again that Mare Island and this whole area has a natural arsenic content to it, and that when you combine that with the people

that panned for gold so many years by using arsenic, it doesn't surprise me at all that there's arsenic out there.

MR. COFFEY: True.

MS. BECK: Way in the back there.

MR. PORTERFIELD: I was just wondering the same thing that Gil was asking about. How far up river did you go? Because Kaiser ran a shipyard on the south end of Napa where they want to build all those big houses where Highway 121 Bridge crosses over, and I was wondering about maybe if you took some samples somewhere along the Napa Solano County line and maybe just north of the pier point 37 Bridge?

MS. BECK: Well, we sampled up to here, this corner here of the Mare Island area.

ACTING CO-CHAIR DREYER: So that bridge you see here is 37 Bridge.

MS. BECK: So Highway 37 is right here on the far end. I think we were closer to the corner of this pier, the fleet reserve pier.

MR. FARNELL: I heard the figure of 149 samplings. Were those all distributed evenly in all 52 or 60 areas? In other words, and they're all 30 foot deep? And you see what I'm trying to say, I see an average of about three per sector in here. Now is this right or could you elaborate a little better?

MS. BECK: Actually the samples were pretty evenly distributed in certain areas. We had just about one from all the cells up here; we were focusing on outfalls down here. There were a couple of cells up in here we didn't really sample because we knew. I guess we were just trying to fill some data gaps from where samples hadn't been previously collected so we could focus our area a little better. But not every sample went down to 30 feet, it was just based on past Navy dredging, historical Navy dredging depths and sedimentation rates, we knew we needed to go down to 30 feet at some locations to get to the Navy dredge depth, but only six feet at others.

MR. FARNELL: Okay. So the report coming out at the end of May is going to say which sectors got which depths?

MS. BECK: Yeah. Well, it will definitely show you where all the samples were, and then there's a table in there that has what it was sampled out to and how many times it was sampled.

MR. FARNELL: That's what is coming out at the end of May?

ACTING CO-CHAIR DREYER: Yeah.

MR. FARNELL: Right. Okay.

ACTING CO-CHAIR DREYER: Right. And again, like Jessica said just to remind you, this is just to fill in some data gaps that we had. We have a ton more data than what you see in the latest work plan for these two investigations.

CO-CHAIR HAYES: And you said that you will be combining all of that data in that May report?

MS. BECK: In the Remedial Investigation that will pull all the data back together in October.

MR. FARNELL: Okay. So in other words, in October it's going to have the report or results we put out is which areas need digging and which don't; is that right?

MS. BECK: Exactly. They're going to look -- they'll determine where there might be some issues that need some further investigation.

ACTING CO-CHAIR DREYER: Right. Not necessarily any remedial actions quite yet, that typically happens in an FS type report, a Feasibility Study Report. Right now for the RI investigation we're just going to combine the data and really analyze it and give some firm conclusions about where some problem areas may be.

MR. FARNELL: So in other words, if there is some really bad spots along there, they will be dredged up and but the decision you say won't be made in the October report?

ACTING CO-CHAIR DREYER: That's correct. A decision for dredging, etcetera, other remedial alternatives would be decided in an FS type report, and ultimately finalized in a Record of Decision or ROD which comes after the FS. So I would say a decision like that wouldn't be made until late 2010 or 2011.

MR. FARNELL: Okay. That's basically what I wanted was to just get a few details. I can think of more, but I'm sure others have questions too. Russ Farnell, Historic Ships Memorial, Pacific Square.

CO-CHAIR HAYES: I have some questions. We've been anticipating this -- your presentation for several months. And, you know, it doesn't feel like a very complete report for the Restoration Advisory Board which is founded on a law that requires early and often communication about environmental cleanup issues at Mare Island. And I can be specific, and I will. But I just wanted to preface my comments with that.

First of all, using a clam shell will be pretty disturbing to your sample at that ecological risk assessment level even though it was pretty shallow. And the next thing I want to talk about is -- well, you heard Paula and me both express concern about your comment that you mixed it all around on your core samples. This sort of seems strange to take a core sample and then just -- it would be nice to have had a presentation that -- like I said, that showed just exactly how you did that, where you took those samples from, where you mixed them up, whether you ever sliced through the core or just cut off the top or whatever, if you'd had an image of that, and I hope you will have that available in that May report. Do you want to respond before I continue?

MS. BECK: Yeah. I guess the rationale behind the taking a sample over a five foot interval was you could take a sample at the five foot depth and at the ten foot depth, but you might be missing something that's at your eight or seven foot depth. And that was the original plan. But then during talks with the agencies and just a lot of discussion, it was determined that really what we want to find out is is there anything in that ten or fifteen or 30 foot core that is causing any issues. And by taking a sample over that entire five foot core you're just getting a taste for what's there at -- for that whole five foot interval rather than just at five feet and just at ten.

CO-CHAIR HAYES: Well, sure. But if you were going to -- but it sounds like you tried to limit the number of samples that you took because you did a 30 foot core, let's say, but then you were only going to do six samples, and so you've still ended up with only six samples. But instead of doing them at a specific interval you mixed them up. Why not do more samples at shorter intervals on those cores?

MS. BECK: We just aren't entirely sure that those cores have a problem. We're just taking samples to see what's out there just to see. We're trying to characterize still, and then once we figure out if there's anything going on we --

CO-CHAIR HAYES: But then you're also trying to fill data gaps. So which is it?

MS. BECK: Both. I mean we want to see -- Mare Island is pretty large, and the offshore area --

CO-CHAIR HAYES: It's not as big as Mare Island.

MS. BECK: No, it's not. But it's really just to see if there's anything going on. If there's nothing going on, then we can move onto the next location.

CO-CHAIR HAYES: Okay. So there is something going on because that's what you gave us in this sediment data summary. Now, this summary is my next concern. You have nothing that tells us what the level of detections, and here you are trying to fill data gaps. You haven't even given us a taste for -- this looks like one of these little games that we play where we make the data look sort of like happy or something, you know, just kind of like we're dumb.

MS. BECK: No, we just got back...

CO-CHAIR HAYES: So who decided to just do this -- I mean I don't need names -- but why didn't you give us something on the data samples at this meeting or just hold off for a month until you could give us a complete --

MS. BECK: Well, we can certainly get back to you. The data just got finalized and validated and the meeting came up and we're presenting the sampling summary. The report that's coming out at the end of May will have a full listing of all the data. And all of that will be taken into consideration in the Remedial Investigation, and fully evaluated against all screening criteria for the base and ambient levels and trying to figure out where there are any issues. But we can certainly provide more information about the data next month.

CO-CHAIR HAYES: Well, we've been at this for fifteen years so I'm really going to, you know, make a scene about this. How many times have I said to you, Steve, representing Lennar, "We want some real data here." Neal, how many times have I, you know, said, "Neal, could you bring us back some real data here? Dwight? Chris? This is not new, so this looks like --

MR. COFFEY: White washing.

CO-CHAIR HAYES: White washing. I mean I wouldn't have used that word, but it's a good one. This looks like the way the Navy is famous for doing things that we don't do at Mare Island because we have a higher standard of getting information to our RAB that is full of data and is accurate and gives us, like this gentleman from the public asked, where did you find these -- which cells did you find these PCBs, for example, or organotins. Why do we have to wait a whole month when you said the data's actually been validated? Why wasn't it given to us tonight or else wait until the June meeting when it could -- it's complete?

ACTING CO-CHAIR DREYER: I mean, you're absolutely right.

CO-CHAIR HAYES: Early and often lack of information isn't what the law requires.

ACTING CO-CHAIR DREYER: Okay. Understood. Early and often, based on that premise, that is why we had this presentation tonight. We gave you as much as we could based on the information that we got in the timeframe that we were able to provide it. I know you don't agree

with us or what I'm saying right now, but this is what we have right now. And perhaps we should have waited until the June RAB meeting. I fully agree that, you know, more data is always better, and we're not trying to -- I'm not sure the full meaning of whitewash, I don't believe we're trying to do that, but --

CO-CHAIR HAYES: Well, would it have, I mean, the reason why I'm harping on this is not because that's necessarily fun, but because here we have a December 29, 2008 letter several months ago from DTSC to my co-chair Michael Bloom saying that one of DTSC's key comments in the SAP was that it did not include -- the Sampling Analysis Plan, was that it did not include an existing dataset for the offshore Investigation Area K. It says "Existing data for the offshore section adjacent to the dry docks indicate PCB contamination at an unknown depth outside of dry dock two. Further of the data suggests possible concentrated PCB contamination that may have been disturbed and redistributed more extensively." I was hoping that -- and it says, "In the vicinity of the dry docks may be a conclusion of significant PCB contaminated sediments." Well, we were shown the sampling plan a few months ago, and then we were told that -- and we were shown, you gave a presentation on the sampling, and then now we have a presentation on what we thought tonight was going to be the results of the sampling plan. And just giving us a range, you know, 50 percent have PCBs, or there's a range of TPH in the data, kind of does seem like what Mike is saying. It's like, oh, you don't really want to tell us what you actually did find.

