

**MARE ISLAND NAVAL SHIPYARD  
RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES  
HELD THURSDAY, August 28, 2008**

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, August 28th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:05 p.m. and adjourned at 8:50 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)
- Michael Coffey
- Chris Rasmussen
- Wendell Quigley
- Paula Tygielski

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

- Michael Bloom (Navy Co-Chair)
- Marie Dreyer (Navy)
- Janet Lear (Navy)
- Jim Callian (Navy)
- Steve Farley (CH2MHill/Lennar)
- Neal Siler (Lennar)
- Jessica Beck (TTEMI)
- Gaelle Glickfield (TTEMI)
- John Kaiser (Water Board)
- Paisha Jorgensen (Water Board)
- Carolyn D'Almeida (EPA)
- Gil Hollingsworth (City)
- Dwight Gemar (Weston)
- Cris Jespersen (Weston)
- Jim Mitchell (Touro)
- Neill Morgan-Butcher (Arcadis)

**Community Guests in attendance:**

- Jim Porterfield

**RAB Support from CDM:**

- Carolyn Moore (CDM)
- Doris Bailey (Stenographer)
- Wally Neville (audio visual support)

**I. WELCOME AND INTRODUCTIONS**

CO-CHAIR BLOOM: All right, folks. We'll go ahead and get started. Welcome to the August, 2008 Mare Island RAB meeting. We'll start with introductions. I'm Michael Bloom, the BRAC Environmental Coordinator, and Navy Co-Chair.

CO-CHAIR HAYES: I'm Myrna Hayes, the community co-chair.

MR. SILER: Neal Siler, Lennar Mare Island.

MR. JESPERSEN: Cris Jespersen with Weston Solutions.

MS. D'ALMEIDA: Carolyn d'Almeida with EPA.

MR. JORGENSEN: Paisha Jorgensen with the Water Board.

BOARD MEMBER COFFEY: Mike Coffey, RAB member from American Canyon.

BOARD MEMBER QUIGLEY: Wendell Quigley, community member.

BOARD MEMBER RASMUSSEN: Chris Rasmussen, a resident of Mare Island.

MR. HOLLINGSWORTH: I'm Gil Hollingsworth from the City of Vallejo.

MR. FARLEY: Steve Farley with CH2M Hill.

MS. BECK: Jessica Beck, Tetra Tech EMI.

MS. GLICKFIELD: Gaelle Glickfield.

MS. DREYER: Marie Dreyer with the Navy.

MS. LEAR: Janet Lear, RPM with the Navy.

MR. CALLIAN: Jim Callian, RPM with the Navy.

MR. MORGAN-BUTCHER: Neill Morgan-Butcher with Arcadis.

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

MR. MITCHELL: Jim Mitchell, Touro University.

CO-CHAIR BLOOM: Okay. We'll go ahead and get started on our first presentation. It's going to be given by Marie Dreyer with the Navy and Gaelle Glickfield with Tetra Tech and it's going to be on Investigation Area (IA) K, the offshore area, the remedial investigation area fieldwork.

**II. NAVY PRESENTATION: *Investigation Area (IA) K Offshore Remedial Investigation Fieldwork***  
**Presentation by Ms. Marie Dreyer, Navy and**  
**Ms. Gaelle Glickfield, TTEMI**

MS. DREYER: Thanks for the introduction, Michael. I'll speak up. Good evening, everyone. For those of you who don't recognize our faces, I'm Marie and that's Gaelle. We'll both be presenting tonight.

I also wanted to let you know there's a new member to our IA-K team, she's sitting in the back, Jessica Beck. She's taking over for Debbie DeLeon who has left on maternity leave. So best wishes to Debbie.

So as Michael mentioned, tonight's presentation is a fieldwork update at Investigation Area K, that's the offshore area. Now, during this presentation we'll be reviewing the location of IA-K and giving a brief history of the various areas within IA-K. I'll go through the previous IA-K reports and work efforts that the Navy has done to better characterize the site. I'll outline the general goals of a remedial investigation. And then I'll talk about how we plan on reaching those goals, mainly in the form of two investigations that is the BERA investigation BERA stands for Baseline Ecological Risk Assessment, and the outfall and supplemental sampling investigation. Lastly we will go over a schedule and identify our next steps.

What you see here is a really small picture of the location of Investigation Area K. If you look at the back of your packet, there's a larger eleven by seventeen version of this. I'll give you a moment to turn to it. There are five figures; this should be the first of the five. In general, Investigation Area K runs from Highway 37, runs down Mare Island Strait, and rounds out to the Carquinez Strait. It is broken up into six different focus areas based on the past uses of these areas.

I'll start here with cell one. The Fleet Reserve Piers were historically used to moor inactive vessels. Next to that, the former north building ways, that was historically used to construct new ships. Berths 1 and 2 were historically used for mooring and light ship repair. This large area here running from about 23 to 41 is the north Mare Island Strait. That area was used for mooring ships for overhaul, conversion, and repair. And lastly, the south Mare Island Strait area and the South Shore Area, these two areas combined really carried the crux of work for the offshore area in that ships were abrasively blasted in these areas, ordnance were manufactured and handled in these areas, as well as the demilitarization of ordnance happened here as is apparent in IA-K. You might have heard there was an open burn, open detonation site within IA-K. Now, given all of these activities and the fact that Mare Island was operational between 1854 and 1996, there was a high potential for a contamination release within IA-K.

The contaminants we're finding that are most prominent are metals, semi-volatile organic compounds, pesticides, polychlorinated biphenyls, and organotins. Here's a list of all the previous work and associated reports we've done at IA-K to date. As you can see, we've completed an Ecological Risk Assessment, a data gaps tech memo, a Conceptual Site Model Tech Memo, a Watershed Contaminated Source Document, Data Quality Objectives Report. And while the five that I've listed definitely have helped characterize IA-K, it is the next one, the Pilot Study Tech Memo that really helped us to refine the sampling design and sampling methods that we will be using in the fieldwork investigations that we will start next month.

The details of the fieldwork we're starting next month, as well as the focus of this presentation tonight, are outlined in three reports. Those reports being the RI work plan, Baseline Ecological Risk Assessment Sampling and Analysis Plan, and the Outfall and Supplemental Sampling Report, SAP.

Now, all this work and the upcoming fieldwork we're doing, once we've completed that we'll be rolling that into an -- a remedial investigation report. And the general goals of a Remedial Investigation report are three-fold. First is to characterize the nature and extent of site related contamination. More specifically to our site, focusing on the outfalls, especially given the historical uses that I've outlined on the onshore areas, as I did in slide number three. Secondly, to assess the extent of contamination which may pose a risk to human health, the environment, and ecology. And thirdly, to collect enough site information for the analysis of potential remedial alternatives in a Feasibility Study report, an FS report, which follows after the completion of the RI

report that we will be drafting once we finish the investigations next month -- or we will be finishing those investigations later this year, but we'll be starting them next month. And I just wanted to point out -- and I see we don't have them -- if you'll recall, usually we have a Board that outlines the seven steps through the CERCLA process. I just want to emphasize that finishing a Remedial Investigation report is, you know, milestone number two of that seven step milestone chart -- and I really wish we had it, but -- so this is a really big step for the Navy and at this site. With that, I am going to turn it over to Gaelle who will be discussing the specifics of the investigations going on next month.

MS. GLICKFIELD: Thank you, Marie. So once again, I'm Gaelle Glickfield with Tetra Tech. I've actually worked on some of the documents that have led up to the efforts that we're going to be talking about tonight, and it's my pleasure to talk to you about it now. Okay.

So first we're going to go over the purpose of the first sampling event, which is the ecological sampling, and we'll talk about what samples we're going to take during that sampling event. And we'll talk about the purpose of that sampling event, which is the outfall and Supplemental Investigation, and we'll talk about those samples. And then we'll talk about the overall sample locations. And you have figures of that in the back, but we'll talk about that in a few minutes. And then we'll get to the fun part which is the sampling equipment that we're going to be using for these events.

So the basic goal of the first sampling event which will happen next month is to gather additional data to fill in the gaps from the original baseline investigation that we performed in 2002. Actually the document was published in 2002, but the sampling occurred before that. So we're going to gather additional data to fill in the gaps, and then we're going to perform a Baseline Ecological Risk Assessment.

So what are we going to collect out there? The first thing we're going to collect out there is bulk surface sediment. So essentially we're going to take the first half of foot of sediment and we're going to analyze it for the potential contaminants at the site. And we are concentrating on the first half of foot because that is the biologically active zone in the sediment. We're also not just sampling for metals and pesticides and the other potential contaminants, we're also sampling for grain size, salinity, pH, and total organic content. And the reason we're doing that is because if we're going to compare our sediments with a possible reference site, we need to know the characteristics of our sediment so that we can compare it to the other sediment and ensure that we're using the proper comparison. So we need these additional characteristics.

Okay. So the next thing we're going to collect, so we're going to do the sediment collection at 48 locations. The next segment that we're going to collect is more sediment, except this sediment will be sent to the lab -- as with the other sediment -- but this will be sent to a different lab where we will do some bioassays. And basically what that means is we're going to take some mussels and we're going to put them on the sediment for ten days, and we're going to see how many survive. And there's a threshold, there's a certain level, and if more than that level survive, then that sediment is considered to not pose a risk to those kinds of creatures, invertebrates, at the bottom of the ocean floor. And if, obviously, fewer than that survive, then we might have a problem. We're going to do that at thirteen locations.

Next we're going to also collect sediment for 28 day bioaccumulation tests. In this case the sediment will go to the lab, and then we will put clams and worms into the sediment, and they will

live there for 28 days. And at the end of the 28 days we will measure how much of the contamination is in the tissues of those organisms, and then we're going to take that level, whatever is in their tissues, and we're going to feed it into a food chain model to determine the risk to birds and animals at the site. So vertebrates at the site basically, birds and mammals.

The last thing we're going to collect as part of this effort is prey tissue which essentially is what we were doing in the previous one that I just described, is we're trying to measure the prey tissue concentration of chemicals. But in this case we're going to collect the actual organisms at the site, and we're going to measure what's in the tissues at the site. So we're going to collect Asian clams, and we're going to collect Bay gobies, and we're going to measure the levels in their tissues, and we're going to feed that into the models and see what results in terms of risk to birds and mammals at the site. So those are all at those different locations. And we'll go over the locations a little bit in a minute. Yes?