ACTING CO-CHAIR DREYER: We absolutely would love to share that data, we're just not prepared to.

CO-CHAIR HAYES: You have it tonight?

ACTING CO-CHAIR DREYER: We have a list of just numbers, but we haven't at all tried to digest it and understand what it's presenting to us.

CO-CHAIR HAYES: Well, you've digested it enough to give us percentages of ranges.

ACTING CO-CHAIR DREYER: That's just percentages, it's not actual numbers. We haven't put it against a background concentration, that kind of stuff.

CO-CHAIR HAYES: Well, I'm going to request that it be on our RAB agenda for June -- no, end of May. End of May. And we'll hope that that data is available at that time, and that it does show where those levels -- where those samples were taken and what you found.

ACTING CO-CHAIR DREYER: We certainly will try. Though, to be quite frank, we wouldn't really be prepared to give you a full-on RI type status on the conclusions basically and recommendations for this site until, as you see here on the next steps slide, slide 22, until mid-October.

CO-CHAIR HAYES: I don't think I asked for an RI. You said that the Data Validation Report was due late May, so I'd like to have you give a presentation on your validation report for the May meeting.

ACTING CO-CHAIR DREYER: Sure. I'll certainly bring it up with Michael.

MR. COFFEY: I just want to clarify what I meant by white washing. And I think basically it's the idea of it is vague and ambiguous. And that's what I find this whole presentation is vague and ambiguous. You don't know exactly what you're talking about -- not being disrespectful that

you don't know your business -- but you don't know the specifics. And we're left with more questions than answers. That's what I find rather annoying about this whole thing is that there's all of these -- I asked for specifics, I can't get specifics, yet we're having a presentation talking about all of these different things, we don't -- I know that in the future there's going to be a remedial investigation, there will be answers as far as what's going to be done with them, but what ends up happening here is that we're like going, okay, there's really been no information given here. And that's what I think Myrna is basically saying is that we're given a presentation, and yet we've got no information. And that's what I find personally annoying is that this is entirely vague, and, I don't know, we're not at all -- we've been listening to this for many, many years, we know what the information and the specifics are, and what they mean, but this has given us nothing. I mean there's very little information that's been imparted here, and I just find that annoying.

ACTING CO-CHAIR DREYER: I fully note your comment, I really do, and I apologize. Like I said, there was a request, I believe last month, to have the Navy present offshore data and --

CO-CHAIR HAYES: No, you were offering it. It was offered to us, it wasn't requested. We can go back to the minutes. But anyway.

ACTING CO-CHAIR DREYER: I believe Paula requested it.

MR. COFFEY: It's your fault.

ACTING CO-CHAIR DREYER: It's not her fault. I'm saying this is what we have right now, and I really apologize for the vagueness. I want to give you more data, we're just not prepared. I mean we basically got the validated data back Monday, it was --

MS. TYGIELSKI: So we can expect in the near future, like the next meeting --

ACTING CO-CHAIR DREYER: Well --

MS. TYGIELSKI: -- a more detailed presentation?

ACTING CO-CHAIR DREYER: I cannot commit to that right now because I want to give you the presentation that I hear you're all asking for, and I'm not sure I can commit to giving that presentation in May. I can definitely commit to giving something like it after this October date on slide 22.

MR. COFFEY: That's a long time away.

CO-CHAIR HAYES: It's a long time if you're going to go try to find some money to clean it up if it's what it looks like.

MS. TYGIELSKI: I have a simple question. Now, on this map that you've included in the packet, there's a little symbol that I see here and there, it's a circle with a zig zag across it.

ACTING CO-CHAIR DREYER: Yes.

MS. TYGIELSKI: And what are those representing? Is that where you drilled for cores?

ACTING CO-CHAIR DREYER: No, those represent outfalls.

MS. TYGIELSKI: Outfalls. Okay.

ACTING CO-CHAIR DREYER: Yes.

MS. TYGIELSKI: Okay. I have a photograph that I got last night. I got on Google and took a picture. And folks, do you remember the Triangle Area that has been -- I'll pass these around. So Mr. Coffey, take one and hand 'em on.

MR. COFFEY: I will do so.

MS. TYGIELSKI: A concerned citizen last night saw me in a Mexican restaurant on First Street and approached me, the same concerned citizen that approached me in the coffee shop, approached me with a similar photograph to the one I'm showing you. His was turned ninety degrees from what I did, but -- in my photograph the Mare Island Straits are at the top of the photo. And it's a photo centered on the Triangle Area that we -- I only ran off twelve of them.

MR. COFFEY: Go ahead.

MS. TYGIELSKI: Well, centered in this picture is the Triangle Area that we've had several presentations on in the recent past. And if you notice, at the top side of dry dock two there's a long dark line. That's an area that's been dug up and filled in with concrete.

CO-CHAIR HAYES: It looks like asphalt.

MS. TYGIELSKI: Okay, asphalt. It's black, yes. Well, right at the end of that --

MR. COFFEY: Right along here.

MS. TYGIELSKI: Right along here.

ACTING CO-CHAIR DREYER: Okay.

MS. TYGIELSKI: This concerned citizen told me that right at the end of that is a huge concentration of PCBs, huge. And he was concerned about it. He was real concerned about it. He was concerned that it not get stirred up in the rest of the Bay, that it get sucked up and removed.

CO-CHAIR HAYES: That's an outfall?

MS. TYGIELSKI: Yeah, it is. According to your map it's an outfall.

MR. COFFEY: Do you know what the PCBs that you guys detected were at that outfall?

ACTING CO-CHAIR DREYER: That is Outfall 22, and given the letter that Myrna read earlier from the DTSC to the Navy, we did -- we did sample near that outfall. Can you remind me how many samples?

MS. BECK: Two.

ACTING CO-CHAIR DREYER: Two samples at 30 feet each, you said?

MS. BECK: Yes.

ACTING CO-CHAIR DREYER: 30 feet each. And I don't know if -- do you have the concentrations?

MS. BECK: The PCBs at those two locations were non-detect. We found that out -- we looked for those immediately because we knew that was a concern, and that was the letter that we had received back in the December, January timeframe. So we know that those two detections, those two locations did not have detections of Aroclors or PCBs.

MS. TYGIELSKI: Well, this concerned citizen is concerned, and I need to be able to answer his questions when he approaches me in a coffee shop or a restaurant.

MR. COFFEY: Again.

MS. TYGIELSKI: Again.

MR. COFFEY: So what I expect that what she's talking about is if this concerned citizen thinks there's PCBs there, and you've tested for PCBs, the next time we get data I would hope that we would have specifics about that outfall for her so that she can inform her what those expectations are for PCBs at that location.

MS. TYGIELSKI: Yes.

CO-CHAIR HAYES: And if we're right, this is just -- your current exercise was just to fill data gaps, and you previously, this letter is based on your previously reporting in previous sampling that you did find PCBs at an extremely elevated level in a sample?

MS. BECK: Yes.

CO-CHAIR HAYES: Or more than one sample.

MS. BECK: That was 2001. That sample was collected in 2001 or 2002. And based on that letter we moved, we shifted a couple of locations of our planned samples towards that Outfall 22 area which is where that PCB detection was of concern in the letter, and --

CO-CHAIR HAYES: Do you remember what that PCB detection was in 2001? What level it was, whether it was above 30 feet maybe and you missed it by doing two 30's?

MS. BECK: No, that was actually at 30 feet. The previous detection was down that deep, and we -- we went down to that same depth this time at two different locations to try to -- and we sampled all along that core to see if we found any other areas of concern.

CO-CHAIR HAYES: So you didn't find PCB in those cores at all?

MS. BECK: No.

CO-CHAIR HAYES: But you found 'em other places on the river?

MS. BECK: Yes.

MR. COFFEY: How old is generally 30 feet down?

CO-CHAIR HAYES: Depends on the storm -- storms.

MS. BECK: 1995 I think was the last Navy dredge.