BOARD MEMBER QUIGLEY: Oh, I'm sorry.

MS. GLICKFIELD: I'm sorry, I thought you --

BOARD MEMBER RASMUSSEN: I have a question. Is there a reason why these particular organisms were chosen, are used for these kinds of --

CO-CHAIR HAYES: Can you repeat his question? As long as we're not able to use the microphone, we'll need you to repeat the question.

MS. GLICKFIELD: No problem. The question was why did we choose these particular organisms over any others, for example. The reason is that these organisms -- first of all, we know that they're out there, so they're in abundance. And secondly, they're actually part of the food chain. So they are actually organisms that our birds and mammals would eat out there. So we know we're getting an accurate gauge of risk. So there they are. I think you may have seen these pictures before, but here they are again. This is what our Bay goby and our Asian clam look like. Okay. So we're going to move onto the other investigation.

So we just talked about all the ecological sampling, now we're going to talk about more of the nature and extent sampling, and that includes Outfall Investigation sampling and Supplemental Investigation sampling. So the purpose of that sampling is to characterize sediments, both again at the outfalls and due to other sources of contamination such as water runoff from the site, from other sites, from the onshore to the offshore, and then historical uses of the offshore. So this second investigation basically consists of coring Investigation Area K. That's really the only type of sample we're going to take. In this case, in all of these we're going to go deeper than half a foot. We're going to go up to 30 feet, in fact. We're going to have short cores that go from zero to six feet, and then we're going to have long cores that go anywhere deeper than six feet. In those cores we're going to take intervals and we're going to sample intervals within the cores. In every case we're going to sample for all contaminant, potential contaminants, so that includes the ones that you've heard before, metals, semi-volatile organic compounds, pesticides, polychlorinated biphenyls, organotins, and TPH, total petroleum hydrocarbon extractables. We'll also see the locations in just a second. In fact, we're going to see them right now.

We're going to turn our page and talk about the locations of both sampling events. So I think your best bet is definitely to look at your own figure for this and the next three as well.

Okay. So you'll see that the next four figures essentially break out IA-K into smaller chunks so that you can actually get a feel for where we're doing the sampling. I direct your attention to this part of your legend on your first figure. These are actually the part of the legend that shows you where we're going to actually sample. The orange dots and the purple -- purple -- I don't know how to call them, but they have a little letter in them and a little tail, those are all part of the BERA sampling or the ecological sampling. So anywhere you see that is where the ecological sampling will occur. Anywhere you see a green, purple, or blue dot is where the other investigation -- that's going to happen actually in November -- is going to occur. Those are all the cores that we're going to take that I was talking about. And then there's color coding for long cores, short cores, whether it's for the Outfall Investigation or the Supplemental Investigation.

Really what you can take away from it is that we're going to sample a lot out there. And we're going to cover a lot of ground. In some cases -- this one here shows you, this part here shows you the existing sample locations, so you have grab samples and pilot study core samples. So there have been some previous samples, and in some cases we're sampling again. And the reason for that is that these previous samples they were surface samples, and now we're going to go a little deeper, investigate a little deeper, because we suspect if there might be contamination it might be a little deeper.

All right. I'm going to skip one and go to the third map now. And I just want to point this one out because we broke out these two cells, cells 42 and 43, this little tiny area. It's actually next to Investigation Area F2 and -- actually Investigation Area F1 and F2. And the reason we have a separate figure for this is that this has already been extensively sampled as part of a different RI, Remedial Investigation, but we still needed to sample some for our Baseline Ecological Risk Assessment, this spot right here, this spot right here, and then also for our Outfall Investigation right here. So we didn't necessarily -- sorry, right here. We didn't necessarily have the information we needed to complete our remedial investigation for Investigation Area K. So you can peruse those at your leisure. We're going to skip over now to the fun part, the sampling equipment. Let me get us there.

Okay. So most of our sampling equipment, especially our major sampling equipment, will be provided by TEG Oceanographic Services. You'll see here the boat that we will be using. So our Bay goby, our fish will be sampled using these trawl nets. They'll be coming out of the back of the boat and they'll be trawling. And as you can see from the other picture, we may or may not get all Bay gobies, there may be other creatures in there. So what we'll do is we'll weigh them, we'll measure them, we'll record them in our field notes, and then we'll throw them back in. However, if we do collect some Asian clams in the trawl net, we'll be keeping those for the investigation.

So the other major form of equipment is the surface sampling equipment. It's a Van Veen grab sampler. Basically you drop it out of the boat, it's open, then it lands on the surface of the sediment and then a pin snaps and it close snaps shut and collects sediment with it. And the thing about it is that it collects sediment from the top six inches which is what we'll need. We'll also be using it to collect clams as well.

Okay. Now, there are going to be some cases -- and our experience has been that the boat won't always be able to reach the locations that we need to sample, so we will possibly need to get out there and trek out in the mud and core ourselves, and so we can do some hand auger sampling, which is what you see on your left. Or we can actually bring the vibracore equipment onto the shore and get that vibracore to take a longer core on the shoreline. Okay. Fun part's over.

MR. FARLEY: That was only three pictures.

MS. GLICKFIELD: We could pack some more in there next time.

Okay. So the schedule, as you know by now, it's a two-pronged effort. Our first sampling event happens from September 11th to the 18th. The precursor to that is the final work plan and sampling and analysis plan, and that will be turned in in a few days. And then we will get the results hopefully from the fieldwork from the first sampling event in October, and that's just about the time when we'll be turning in our documentation for the second fieldwork event, our final documentation. We've already got some drafts done, but this would be our final one. We'll be performing the fieldwork for the coring event, all the coring in November, getting those results in January, and hopefully getting the draft remedial investigation out by July, 2009. That's it unless there are some questions.

MR. SILER: I have a question for you. And that is when you're doing your sampling between, I guess, a half foot, or zero to a half feet below the ground sediment surface -- is that correct? -- are you taking where the sediment is now, where it now is, or when the Navy left the island?

MS. GLICKFIELD: Where it now is. Although the purpose of the coring is to go down to levels where we might suspect that the Navy's contamination would be. But for ecological sampling it wouldn't make any sense to try and determine what the risk is down there because there aren't any creatures down there, so --

MR. SILER: I guess the question would be is that if and when the strait is dredged again, and those sediments dredged down to that level, you know, how are you going to assess the ecological risk at that point?

MS. GLICKFIELD: So one of the reasons -- one of the good things that comes out of the investigation for the nature and extent of contamination, which is all the coring, is that we will have some record or possibility of record of what is down there. And whatever entity at the time will be performing that dredging, there are, by law, requirements that they have to perform dredging evaluations, which include the same kind of bioassays, a little different than the bioassays that we're conducting, but that mandate bioassays be conducted to see if the sediment is harmful to biota too much or --

MR. SILER: But, you know, I mean your surface sample is you're collecting 48 surface samples, and then you're only collecting three deep cores. Is that enough to characterize the column of sediments that was left when the Navy left the island?

MS. DREYER: We've been working to determine the location --

MS. GLICKFIELD: Go ahead.

MS. DREYER: We've been working to determine the locations of those deep cores with the Water Board and DTSC extensively, and those were, in fact, the locations that they pinpointed that they'd like to see deep cores.

MR. SILER: Okay.

MR. HOLLINGSWORTH: Go ahead, please.

MS. D'ALMEIDA: I have a question maybe off the top for anyone who can answer. What's the status of the proposal to dredge the dry docks and reopen them for ship scrapper?

CO-CHAIR HAYES: Would you repeat her question when you answer it?

MS. DREYER: Sure. Carolyn D'Almeida's question was could we give an update on the status of the proposal that came in from, I'm assuming ADR or --

MS. D'ALMEIDA: If that's who it is?

MS. DREYER: Michael

CO-CHAIR BLOOM: No, we just know that they've, you know, it really didn't come to us, it's submitted to -- what's that organization called?

MR. HOLLINGSWORTH: Murad.

MS. D'ALMEIDA: That's for dredging?

CO-CHAIR BLOOM: Yeah.

MS. D'ALMEIDA: What about business plans coming in, there's no update or anything like that?

CO-CHAIR HAYES: Again, could you repeat her question for the people who can't hear her voice?

MS. DREYER: Carolyn again -- or I'm sorry, again Carolyn asked -- I'm sorry -- could you repeat it one more time, Carolyn?

MS. D'ALMEIDA: If anyone had any update as far as business plans or --

MS. DREYER: Okay. I'm sorry, yes.

MS. D'ALMEIDA: For the ship scrapping operation.

MR. HOLLINGSWORTH: I do know that the Water Board sued the federal government in court - - opened or delivered a suit to the federal government yesterday for the back basin fleet. That's everything I know.

MR. JORGENSEN: We submitted an intent to sue.

MR. HOLLINGSWORTH: Okay.

MR. JORGENSEN: I know.

MR. HOLLINGSWORTH: What's that, a warning?

MR. JORGENSEN: That's the email that I got. That's my understanding. It's a sixty day notice of intent. It was submitted yesterday.

MS. D'ALMEIDA: There's this pressure.

MR. JORGENSEN: It's more of a discharge thing, all the things sloughing off the ships, so it's an unpermitted discharge. I haven't read it.

MR. HOLLINGSWORTH: I understand -- I may be entirely wrong because I got this secondhand -- that your suit basically says that they are not to move the ships through California waters to the open ocean until they have -- I would call it scoured the bottoms and the sides, and that's what you're intending to sue about. Whether that's true or not, I don't know. I'm going secondhand with that.

MR. JORGENSEN: I have no idea. I haven't read it yet.

MR. HOLLINGSWORTH: Well, let's take her question -- let's just say tomorrow morning they issue a contract. And it's definitely we've got to, you know, around Dry Docks 2 and 3 we would have to dredge. What happens?