MR. HOLLINGSWORTH: That's true.

MS. BECK: Yeah.

CO-CHAIR HAYES: And to what level?

MS. BECK: It's like 26 feet plus two feet over dredge, so 28 feet.

MR. JORGENSEN: 28 feet of sediment, right, but not below groundwater surface.

MS. BECK: Yeah, yeah, yeah.

MR. JORGENSEN: Because I think we need to dredge down. To add onto that, we, the agencies, Chip and myself, have looked at all the boring logs for that original boring Outfall 22 that had the high PCB concentration in it. Looking at all the Navy provided to us and looking at all the data, water depth, sediment depth, what I could determine was that high PCB concentration was at a depth deeper than any proposed future dredging, the maximum they'd need to dredge to open the dry docks or to run ships in there. That depth was given to us by the Navy and by what they've historically done, which is what, 34 feet below mean, mean low, something around there. And that adds the two feet of over which -- the two feet of error that the dredging agencies require because you can't be that accurate with dredging.

So looking at all that, the boring logs and the data, what I came up with was that we had a buffer, there's a buffer of about two to four feet roughly between that really high PCB concentration that was detected in 2002 or 2001, and what would be dredged out in the future for accessing the dry docks or using Mare Island Strait. That's some information that I can add here.

CO-CHAIR HAYES: Well, I'd be curious to know, I don't see the U.S. EPA here, but I'd just be curious to know -- and I don't see DTSC here tonight, I don't know why, but -- just curious to know whether you can just leave those high concentrations behind just because -- under CERCLA just because they might not be dredged. I want to remind you of -- on CERCLA, and the Superfund law was actually based on the experience at Woburn, Massachusetts where there were extremely high level of contaminants that were not disturbed at all once the tanneries were closed. And it was a redevelopment project in the sixties that totally disturbed the soil on the site of these former tanneries that then released the water into -- or the contaminants into the water. And all the downstream cities that had wells that were fed by that river was where the contaminant ended up coming from that caused the high cancer levels throughout those cities, prompting eventually the Superfund law.

So just because we might not dredge for commercial purposes today doesn't mean that the contaminant doesn't pose -- isn't there and shouldn't be remediated in some way. Particularly since I hosted a delegation from -- along with the EPA from Vietnam a few years ago from the Vietnam EPA, and I recall -- and, well, the Navy, I went along with the Navy on that little hosting. And one of their biggest challenges, they have signed onto the POPS treaty, the Persistent Organic Pollutants Treaty, Stockholm Treaty, and to my knowledge the U.S. has not. And yet they don't have the resources, the money to go do the detections and do the cleanup or do the long-term custody of the material once they would try to clean it up, whereas we do. And right now we have a federal stimulus package, and we have Brownsfield money. And if this possibly came from a Lennar owned outfall, then they could go after that money.

We certainly have money coming in in the tens of millions of dollars to Clearlake to clean up some contamination there, and a couple of other sites in California. DTSC is desperately looking, as the U.S. EPA is, for sites to spend some of this money. So I would think it would be pretty silly of us to short-sightedly say, "Oh, well, it's down there a little bit too deep, and it doesn't pose a threat, you know, to ecoreceptors, and nobody's going to go skin diving that deep," and blah, blah, blah. Why not just take the opportunity to remove the source, and then we won't have to worry about transport in trade and commerce or, you know, we could maybe actually be a little better off than the Vietnamese people.

ACTING CO-CHAIR DREYER: Thanks, Myrna. Thanks everybody for their comments. You know, I definitely will take your comments back and think about an appropriate time where we

could present a more detailed presentation, the type that I know you all want and definitely deserve. With that, I think it's time to pass it on to Lennar Mare Island for Neal Siler's presentation.

III. PRESENTATION: *Land Use Covenant/Control Update for the Eastern Early Transfer Parcel (EETP)*

Presentation by Mr. Neal Siler, Lennar Mare Island

MR. SILER: I just want to say before we start, I really want to thank the Navy once again for being the setup people for my presentation here; it's two months in a row. And with presentations like that, I'm insisting on going first next time we have a presentation here.

But this is a presentation that the RAB has requested over the last few months. I know both Paula and Myrna are interested in this topic, and what we're going to talk about is the update for the Land Use Covenants on the Eastern Early Transfer Parcel. And the documents that you should have in front of you, you should have three documents; you should have the presentation. There's a map that shows the existing Land Use Covenants in Investigation Area D1.2. And then there should also be the first five pages of the Annual Inspection report for 2009. So if you don't have those you should get them. Does anybody not have those documents?

MS. TYGIELSKI: What do they look like?

MR. COFFEY: That's it.

MR. SILER: You've got this right here and this right here. Not that one, let me give you another one.

MS. TYGIELSKI: I've got two of those big ones.

MR. SILER: That one right there, that's the one you need. And you should -- you've got the other one right there, Paula. This is the 2009 Annual Inspection report.

MS. TYGIELSKI: Okay.

MR. SILER: So just to cover what I'm going to talk about tonight. I'm going to talk about just Land Use Covenants in general. I'm going to talk about the types of LUC's we have on the Eastern Early Transfer Parcel. Some of the requirements that we're going to look at. I'm going to talk to you about both the existing and the anticipated Land Use Covenants that we have in place or plan on putting in place on the parcel. And then I'm going to answer any questions that you would have.

So what is a Land Use Covenant? A Land Use Covenant is a written instrument or agreement designed to protect the public from exposures from residual contamination remaining in place on property during or after an environmental cleanup. And what they do is they specify some of the restrictions that you would have on the property. They're going to affect the title. And the reason they affect the title is that they're going to run with the land in perpetuity. They're recorded with the deed in the county recorder's office. And they remain in effect until they're actually formally removed or modified. So some of the things that we look at when we're considering LUC's, you know, our first and foremost concern is what is protective of human health and the environment. We want to take a look at who and what is affected. We want to look at the development impacts. We want to look at performance over time. And what I mean

by performance over time is the implementability of the remedial technique, and also into the future, what would you have to do to maintain or operate, you know, do O and M [Operations and Maintenance] on that restriction as you go along in the future. We look at land use. We look at cost. And one of the things we really want to take a look at is does this make sense or not? Is this something we can do? Is it something we can live with?

Again going back to our prominent concern, is this going to be protective of human health and the environment. So some of the types of environmental Land Use Covenants that we have on the EETP, there are local area LUC's that would cover either an entire investigation area or a portion of the investigation area. We have some site specific LUC's. Mainly these are polychlorinated biphenyl sites. They are like electrical substations or transformers that formerly used polychlorinated biphenyls at those sites in the oil. And those kind of fall into four categories. There's an industrial use LUC. There's a surface encapsulation. There's encapsulation by active transformer. And there's low occupancy. And believe me, most of these sites if ever go into these electrical substations; you wouldn't want to spend many hours in there when you go in there, so they're perfect low occupancy sites.

Some of the other ones that you may see in the future. You may see cap maintenance. You may see ones that would affect alteration of groundwater conditions or a monitoring well network as you go forward. And some of that you would look at residual source material disturbance. And in a number of areas across both the Navy's property and our property, we see some petroleum hydrocarbons that are embedded interstitially in the sediments as you go down. And what you'll see is you'll see the predominant matrix, and all of the sudden you'll see a little glob of petroleum hydrocarbon. It's very difficult to get that petroleum hydrocarbon out of that sediment.

So that's the kind of things I'm talking about when I talk about residual contaminant source material remaining in place. The other thing that we're doing in conjunction with the Water Board, because they're the regulatory agency that is in the forefront of looking at petroleum hydrocarbon issues, in the investigation area wide LUC's if there is petroleum hydrocarbons that are left in place on the property, there's a notification in there, and that is mentioned in the area wide LUC, and it's also in the LUC O and M plan, there will be a map showing where these locations are that potentially could be an odor or nuisance concern in the future if anyone was to disturb those sediments.

Now, some of the restrictions that you would see potentially are restrictions on sensitive uses. And those sensitive uses are residences. Schools and daycare centers for persons under eighteen years of age, and hospitals. And hospitals I mean somewhere where they would potentially have surgery, someone would stay overnight or an extended time period. Something like the VA clinic that you see here on the island, it has no surgery, people do not stay overnight. They may be there at some time in the day to go to an appointment, to go to a therapy session, but they would not be any different from going to any other doctor's office in a commercial area.

The other thing is there's no cultivation of plants for human consumption in any of these areas. Again, some of the other things I talked about before, there are these cap disturbances; occupancy limitations; and again, altering groundwater conditions or the monitoring well network.

MR. RASMUSSEN: Neal.

MR. SILER: Yes, Chris.

MR. RASMUSSEN: Can you define the term cap disturbance? What is that referring to exactly?

MR. SILER: What I'm talking about there is I'm talking about some of the remedial techniques that we're going to be using; we're going to be putting caps over something. So what we're going to do is we're going to block access to be able for human beings or animals to get to actually access this condition that would be underneath the cap. So what you have to do, though, is you want to make sure that that cap integrity remains in place as you go forward in the future. So you want to make sure there are no breaks in it. If there are cracks in it you make sure you mend those cracks. If you have to go over and put additional concrete or asphalt over it, you want to make sure that that's done into the future. Paula.

MS. TYGIELSKI: I have a question, because I've had this question for years.

MR. SILER: Okay.

MS. TYGIELSKI: One of the Land Use Covenants would cover no cultivation of plants for human consumption. Is your concern about the people eating the plants, eating contamination, or is your concern for the process of planting?

MR. SILER: No, it's for actually people consuming them. Of course, my main concern is I want to know human consumption, what about marijuana? That's the first thing that comes to my mind, but that's just me. But what you can't do, because what would happen is --

MR. FARLEY: Did you spell that correctly?

MR. SILER: But what happens is, Paula, is that when they did the initial risk assessment on the island they did not take that avenue of uptake into account, so therefore you have to make sure that you mention that explicitly that you can't cultivate any plants for human consumption.

MS. TYGIELSKI: But there would also -- my thinking is that if there are contaminations in the ground, that just the act of digging in the dirt and planting the seeds or the seedlings would be a risk to the gardener.

MR. SILER: And that is not any kind of a risk here.

MS. TYGIELSKI: Okay.

MR. SILER: And it's actually just the uptake. The reason is that it may be a risk, but nobody has ever done the risk assessment to say, if you planted things like corn or wheat and you cultivated that, and you took it in, would that be a potential exposure risk for people eating that, those crops? Gil.

MR. HOLLINGSWORTH: Yeah, I just thought you might want to mention that we're talking about industrial sites here, not residential sites.

MR. SILER: Yeah, and that's true. And whenever I talk about LUC's, I'm not talking about any of the areas that we have developed for residential reuse. There are no LUC's in any area for residential reuse there are no environmental restrictions, perfectly safe.

CO-CHAIR HAYES: Well, except for right now this picture of this green blob here is actually a transformer station within a residential area.

MR. SILER: That's correct.

MR. COFFEY: It's ugly.

CO-CHAIR HAYES: Well, that's what it is, it's no uglier than me.

MR. SILER: But really if you take a look at that, if you were living outside of that green blob in that area, there is no environmental restriction on what you can do outside of that area. So again, back to where I was here. Some of the other things that you would have to do with some of the restrictions or conditions. You have to notify the regulatory agencies of any kind of property ownership change; of any use in the property; or any off-site soil transportation from some of these commercial or industrial areas. You would also have to notify new property owners or lessees of the environmental restrictions that are on those sites, and their obligations and responsibilities.

Now, one of the things you have to do -- and you have actually the latest one that I just put together -- was the annual inspection, and it's a requirement of the LUC. What we're trying to do here is document whether the following conditions have occurred or have not occurred on the site. And those are any unauthorized soil excavation. Movement, storage, disposal. Again, any growing plants for human consumption. The PCB sites, if they're encapsulated sites or ones that have active transformers. Disturbance deterioration of the surfaces or the encapsulating material. Any kind of access. Some of these sites, again, are low occupancy sites, so you want to make sure that people aren't coming in there and, you know, spending a lot of time in these areas. And there's signage that you have to do. There are requirements under the Toxic Substances Control Act when you have residual PCBs what kind of signage has to go on those facilities. And again, the capped sites we want to make sure there's no disturbance or deterioration to the cap surface. And although we don't have these, we may have them in the future where there will be sites that have alteration of ground water conditions.

Now I want to ask you all a question. And Paula, I'm going to ask you. Do you feel like you're exposed right now to any residual contamination on Mare Island?

MS. TYGIELSKI: (Shook head.)

MR. SILER: No? Mike, how about you?

MR. COFFEY: Nope.

MR. SILER: Wendell, how about you?

MR. QUIGLEY: I can't answer that, I don't know. I think yes.

MR. HOLLINGSWORTH: Remember where he lives.

MR. SILER: Chris, how about you?

MR. JESPERSEN: I'd say no.

MR. SILER: Okay. Myrna, how about you?

CO-CHAIR HAYES: You mean right here in this building?

MR. SILER: Right here in this building.

CO-CHAIR HAYES: Well, I can't tell you that I know because I don't have a website that shows me what types of actions took place or what kinds of contaminations are just like right over the hill right here.

MR. SILER: Okay. Chris, how about you?

MR. RASMUSSEN: I would say I don't know.

MR. SILER: Okay. Well, what I want to point out here is the fact that you're right now on a piece of property that has a Land Use Covenant on it. And I see people coming in here all the time. Where it comes from, it comes from the pre-decision covenant that was placed on this property when it was transferred because it was transferred in a contaminated state and not cleaned up. But I can tell you I work here every day, and I probably work here more than the average person works because I'm here about twelve hours a day, today I'll be here about sixteen hours, but I don't feel unduly exposed by being on this property. I don't feel that I'm unduly exposed, and I'm on this property eight hours a day. And nobody else here should feel that they're unduly exposed when they're on this property more than eight hours a day.

And Wendell, for the areas that you live in and, Chris, for the areas you live in, unrestricted land use, you can be there 24 hours a day, 365 days a year for thirty years and you will not be in any incremental exposure risk. Now, on top of that, if you take a look at the eleven by seventeen figure that I just gave you, that shows you the area where we have existing Land Use Covenants on this property, and that's Investigation Area D1.2. We'll just take a look at this; it may not come through real well. But if you look on the figure, this area right here, this is Railroad Avenue right here, it comes around like -- excuse me, not Railroad, but Walnut Avenue right here. This northern boundary that is Connelly Street. This is Azuar Drive right here, goes around Alden Park, and goes around Chapel Park. That's the commercial Land Use Covenant area for Investigation Area D1.2.

And Myrna's right when she points out that there are some small sites that are within this area, and they're actually within other areas like Touro University that have been cleaned up to unrestricted land use, small residual areas where we do have some environmental restrictions, and those are very small PCB sites. And if you go back to the other slide that I had right there, there are eleven Land Use Covenants on Investigation Area D1.2. There's the 29 acre portion that covers the Investigation Area D1.2 commercial area that I pointed out, plus there are ten site specific PCB LUC sites. Building 229, the west elevator. And I can go back and show you these.

And somebody asked me earlier today is what do I have all these pictures here in this presentation, but these are all sites where we have LUC's except for the gavel, that's not a site where you have an LUC. But this building right here is Building 521. And this is the eastern elevator right there, and the LUC is on that equipment room up on top of that building right there. This is Building H73 and if you go through here there's a small little area transformer that the equipment has been removed out of, but that is a low occupancy LUC area along with being up here in this elevator shaft. And I wish Carolyn d' Almeida was here because that's one of her favorite sites to go on on Mare Island is up in that elevator shaft, she just loves it. I'm being sarcastic.

CO-CHAIR HAYES: But not for long.

MR. SILER: That's right. Again, as Myrna pointed out, this right here is electrical substation A. This right here is Building 229. This is the western elevator shaft in Building 229. Again, it's this equipment room right here on top of it. This transformer right here is the transformer pad near Building 872A, and this is an encapsulation by transformer site. This is Building 605.

There's one room on the first floor that's a surface encapsulation site. There's one room on the second floor that's a surface encapsulation site. This is Building 253 right here. There is the main floor and then the wood floors as you go up, there are two other floors. Those are industrial use PCB sites. This lovely building right here is electrical substation B, it's Building 781. This is another low occupancy site. This site is open air.

So back to this slide. And again this shows you the existing eleven LUC's we have in Investigation Area D1.2. The IA D1.2 commercial area and then the ten PCB site specific sites. And when you actually record these LUC's -- and this is the document right here, the header for it that records the Investigation Area D1.2 or a portion thereof -- what comes along with that is a release of the pre-assessing covenant, and that's what this header is down here.

CO-CHAIR HAYES: Did you plan it that way?

MR. SILER: Not at all, but if you want to see it I can show it to you.