MS. DREYER: First and foremost the Navy has to review their plan and --

CO-CHAIR BLOOM: What would happen is, I mean, they've submitted a plan to whatever that organization is to do that, and they're reviewing it. They would have to abide by anything that we would -- I mean, if the Navy was going out, doing our investigation, or our remediation after we do our investigation, which is what we're doing right now, if there was anything to do there's -- we have to follow the CERCLA process, and that's what we'd do. I know that they have been in contact with DTSC. I don't know if they've been in contact with the Water Board. But they would have to abide by, you know, if there's any contamination there to deal with it.

MR. HOLLINGSWORTH: Well basically -- Okay. Let me ask you what you just finished saying. That in order for them to dredge they would have to do the same sampling that you're having to do, and that it would save you some money and time because they would go out there and do it for you?

CO-CHAIR BLOOM: I don't know.

MR. HOLLINGSWORTH: Okay.

MS. DREYER: We'd have to discuss it.

MR. HOLLINGSWORTH: Of course you would.

BOARD MEMBER COFFEY: No one is going to be dredging anytime soon.

MS. D'ALMEIDA: So you'll be able to get your cores in before the dredging?

CO-CHAIR BLOOM: We're moving on with our process.

MS. D'ALMEIDA: Okay.

BOARD MEMBER COFFEY: What's the point in the fifteen foot cores? You're going to be going down way deep. What's down there? There's no life down there, you're not going to be dredging down there, you're not going to be eating anything that deep, so why?

MS. GLICKFIELD: So the point of the fifteen foot cores is way back when the Navy was dredging, and since then there's been an accumulation of sediments. So possibly if there's a lens of contamination that was caused by the Navy, that we could actually say the Navy really did cause, it might be down at that level.

BOARD MEMBER COFFEY: That deep?

MS. GLICKFIELD: Right.

BOARD MEMBER COFFEY: So supposing they find something fifteen foot deep down, what happens at that point?

CO-CHAIR BLOOM: Well, that information -- we're going to analyze it, it'll go in the remedial investigation feasibility study. And if there's an action for us to dig it out or dredge it, whatever the remediation alternative would be, we'd take care of it.

MR. HOLLINGSWORTH: And if we were to have to dredge down along there, it's more than possible, in fact, it's almost an absolute that we'd have to go down more than fifteen feet. Because - I mean when you look at it now there's spots along there that are only twelve feet deep and they used to do 38 feet --

BOARD MEMBER COFFEY: Dredging.

MR. HOLLINGSWORTH: -- dredging. And the bottom of the silts on the dry docks are more than fifteen feet deep, so it's very possible we'd have to go down that far.

BOARD MEMBER COFFEY: Where would all that end up?

MR. HOLLINGSWORTH: We've been thinking about taking it to American Canyon.

(LAUGHTER.)

BOARD MEMBER COFFEY: Yeah. I've got a Wal-Mart that could handle a lot of that.

MR. HOLLINGSWORTH: The parking lot of Wal-Mart, right? You mean the dredge, where would the dredge --

BOARD MEMBER COFFEY: Yes.

MR. HOLLINGSWORTH: The state has -- I can think of three places in the general area that you can pump them out to.

BOARD MEMBER COFFEY: It wouldn't end up on Weston property though?

MR. HOLLINGSWORTH: Oh, no, this isn't something that could go in there. This is something that has to go to landfills -- not landfills, I'm sorry -- dredge disposal areas.

CO-CHAIR HAYES: Well, it used to be a dredge disposal site. Does anybody else have questions? I have a couple of questions.

MS. GLICKFIELD: Sure.

CO-CHAIR HAYES: I was going to ask you what your depths are, the ranges of depths that you have in your sample areas.

MS. GLICKFIELD: Sure. There are some cores which go from zero to six feet.

CO-CHAIR HAYES: No. No. Not the depth of the cores, the depths of the sediments that you're sampling in.

MS. GLICKFIELD: Oh, how far the depth of the sediment below the surface of the water is? Well we're --

CO-CHAIR HAYES: Yes.

MS. GLICKFIELD: So I can't speak really to the deepest, I'm not too sure about that one, but we're going definitely from the surface, because we've got some that's right at the surface, right on the mud flats. And then the deepest? I'm not really sure what the deepest one, what the deepest. I mean, I would guess, I don't know, twenty feet below the water, 25 feet below the water possibly.

CO-CHAIR HAYES: You mentioned that you are taking your samples and that you'll use a reference site. Would that be in San Francisco Bay?

MS. GLICKFIELD: Yes.

CO-CHAIR HAYES: What kind of reference site would you be using? I mean, I can't think of a spot that isn't, in this geographic area, any less contaminated than this site. What kind of reference is this?

MS. GLICKFIELD: I think, if I recall correctly, it's the San Pablo Bay Wildlife Refuge, there's a San Pablo Bay Wildlife -- it's a Water Board reference area.

MR. JORGENSEN: I don't know.

MS. GLICKFIELD: It's been determined through the agencies and, we've had discussions about picking the reference area, and I guess it's a common reference area.

BOARD MEMBER COFFEY: Well, it would be nice to know exactly what that is.

MS. GLICKFIELD: You know what, I don't know how we handle questions we don't know, but we can get back, but it's definitely in all of the documents.

CO-CHAIR HAYES: Well I'm not going to read the documents.