CO-CHAIR HAYES: Okay. That's what we asked for.

MR. SILER: Down here is the map again. If you look at the map there will be green triangular small areas on the map that have a green label, those are the PCB sites that have the site specific LUC's. And then the purple stripe area, that's the area that is the 29 acres that has the commercial LUC on it. Okay.

So going forward. Any piece of property that has a commercial industrial reuse is going to have a commercial industrial LUC. The restrictions that you're going to see, you're going to see those restrictions against the sensitive uses, the residences, the schools and daycare centers for persons under eighteen years of age, and no hospitals where people would have a surgery or would stay overnight, and the cultivation of plants for human consumption. Now going forward, what we have estimated right now, there are a total estimated number of 61 LUC's that will be site specific LUC's. There are eleven in Investigation Area C-1. Again, the majority of those will be those PCB site specific LUC's. There will be a few where you will have alteration of groundwater conditions will not be allowed, and there may be some where you have an encapsulating surface that will not be allowed, or you could not breach without prior notice and approval of the regulatory agencies. Investigation Area C-2 you have 35 LUC's. Again, the vast majority of these are these small site-specific PCB sites. Investigation Area C-3, fourteen LUC's. Investigation Area H2, one LUC. And that's the IR-13/ IR-10 site.

So I want to give you some examples of why these LUC's are part of the remediation on the Eastern Early Transfer Parcel. This is Building 680. And this is the main floor of Building 680. And these are shots on the left-hand side. As you look down the floor you have some pits in there that need to be cleaned out, you have the flooring here, a lot of this is wood block flooring. Now, we've actually gone and looked into this area and tried to do remediation of this floor to take it out, but if you look at this area right here, the concrete underlying this is about five feet thick. We broke three hydrorams trying to take this out.

Now, unless we want to corner the market on hydrorams and pay for every contractor's hydroram that comes out there, it's going to be very difficult to try to clean this up. So what the thinking right now for the technique on this floor is to actually remove all this wood block, remove sediment under these areas right here that would have metals or PCBs, you would go in then, take all this area, dispose of it properly, come in, put concrete over this as an encapsulation surface.

CO-CHAIR HAYES: Will that have any epoxy seal on it, on the concrete?

MR. SILER: You'd probably have an epoxy seal on the concrete. You're going to have concrete, and we're going to have a seal on the top of that concrete. Usually where the epoxy seal comes in, Myrna, is it comes in where you have the active transformers, because you would encapsulate the surface, and then right around the base of the transformers you would put the epoxy seals.

CO-CHAIR HAYES: Yeah, I know.

MR. SILER: Okay. Now, on another area, this is Investigation Area C-3, and it was the triangle, the one that Paula showed you where the outfall was, that's the -- right down here it's called the Building 516 Sanitary Sewer Site, right, there's Outfall 22 right down there. But this is the area that we're talking about in here. What there is in here is this Black Granular Material that seems to be fairly ubiquitous over the area, and it has high lead concentrations although it has some other things in there. There are a couple of things we've looked at in here to go ahead and remediate this area. We looked about taking all this area out but leaving the buildings in place. And if you did that you'd still have probably some sort of an encapsulation LUC under the building. But the cost to go ahead and take that out is estimated to be about \$20 million to take out that material down to a depth of about eleven feet. Now, if you went in here and you took all this material out and you actually demolished all the buildings in this area so you wouldn't have an LUC on there, took it all out, you're talking a cost estimate of about \$30 million.

Well, this is about five acres, this piece of property right here. So now if you're talking about not having any LUC on the entire commercial industrial portion of the island, which covers about 250 acres, you take five into 250 and you get fifty. Now take that times twenty or \$30 million per five acres, and it ends up being about between one and \$1.5 billion to clean up.

CO-CHAIR HAYES: Was there anyone, Neal, who's ever mentioned not having any land use controls in commercial/industrial areas?

MR. SILER: No.

CO-CHAIR HAYES: Then why did you just give us all those fantastical numbers?

MR. SILER: I just want to give you an idea about what it would take if you didn't want any kind of LUC's. But what's going to happen here, at least the plan right now is to go ahead and take a look at this area, actually take off the asphalt in a number of areas, and resurface this entire area with asphalt, and leave the buildings in place.

So the path forward, we're going to continue the remediation work. We're going to do remediation as appropriate to the land use criteria. We're going to use the decision documents in the orders that are in place right now. We're going to discuss these with the regulatory agencies. And we're going to use LUC's where they're appropriate and necessary. There are some things that we have to complete that we haven't been able to complete up to this point that's finalizing some of these administrative documents between Lennar Mare Island the City of Vallejo and DTSC. One of them is the LUC operation and maintenance plan, the operating agreements. The LUC information access, this is something that we really want to get the public to take a look at.

We've talked about the City of Vallejo about doing this. When you look up parcels you will be able to pull up the LUC's on the property, and that would be potentially available to the public.

So with that, that's the end of my presentation. And if I can answer any questions, I would be glad to. Chris.

MR. RASMUSSEN: Back to your example of the -- that five acre area.

MR. SILER: Sure.

MR. RASMUSSEN: Has anyone suggested that -- has anyone suggested that if we keep LUC's in place there, keep all those structures in place, that that property could ever be used for anything?

MR. SILER: Oh, yeah. Like I said, it's just like any other commercial or industrial area that you walk around in or would work in. Just like going up to Home Depot, it's a commercial area. Just like going to the supermarket. Just like working in any kind of industrial factory that you would work in.

MR. RASMUSSEN: Can those buildings be occupied for those uses?

MR. SILER: They sure can. They sure can. Russ.

MR. FARNELL: Is my mike on? All these little blue spots on there, is that where the coring samples were done?

MR. SILER: No, I think what those are are catch basins and manholes that you're looking at.

MR. FARNELL: In other words, you're saying that like 10 feet, 15 feet samples were done -- and I heard eleven feet deep and --

MR. SILER: No. No. These aren't sample locations, what those are are manholes or catch basins for either the sanitary sewer, most likely the storm sewer system.

MR. FARNELL: I see. But as far as I heard eleven feet deep now, and the black granular material we know there's a lot of lead in it.

MR. SILER: That's correct.

MR. FARNELL: I would like to think that somebody took time to find out what else is in this stuff.

MR. SILER: We did. There are actually five types that we've identified of black granular material. It's a real carbonation material. It looks almost like burnt carbon material. In some areas, some areas it has like a slag type of material in it. So we've tested it for metals, we've tested it for petroleum hydrocarbons, we've tested it for polynuclear aromatic hydrocarbons, semi-volatile organic compounds, volatile organic compounds. The thing that we keep coming back to is the lead. A lot of the other things kind of fall out or are not something of concern, but it is the lead that really is a concern.

MR. FARNELL: Okay. And I guess it was evenly distributed amongst the whole triangle?

MR. SILER: It's not evenly distributed, it's very, very uneven.

MR. FARNELL: I see. For eleven feet deep I'm sure we've got a chart that shows where we want to dig eleven, where want to dig five, and so forth. Is this available or coming up?

MR. SILER: Well, what would happen is you'd have to dig the entire eleven feet because you can't tell a lot of places where it leaves off and where it comes back, because it's in lenses or it's

like in bodies. It's in some of the bodies, it's right underneath. But like Building 108, if you look here and you look at the footings of the building, it actually goes all the way around the footing of the building. Some places it comes as a bed, some places it's a plainer structure, some places it's a, you know, kind of a globular structure, but it's all the way across there.

MR. FARNELL: And at this point Lennar is recommending that it all be removed or is it still in process?

MR. SILER: No. No. What we're talking about now is this, going ahead and reasphalting this entire surface in here using the building foundations themselves as other encapsulating material to make sure that you would not have any kind of a breach or come in any contact with the material underneath that, the black granular material.

MR. FARNELL: I see. So this is a decision that has been made to --

MR. SILER: It has not been made, it's something that's proposed.

MR. FARNELL: Okay. Is there a guess as to when approximately a decision will be made on this?

MR. SILER: I think that the next decision document which is going into the regulatory agencies will probably go in June; is that correct, Steve?

MR. FARLEY: Yeah.

MR. SILER: It will go in June. It will probably take at least thirty to sixty days to get any feedback from the regulatory agencies, then it will go out.

MR. FARNELL: Is that the public review document or is it the draft final?

MR. FARLEY: Yeah.

MR. SILER: It's the public review.

MR. FARLEY: The public review comment period we're expecting to start in early June.

MR. FARNELL: As long as that's published I'm sure some of us will be there. That's basically what I wanted to get a little more clarification on, and I thank you.

MR. SILER: Thank you.

MR. HAWKINS: Yeah, my name is James Hawkins and I just had a quick question. For the annual cap maintenance and maintenance costs, who's responsible for paying that, the future landowner?

MR. SILER: The future landowner would be responsible for that.

MR. HAWKINS: Okay.

CO-CHAIR HAYES: I have a couple of questions. Under your institutional controls page, the Land Use Covenants remain in effect until formally removed or modified. Have you done any or do you anticipate doing any removals or modifications?

MR. SILER: Well the one that I mentioned that has been removed is the pre-decision covenant. So like on the areas where we had residential reuse, okay, you have the pre-decision covenant in place which banned any kind of residential use, any use as a daycare center or a school, any kind of use as a hospital, those have been removed.

CO-CHAIR HAYES: Well this building you said was in, was a pre --

MR. SILER: This building was within the pre-decision covenant area.

CO-CHAIR HAYES: So now it has no covenant, no land use --

MR. SILER: No, it has an LUC. I'm talking about the areas where we have residential reuse, Investigation Area D-2, Investigation Area D -- let's see, A-3 and D1.1, those areas the pre-decision covenant has been removed. Now, like on some of the ones that you had talked about like Building 671, which is that green glob that you don't like, there's --

CO-CHAIR HAYES: Oh, I like it. I like it. They don't like it.

MR. SILER: There's another one down -- further down that's Q17-A, that's just kind of basically a ten by ten foot transformer that has a chain link fence around it. When we actually do the improvements along Oak Avenue, what we're planning on doing is putting in new electrical substations, okay.

CO-CHAIR HAYES: Oh, and then you'll take that out.

MR. SILER: And then what we'll do is we'll switch the power over, and then we'll take those out of service and remove the -- do the remediation necessary to remove the Land Use Covenants on those sites. Another one we're looking at potentially is Building 237. That building is slated for demolition. And so what we're going to do is there's an industrial LUC on a portion of the concrete floor in there, we'll remediate that and then remove that LUC from that building.

CO-CHAIR HAYES: Under your restrictions you note cap disturbances. Who funds any -- you just mentioned to this chap that the new landowner will fund the cap.

MR. SILER: Well, they would be responsible -- once the property is sold to them, because the Land Use Covenant is a part of the deed, that that will be part of the deed, and they will be responsible for the maintenance of the cap at that point.

CO-CHAIR HAYES: So the responsible party will sell its responsibility for long term?

MR. SILER: We're not selling responsibility, we're selling the land, and the actual LUC is tied to the deed which is tied to the land.

CO-CHAIR HAYES: When was that decision made? Who made that decision that the long-term maintenance would go with the land?

MR. HOLLINGSWORTH: The state legislature when they passed the law.

CO-CHAIR HAYES: What law?

MR. HOLLINGSWORTH: The one that allows LUC's.

CO-CHAIR HAYES: It says that --

MR. HOLLINGSWORTH: An LUC is a legal administrative document, it's just something that rides with the deed. It's like your homeowners associations, you know. I don't know if you have.

CO-CHAIR HAYES: No, they do not have a homeowners association.

MR. COFFEY: They should.

CO-CHAIR HAYES: They can't.

MR. HOLLINGSWORTH: State law is what dictates that.

CO-CHAIR HAYES: So where is the cost -- the long-term cost that was choking everybody up on this? Is this the oversight of the LUC?

MR. SILER: Well, where a lot of the cost was in choking this were estimates that we got from the Department of Toxic Substances Control to take a look at these areas and what they thought they would need to do that. And they come up with tremendous numbers that were in the millions of dollars. Now, they've gone out with me for the last three years to see what it takes to basically look over the Investigation Area D1.2 area, we go around the area, we look at all the individual PCB sites, make sure there aren't any deficiencies, make sure nothing is out of compliance. The first year myself, Henry Chui, and Bill Kilgore of the DTSC went out, took about four hours to go over everything. The next year it was Henry Chui and myself, we went out, that was in 2008, it took us about two hours to go over and look at everything.

CO-CHAIR HAYES: But that was in D1.2. And that was a cinch.

MR. SILER: Yeah, that's right. And I'm going to give you an example. And it won't be much different anywhere else, it won't be much different anywhere else. This last year when we went out on April 7th, Henry went out with me again after I went and looked at 'em on April 2nd, it took us an hour and fifteen minutes to look at all these sites. So it's really not going to be a very burdensome effort for the regulatory agencies.

CO-CHAIR HAYES: Who's going to pay for it though?

MR. SILER: What's going to happen is --

CO-CHAIR HAYES: Because this is like forever, right?

MR. SILER: That's correct. That's correct. We have a proposal in front of them, the city fees would be collected through their permits that they would do, like if you're going to move soil, it would be gone through a grading permit. What we have is we've proposed an account that goes in, that's like an evergreen account, to DTSC, and when somebody submits their annual report, there would be a fee for that annual report and that would replenish that evergreen account. Now, if someone --

CO-CHAIR HAYES: Who will set up the evergreen account?

MR. SILER: I think that would be between DTSC and the City and Lennar.

CO-CHAIR HAYES: So that's -- so the thing is still pending?

MR. SILER: That's correct.

CO-CHAIR HAYES: I just want to comment on your question around the table to us about how we feel about being here, whether we feel safe, that wasn't actually a part of your presentation so that seemed a little impromptu. And I think that it illustrates very well what, why I asked for the land use restrictions and controls and covenants and conditions presentation that you've given.

Those of us who do serve on the Restoration Advisory Board on behalf of our community have been quite handicapped in our ability to specifically say this property is clean, and that one, and where do you live? Where do you live? Where do you plan to live? Where do you plan to work? It's a nightmare. So you could trust us

to make up stuff like we did tonight, "Oh, yeah, I feel okay." "No, I don't." "Oh, I don't have enough information to." Which is what we've been doing. Or you can continue to press on on this plan you have listed way, way, way at the end, which is LUC information attached to the parcel information and available to the public. I don't care what people answered tonight, the fact is we don't have any documentation, we don't have any information; you've, in fact, said that this building is under an LUC, but you didn't say what it's under an LUC for.

And then you went on to say, "I work here 16 hours a week -- a day, or twelve or eight, and I'm fine, look at me." That's adding fuel to the misinformation fire. It isn't giving us the data that we were dinging the Navy for earlier. So my community, whether they speak to me about this topic of environmental cleanup at Mare Island or if they talk about other issues at Mare Island, I don't feel comfortable just going, "Well, look at me, I've been here fifteen years today and I feel fine." That doesn't pass the straight face test. So I'm sure you were just doing that for fun. But --

MR. SILER: Not at all, Myrna, that's an illustrative point. And I think what I'm trying to tell you is that if you go to any commercial industrial area, there's no difference in going to any commercial industrial area on Admiral Callahan Drive and coming here as far as walking around.

CO-CHAIR HAYES: But you could tell me that, Neal, and you could tell me that on the record, but that is not the perception of the public about Mare Island. So perception is more than probably a hundred percent of the truth. I had a phone call, a very irate phone call yesterday morning, it must have been prompted by the ad in the paper. And this man went off on me about how he spent six years as a contractor for the Navy taking undescribable things to the landfill at the end of Dump Road directly across the street from the industrial wastewater treatment plant. He went berserk just talking to me about how everybody here on Mare Island is going to be exposed to stuff, and they can never dig it up. And everything I tried to tell me him to cool his jets about, "Oh, no, it has a slurry wall." "No, concrete can crack." And he finally just hung up on me. He didn't want to hear that anything was safe here, because his own experience was that he was exposed to contaminants for six years, and those contaminants still exist on this island. So I don't care whether you tell me, you know, oh, everything feels good around here, that is not the perception on the other side of the water. And I feel good because I don't think contamination is flowing in mother's breast milk in this town. But how do I get that message to the people in this community and even outside of this community who have that perception? That's why we ask -- at least I ask for this type of information --

MR. COFFEY: Details.

CO-CHAIR HAYES: -- is to assure and, you know, probably over there by Home Depot is a whole lot of mercury floating around in the air because there was a cinnabar and a mercury mine right nearby. There's probably lead, you know, or whatever from being by a highway for all these years. You're right, maybe it's all even, but that isn't the perception in this community.

So -- Finally, you note that in the commercial industrial area you'll never have residential, yet in the specific plan amended and updated December, 2005, and certified by the City, it did allow for 29 residential unit in the industrial area.