CO-CHAIR BLOOM: It's in the documents.

CO-CHAIR HAYES: Come back and tell us next time. Because it's my understanding that there isn't really any place that's going to be pristine in this area, so I'm just asking what you're using for a reference. I mean San Pablo Bay National Wildlife Refuge, just because it's designated a national refuge doesn't mean it's pristine.

MS. GLICKFIELD: Right. We can definitely get back to you, because it's in the documents, and I just don't happen to remember exactly the spot.

CO-CHAIR HAYES: I thought your description of mixing up clams and worms together sounded like an Eclamivitis initiation.

MS. GLICKFIELD: They won't be mixed together actually. The tests on the clams and the worms will be on different sediment samples.

CO-CHAIR HAYES: Will you have an ordnance tech on board while you're coring?

MS. GLICKFIELD: Yes. Would you like some information about that or --

CO-CHAIR HAYES: Sure.

MS. GLICKFIELD: So, we will have a UXO technician on board, unexploded ordnance technician. There's been a previous study that's mapped out any anomalies that are throughout the areas that are suspected UXO areas or MEC areas, munitions and explosives of concern. And, anyway, we've previously mapped out the anomalies. So the UXO technician will make sure we have that with him, and make sure we're not going to go to any specific locations where there have been anomalies detected. And then for the surface sediments when we -- or for any sediment for the cores, he'll take a magnetometer and scan it, I guess, with a magnetometer before any sediment samples are handled or manipulated.

CO-CHAIR HAYES: What if it's not ferrous?

MS. GLICKFIELD: If for some reason something is found that is not supposed to be there or questionable, there's a protocol that's in the health and safety plan. And I think the first thing that the technician will do is evacuate everyone from the area and bring them into the -- there's something called a control area -- I forget the exact terminology -- but there's a particular area that's

set up like a restraining area basically, and then he has a set of protocols that he follows. He calls his -- there's a particular station that he calls and he gets instructions from them as well, so --

CO-CHAIR HAYES: But they'll be doing visual inspections of the core sample as you take it.

MS. GLICKFIELD: So the grab samples will be mixed with a hand, like with a spoon and a bowl, they'll be mixing that up after the magnetometer check.

CO-CHAIR HAYES: I'm just -- but I'm just asking, the magnetometer is only going to pick up ferrous metal, right?

BOARD MEMBER COFFEY: Could be copper casings.

BOARD MEMBER TYGIELSKI: Let's clarify her question. If there's something under there that's copper, a magnetometer is not going to see it.

BOARD MEMBER COFFEY: Right.

MS. GLICKFIELD: So the statement is that if there's something under there that's copper, a magnetometer will not see it.

BOARD MEMBER COFFEY: A magnetometer is only going to register something that's iron or steel.

BOARD MEMBER TYGIELSKI: They only pick up things that are magnetic.

MS. GLICKFIELD: You know, I just don't have a good answer for that one. I don't. I don't know.

MR. GEMAR: You might want to check the health and safety plan; most likely the UXO tech will check for all metals as well as have a magnetometer.

MS. GLICKFIELD: Maybe we need to add that. I know it's in the health and safety plan and we'll --

CO-CHAIR BLOOM: Okay.

BOARD MEMBER COFFEY: Several of the locations in there also talked about locations to do tissue samples on the Bay goby, what happens if you don't find a Bay goby in that section? I mean, are you going to spread out and go a little bit further, a little bit further, a little bit further until you find something?

MS. GLICKFIELD: So the question is what happens if we don't find a Bay goby in the exact area. What we have decided is that if a particular area, we will try to go within bounds around the area that we plan to sample, but if there's just nothing in this particular habitat -- because actually, if you look at your maps, our Bay goby sampling is within that particular habitat each time. So if there's nothing within that particular subsection, we'll use some of the samples hopefully that we find from the other locations, and we'll have to extrapolate. There's no particular protocol yet for how exactly we'll extrapolate that information.

BOARD MEMBER COFFEY: But doesn't the Water Board determine where those locations are, and if you get too far along the line and can't find anything there, what? What do you do?

MS. GLICKFIELD: Well, I don't know what the exact range is from, but I'm sure that the field biological lead will know that information. But if they do get outside of that border, like I said, then they won't collect from that area, and we'll get some information where there was a collection made.

MS. DREYER: In general, too, just to add to what Gaelle said, the reason we're targeting September is that's when we know they are likely to be present in bulk.

CO-CHAIR HAYES: If you -- since Asian clams are an invasive species, if you collect them you're not allowed to put them back in the water, are you?

MS. GLICKFIELD: I don't know the answer to that, but I know that we plan on keeping them and collecting a certain amount of tissue. I don't know if we're allowed to put them back in. I don't know.

MR. KAISER: Excuse me, this is John Kaiser from the Water Board. We don't have any specific regulation that would say if you obtained Asian clams, don't throw them back in. But it would seem prudent not to return them to the environment if you collect them. It's common sense.

MS. GLICKFIELD: Okay.

CO-CHAIR BLOOM: Did you have a question, Paula?