MR. SILER: Not in the industrial area, it would have --

CO-CHAIR HAYES: Adjacent to.

MR. SILER: It would have to meet that residential land use, unrestricted land use requirement.

CO-CHAIR HAYES: But it is in the current industrial area.

MR. SILER: That's correct, but it's going to be cleaned up to unrestricted land use.

CO-CHAIR HAYES: All right. And by the way, in the granular material page you can see this, I just noticed this black trench here where you cleaned up, I guess you say it was --

MR. SILER: It's Building 516 storm sewer.

CO-CHAIR HAYES: That we saw in that aerial photo that Paula gave us. And I guess the last thing is could you talk about this attachment? You didn't talk about it, but you said something about the first five pages.

MR. SILER: Yeah. And what I did was I gave you the Annual Inspection Report for 2009 that we performed. And so that gives you some of the LUC's on the property, the types of restrictions that went down and looked at any other restrictions that are in any of the documents and tried to document those to see if there was any evidence of non-compliance or deficiency. The one thing that did come up was at that Building 1322, and I actually look at these sites probably more than anybody else, but there was a hairline crack in one of the seals, and I went in and epoxyed that up. So that's --

CO-CHAIR HAYES: You did that yourself?

MR. SILER: That's correct.

CO-CHAIR HAYES: Wow, what a handyman. All right. So you say this is --

MR. SILER: I actually, you know, I'll come over and do some chores for you for a fee.

MR. COFFEY: It's on the record.

CO-CHAIR HAYES: Oh, for a fee, forget it, forget it. No, I'll do my own.

MR. SILER: I'm very good at epoxying.

CO-CHAIR HAYES: So I am, you should see the side of my house. The first five pages. What was on the rest of the pages?

MR. SILER: There's the appendix. And what there are is there are some forms that just say like here's the form for each site, you know, what parcel it was, when we did the inspection, and it kind of goes down things like what did you see, was there any evidence of soil disturbance, was there any areas of non-compliance, was there, you know, any inconsistent use. And you just kind of answer those questions and then I signed it.

CO-CHAIR HAYES: Could we have a -- I was hoping to get a sample of -- an example of that too, so could you just shoot that over by e-mail or put it in our next RAB minutes?

MR. SILER: Sure.

CO-CHAIR HAYES: Okay. Great.

MR. SILER: Anybody else have any comments or questions? Well, thank you very much. I think it's cake time now because, you know, Marie promised cake and I think we've all earned it.

CO-CHAIR HAYES: Well, before that we have a public comment period. And this is an opportunity for members of the public to ask any question of the Restoration Advisory Board that you have, or a RAB member to ask about something that's not on the agenda tonight.

(No response.)

CO-CHAIR HAYES: Okay. We'll take a ten minute break. I think we're probably running behind.

(Thereupon there was a discussion off the record.)

ACTING CO-CHAIR DREYER: Just one more announcement. For any folks that are leaving, if you could just please sign in and let us know you are here? There's a sign-up sheet there, and if you need some help Caroline's there. Just let us know that you're here. Thanks.

(Thereupon there was a brief recess.)

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Marie Dreyer)

CO-CHAIR HAYES: Okay. Marie, would you come back and join me? Okay. I always give people a chance. Administrative business. Marie, do you have any announcements at this point for the Navy? The only one I would have is that if you have any corrections to the March 26th meeting minutes, please give Marie or me those corrections if you have 'em tonight, otherwise e-mail either one of us. Anything else?

ACTING CO-CHAIR DREYER: That's all I have. So I guess we'll move on to the focus group reports.

V. FOCUS GROUP REPORTS

a) Community (Wendell Quigley)

CO-CHAIR HAYES: Yeah, I'll do those. Wendell, do you have a community focus group report?

MR. QUIGLEY: Nothing at this time.

b) Natural Resources (Jerry Karr)

CO-CHAIR HAYES: Okay. Jerry Karr isn't here with us. He is expecting, by the way, to be through his chemo, his latest round in May here, so maybe he'll be with us at the May meeting. But I'm sure he would welcome cards or phone calls or e-mails, so let's not forget Jerry. Paula, technical focus group report, other than what you've already given.

c) Technical (Paula Tygielski)

MS. TYGIELSKI: Yes, I kind of gave what I had for tonight earlier today.

d) City Report (Gil Hollingsworth)

CO-CHAIR HAYES: Okay. Good. City report, Gil Hollingsworth.

MR. HOLLINGSWORTH: We have nothing.

e) Lennar Update (Steve Farley)

CO-CHAIR HAYES: Welcome back from the City. Lennar, Steve Farley.

MR. FARLEY: I've got about an hour's update, so everybody just relax have some more cake.

Okay. Let's -- there's a lot going on. In the interest of time I don't think we ought to go through all the details, but I would be happy to make available the summary that I typically put together if anybody would like any details. I've got a handout here, our normal handout, and our map. I'd like to start in the lower left corner. If we look at the environmental site closure status, there's been four additional PCB sites closed in the last month, and one additional Fuel Oil Pipeline or FOPL site closed.

CO-CHAIR HAYES: Getting there.

MR. FARLEY: Getting there is right. A couple of reports have moved from the quote "significant upcoming documents" category into the documents review. One of the really important ones is the IA-B1 Feasibility Study/RAP, the FS/RAP, that's the Crane Test Area. And that went out for agency review in March.

There are several upcoming public comment periods. One is that IAB FS/RAP. The IA-C3 FS/RAP for the BGM, it's what Neal was touching on in his presentation that specifically talked about the Triangle Area. And then the IA-C2 FS/RAW for building or for site IR-21.

Just as an aside, you'll see here that there's an FS/RAW and an FS/RAP, they're basically fundamentally the same documents, except that an FS/RAW is for slightly smaller sites, and an FS/RAP is for larger sites that are slightly more complicated. And they basically lay out the specific process that's going to be followed in cleaning up a site. So let's go to the photographs. In the upper left that's some backfilling going on at UST 231. UST 231 is along Azuar Drive, sort of makes that little kink in the road as it heads down towards the new housing area. This was a fairly large excavation and it's nice to be backfilling. I'm sure a lot of folks have seen the tractors and the backhoes and excavators moving around in there. Below that is an excavation that we're doing around a subsurface utility.

The building in the background is Building 678, the view is slightly to the south, maybe a little to the southwest. The work that's going on there is to remove some soil around a Fuel Oil Pipeline in the vicinity of Building 290.

Upper right corner, just an example of some work that we have done between two buildings. This is Buildings 1310 on the left, and Building 206 on the right, and you can see how tight some of the work areas are. This was for a Fuel Oil Pipeline removal and backfilling that we did in that area.

A couple of additional other highlights. If you look at all the different dots and lines and boxes and that sort of thing, those are all the areas that we're actively doing work at or that are going to have some upcoming major activities. Let me point out a couple. One is the IA-C3 Triangle Area. We've got some planning documents going into that to get approval to begin the actual work. As Neal pointed out, the primary contaminant in there are the metals primarily, but not exclusively, in the BGM, the black granular material. A very generic name for some visually obvious material that looks like it was used as a leveling course and/or underneath building foundations and stuff. So the point is, and I think this is important, the point is that that BGM is very old stuff. It's in the foundations and the footings, under the footings of some of these buildings. It gives you an idea, at least from a general standpoint, of how old that stuff is, how long it's been there.

IR-15 is sort of in the middle. It's sort of a circle area, a green circle labeled IR-15, we've got an FS and RAP that's gone in there. The contaminants there are very various solvents in

groundwater, things like PCE, PCE, DCE, and Vinyl Chloride. And this is a site that's relatively close to the Strait, and so we've had to really come up with some very important remedies to fix that problem. And it's everything from enhanced in situ bioremediation to a permeable reactive barrier. And inside some of the floors of one or more of those buildings there's some metals, primarily some hexavalent chromium that's going to be removed as part of an excavation. I think there are two other things real quickly.

If you look at where it says IA-B, it's sort of a green area to the upper left, there's a sort of a purple line -- or is that magenta? I don't know -- that separates IA-B.2-1 and IA-B.2-2. The idea is to divide that area of IA-B into two subareas because there are lesser problems in the IA-B.2-1 area than in the rest of it. So the idea is to put together a document that demonstrates that carving those two areas out and proceeding with closure for the IA-B.2-1 area is really the best way to get through the process and get those areas closed out.

I think one other thing I'd like to mention is, well, two things actually. Building 637 has been demolished. I think for the folks that have been driving down Azuar Drive for the last few years have seen that obvious building gone. It's sort of in the middle of that IA-B.2-2 area.

And I think the last thing I'd like to mention is the IR-07/20. It's up by the Mare Island Causeway. There's some metals in groundwater there, and one of the things that we were struggling with was, well, what is the nature and extent of that contamination? And what we found was that the natural groundwater system up there was causing a change in the metals concentrations. For example, chromium was being converted from chrome six to chrome three through -- just through natural processes in the subsurface. And so we looked at that, and it's like any other of the natural processes, and we're looking at that as being just a natural remedy for the contamination up there. So that's sort of the 10,000 foot level. One other thing, there are no changes to the status of the IA closures since the last month. Any questions?

CO-CHAIR HAYES: Basically can you remind us of why you're putting that visqueen on that property that I recall was slated to be residential?

MR. FARLEY: Yeah. If you look in the very bottom of that photograph you'll see that there's a different kind of material that's underneath that fabric, and the idea is to separate the coarse grain gravel or three inch minus backfill material below the fabric from the upper material so that the material doesn't simply go into the pore spaces of the coarser grain rock underneath. So it's just a matter of separating the material out so that it forms a nice barrier between the two materials. It's all compacted, and that barrier isn't a barrier to prevent contamination from moving up through the vadose zone.

CO-CHAIR HAYES: The gravel was just cheaper or --

MR. FARLEY: No, it's just a better material for the bottom of those excavations. Thank you.

f) Weston Update (Cris Jespersen)

CO-CHAIR HAYES: Okay. The Weston update, Cris.

MR. JESPERSEN: Thank you, Myrna. First off we've got a status of our various documents that are currently under regulatory review or that we plan to submit for regulatory review, and I won't elaborate on these, you can read them on there. Next up would be an update on the Sanitary Sewage Treatment Plan Outfall.

We held a follow up discussion regarding the path forward to site closure with the agencies on April 6th. And it was generally agreed upon that a risk based approach will be used to evaluate the characterization data that has been collected at the site over the last several years. And based on the input from the agencies during the meeting, the technical memorandum that Weston had prepared summarizing the prior remedial action and characterization work, ecological risk based concentration developments and some other details was revised and resubmitted back to the agencies on the 14th. We have another meeting with the regulators scheduled for May 5th to discuss the calculated eco-risk based on concentrations in comparison to the sample data for -- or excuse me -- to further develop or agree upon the path forward to obtain regulatory closure for the site. That's a mouthful.

An update on IR-05 soil excavation. And I'll be brief on this one, there's no change from last month. The Navy and Weston are still waiting on U.S. Fish and Wildlife Service to issue their biological opinion for that site. We hope it will be coming shortly; we've been waiting for some time.

Next up is an update of the Investigation Area H1 containment area. And we completed the construction of the perimeter security fence along the western and northern sides of the completed engineered cap. That was begun last month and completed this month, so you can see a picture of that work there below.

And then finally an update on the San Pablo Bay Trail. We submitted a site development permit to the City of Vallejo for a two mile long trail along the levees of the former dredge ponds and the western portion of Mare Island. And we expect this to be approved in early May. The trail is part of the DTSC approved cleanup remedy for the Western Early Transfer Parcel, which includes the former dredge ponds, due to the legacy of munitions that have been encountered in that area and removed as to the dredge pond outfalls. The trail is required to provide safe access for the scenic and wildlife viewing by the public within a portion of Mare Island while avoiding impacts to nearby wildlife and habitat. And we're currently anticipating that the trail will be constructed during the summer, and hopefully opened in late fall to avoid conflicts with the final environment cleanup activities at nearby locations. And with that I'll take any questions.

g) Regulatory Agency Update (Chip Gribble, Paisha Jorgensen, Carolyn D'Almeida)

CO-CHAIR HAYES: Okay. I think the only regulating agency representative we have here tonight is Paisha Jorgensen with the Water Board.

MR. JORGENSEN: Thanks, Myrna. Recently, actually today I submitted comments to Lennar about the IA-B1 FS/RAP which is adjacent to the Navy's DRMO which I submitted comments to last week or the week before on their technical memorandum for their TPH investigation. These two sites have free product that borders both -- go under both sites, and so we're dealing with that concurrently.

I also submitted closure of UST 142 today, so that site is now closed. It's actually a site that never existed, no UST was ever there, it's interesting, it showed up on a 1911 Navy map, and when they did a UST inventory that black dot got put onto the list. And through photograph and map investigations and a lot of subsurface investigations they figured that it was an old water fountain right near the U.S.S. Independence Wharf. So it's kind of an interesting investigation they all did. However, there's a lot of free product still remaining in the ground from that area, not related to the UST, but probably related to the creation of the island during maybe spilled oil

in the marsh and then filled over with dredge material and such. So while the UST is closed, Lennar is still responsible for dealing with the free product and soil groundwater contamination in the area. That's about it for now.

MR. FARLEY: If I could? I just want to -- Paisha has done a really good job in supporting the EETP project. He asks hard questions but he's available to come over here and meet with us, even if it's not on days when we have regulatory meetings. He's no pushover, but at least we can get through issues and make some progress. And I just want to publicly express the CH2M Hill's thanks for everything that Paisha has done, and in particular the focus on technical issues and working through those technical issues as it leads to getting closure on sites.

MR. JORGENSEN: Thanks, Steve.

VI. CO-CHAIR REPORTS

CO-CHAIR HAYES: Great. Okay. So we're at the co-chairs report. And Marie, do you have a report from the Navy?

ACTING CO-CHAIR DREYER: Yes, just a few reports. The 30 day public comment period for the Engineering Evaluation and Cost Analysis and Interim Remedial Action Plan or EE/CA IRAP was submitted or was started on April 6th and will run until May 6th. There was a public meeting on April 16th to discuss this proposed plan, and the Navy will continue to accept comments until May 6th.

As you see in the two pictures there, those pictures are of the PCAP field work going on at the former North Building Ways within Investigation Area A-2 -- that's a typo that should be A-2. So far the Navy has removed approximately 3,500 cubic yards of petroleum within this area. The field work is expected to be completed by early next month.

During this last period the Navy submitted three documents, one being the fact sheet for the EE/CA IRAP for IR-17 and Building 503 area. Additionally, the Draft Final EE/CA IRAP again for the IR-17 and Building 503 area.

We also submitted the Draft Final Investigation Summary Report for Munitions and Explosives of Concern at Mare Island Strait and Carquinez Strait, focusing on the sites at IA-K and the shoreline areas adjacent to Investigation Area F1, F2 and G. The validated data package was also submitted. This data package was for the presentation that was given tonight. Just flat out raw data is all it was. As you saw from the presentation in the report, the physical report will be coming out in late May to address the data validation process for these last two investigations.

The Navy received two comments, both from the Water Board, during this past month. Paisha mentioned one of them, the Draft Final DRMO TPH tech memo comments we received from the Water Board, as well as the Draft Project Closure Report for the former UST Site 993-4. That is the end of my update.

CO-CHAIR HAYES: Okay. Great. And mine is brief. On May 9 we have the next second Saturday access day at the Mare Island Shoreline Heritage Preserve. We're open nine to seven. And that's all I have to report. I want to thank RAB members. Paula Tygielski and myself have attended this RAB for fifteen years, and some others like Kenn Browne have been here for a heck of a long time too, and as well as Mike Coffey, and then Wendell and Chris more recently. And, of course, our three way agreement that has Lennar, the Navy, and Weston all at the table.

And we very much appreciate the investment in time that all of you have made to be here. And with that, if there are any other public concerns that you would like to raise at this time, we have another opportunity for you to do that.

(No response.)

CO-CHAIR HAYES: Okay. Meeting adjourned.

(Thereupon the foregoing was concluded at 9:17 p.m)

LIST OF HANDOUTS:

The following handouts were provided during the RAB meeting:

- Presentation Handout – Investigation Area K Offshore Sampling Summary – Navy
- Presentation Handout – Land Use Covenant Update: Eastern Early Transfer Parcel – Lennar Mare Island
- Presentation Handout – Exhibit A – General Location of Investigation Area D1.2 - Lennar Mare Island
- Presentation Handout – 2009 Annual Inspection Report of Property and/or Facilities with Land Use Covenants, Investigation Area D1.2, Former Mare Island Naval Shipyard – Lennar Mare Island
- Features within the EETP – CH2MHill/Lennar Mare Island
- Mare Island RAB Update April 2009 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard April 2009