BOARD MEMBER TYGIELSKI: If you happen to not find Bay goby or the kinds of clams you want, and there is another species available, do you have procedures that would allow you to substitute what you do find for what you want to find?

MS. GLICKFIELD: You know, I think the answer to that may be yes.

CO-CHAIR BLOOM: It's got to be in the work plan, I mean, in the sampling and analysis plan. I don't know exactly what it is, but there are procedures to --

BOARD MEMBER TYGIELSKI: I mean, there's no Bay goby but you find a different fish, can you use it?

MS. GLICKFIELD: Yes. But if you're asking about a protocol, we don't have a specific it has to be this species or that species, we have an allowance for a substitution, but I just don't know if it has to be a particular, I don't know, but yes, we can substitute.

MS. DREYER: In general from the pilot study those are the two species we've been seeing so those are the ones we're going to target. But, like Gaelle said, we may have to substitute, and that's just going to have to be what we do if there's another species in abundance in September.

BOARD MEMBER COFFEY: And it's not just because the Bay goby is something that shows problems more readily that it's, you know, and there's not something about its tissue that you have to have other than some other type of fish or something else you pull out of the water?

MS. GLICKFIELD: Right. It's just that it is the potential prey item and we know that it's there.

BOARD MEMBER COFFEY: Okay. That's why you're being specific about it?

MS. GLICKFIELD: Yes. Right.

BOARD MEMBER COFFEY: Okay.

CO-CHAIR BLOOM: Okay. Any other questions? All right. Thanks. Thanks, Gaelle. Thanks, Marie. Neal, we're going to go ahead and get started on the next presentation. It's going to be given by Neal Siler from Lennar Mare Island. It will be an update on the Fuel Oil Pipeline program.

**III. LENNAR PRESENTATION: *Fuel Oil Pipeline Program Update*  
Presentation by Mr. Neal Siler, Lennar Mare Island**

MR. SILER: Thanks Carolyn. Well, as Michael said, I'm going to give you an update on the types of investigation, remedial actions we're doing at the Fuel Oil Pipeline, or FOPL system on the island. And the last time we did do this was about March, so it's been about five months ago.

So what I plan to do is to update you on the actions we've taken in the last five months. I'm going to use three sites that are illustrative of the types of actions that we've done, and I'm going to answer a question that has plagued mankind since the beginning of time, it's right up there with what is the meaning of life, it's what is a FOPL. And a FOPL is, again, a Fuel Oil Pipeline. And it's a system of pipes that were used throughout the former shipyard to transport fuel oil from storage facilities, whether they are aboveground tanks, underground tanks, to buildings and to ships that were working on the facility. And this next slide shows you what I was talking about as far as the definition of the Fuel Oil Pipeline. And there was about 51,000 lineal feet, about nine and a half miles of Fuel Oil Pipeline on the island. It ranged in diameter from one inches to ten inches. And there are some of them where it doesn't show up and nobody knows what the diameter was, and if you see it on the designation it will have an X on it so you know it's an unknown diameter. And it ranged anywhere from being aboveground running alongside of buildings, to actually going underground, being in utilidors or being in open trenches. And it ranged down to a maximum depth of about ten feet below ground surface.

BOARD MEMBER COFFEY: One quick question, Neal.

MR. SILER: Sure.

BOARD MEMBER COFFEY: How much of that 51,000 feet is still around?

MR. SILER: That I couldn't tell you. There are a number of sections that have been taken out by the Navy. I think the majority of it was either cleaned in place or is still in place. I couldn't tell you the exact lineal footage that remains in place. A little bit was taken out. Sometimes they'll be in areas where we have an indication from the Navy documents that it's been taken out, and we start digging and we'll find it. So it just depends. It's hard to say what's in place and what's not in place.

BOARD MEMBER COFFEY: Never going to be reused, though, right?

MR. SILER: It's not going to be reused. So I'm going to focus on some areas in Investigation Area C-1. And I don't know if all of you have the eleven by seventeen figure that we usually hand out, but you can see an idea of where Investigation Area C-1 is. It's right along the northeastern part of the Eastern Industrial Transfer Parcel which is Lennar Mare Island's property. And that's the area that I'm going to discuss. And we'll also be doing a number of investigations in the future in Investigation Area C-2, which is the heavy industrial area that's in the central portion of the island.

But in Investigation Area C-1 there's about 15,000 lineal feet of pipeline. And right now we're performing investigations or remedial actions at fifteen of those areas. And I'm going to use three of those areas to illustrate what we've done in the last five months.

So those three areas I'm going to talk about are south of Building 121, which is the former power plant on the island. And we're going to look at an area just south of that power plant. We're going to talk about Building 207, which is a former storage area on the island which is now housing Klamath boats and their construction facility. And then we're also going to look at Building 971 which is down by one of the pump stations for the sanitary sewer system, DOM 6, down by the shoreline. So switching to –

BOARD MEMBER TYGIELSKI: What does DOM acronym mean?

MR. SILER: It means domestic pump station is what it's talking about. So it's the sanitary sewer station. So progress on the Fuel Oil Pipeline work south of Building 121. When we did some investigation in this area we took a number of soil and groundwater samples, and we were able to delineate contamination south of the building. And what you're seeing here in the green area, these areas right down here, that's where the contamination appeared to be located. So when we started looking at it we found that it seemed to be concentrated along the utility pipelines. And this area, when we actually started digging the area up, we actually found that there was a utilidor in that area. And, of course, when you find utilidors you can find anything. And there were a number of pipelines that went through this utilidor, and there were a number of open pipelines. But lo and behold, as we took off the top of this utilidor, we found asbestos wrapped pipes. And when we did that, we had to stop at that point and regroup. So we had to go back, get a contractor on board who could remediate or abate the asbestos before we could actually do our work, and then we went ahead and did our work. And I've got a couple of illustrations that show you that on other pages. But in this area we removed about 220 lineal feet of pipeline and over 500 cubic yards of contaminated soil. Again, we had to remove the asbestos wrapped pipeline first before we could do any of that work. And we were able to attain cleanup goals for this area. And what we're using for cleanup goals for the commercial industrial area, we're using Tier 2 Cleanup Goals. And for the fuel oil it's about 2,500 milligrams per kilogram down to a depth of ten feet.

So this shows you, the slide here shows you some of the observations of where we found the contamination. And we usually found it in some of the partings. And it's hard to see on this slide, you can probably see it better on the handout you have. But we found it in little globules or interstitial areas in the soil matrix that we found here. Now, what we also did -- it's hard to see up here --

MR. FARLEY: Can we hit the lights for just a second, the overhead lights? Thanks, Wally.

MR. SILER: You can see right there we found actual fuel oil around the backfill of the pipelines, and I think that that's pipeline right there. So we found it basically going along the courses of the pipeline in the backfill materials, and we found it in the vesicles in the sediments as we looked at them. Now this next slide shows you what we had to do before we even got to this point, and all these people here are abating asbestos in those pipelines that we found in the utilidor prior to us going ahead and start digging in the backfill material, removing the utilidor and taking it out. And that's a slide of the utilidor right there. That material right there is pretty much asbestos wrapping.

So moving onto the next area, and this is the Building 207 area. And --

CO-CHAIR HAYES: Wally, you want to grab the lights? At least enough for us to --

MR. SILER: Thank you, Wally. And these Fuel Oil Pipelines come around like this. We mainly found contamination in this area right in here, and in a number of little areas around this pipeline. We had to do some investigation areas to find out exactly where that was. So these were pipelines that were previously removed by the Navy. We went back in, dug, I think, five trenches, and did one excavation where we knew contamination resided, removed about 200 cubic yards of material, installed four temporary well points -- we don't have the data back from those well points. What we also did was we installed groundwater wells, and we're trying to go ahead and get an idea what the groundwater quality is like. And we'll probably go out and do that sampling probably next month or the month after from that point.

This slide right here is the excavation that we did right down here on the southeast corner of Building 207 where that pipeline was. And then these are all the trenches that we looked at around the area. There were five trenches and one excavation. So this gives you an idea -- again, Wally, you might want to hit the lights once again, cause it's a little hard to see with the lights up. Here we go, I think you can see it pretty well here.

But again, the fuel oil that we're seeing, we're seeing it in a very confined space here along the pipelines. In this picture right here you can see a sheen on the water right there. But when we do see impacts, we usually see this greenish material that we see in the sidewalls, and so we excavate this material out until we hit our cleanup goals.

MR. HOLLINGSWORTH: Is the greenish material just some type of dirt that's been --

MR. SILER: It's just impacted. It shows you where it's impacted with petroleum hydrocarbon.

MR. HOLLINGSWORTH: Oh, I see.

MR. FARLEY: Sometimes you can end up with those kinds of colors from different ranges of petroleum. A lot of times the heavy fuel oils will stain things black, and sometimes the gasoline will stain the soils green. So without knowing anything more about the details, that could be the result of some gasoline staining.

MR. SILER: But I think to what we're looking at here, I wouldn't be surprised because we're looking at a Fuel Oil Pipeline, this is most likely fuel oil that we're seeing here more than anything else. So what we're planning on doing here in this area, we're going to collect groundwater samples from the recently installed groundwater monitoring wells to give us an idea of what impacts to groundwater are. We're going to go back and take some additional soil samples. We want to see if there are any impacts inside Building 207 and one area outside of the building to the northwest of the building. We're going to evaluate all of the analytical material that we get back and try to get an idea of what the remedial alternatives will be. And we hope to get that work done by September of this year.

So this slide here shows you where we're planning on doing this. These are the preliminary location of the monitoring wells, these yellow cross-haired areas. And then these are the areas that we plan on going inside Building 207. This is Building 207 right here. And then this area right here is right outside of the building right as you're going to the northwest, and this is the one we're looking at outside the building to get some idea of the extent of soil contamination.

MR. FARLEY: Neal, if I could add one thing here while we're looking at this one slide?

MR. SILER: Sure.

MR. FARLEY: Look at the very top of the map in the upper right you'll see an H1 slash two slash B-111, that's sort of a code that the Navy came up with that identifies a grid location for the pipeline, the H1. The second digit, in this case there's a two there and a couple of others, there may be an X or a six. Anytime you see an X, it's because the diameter is unknown. But that gives you the diameter. And then the last one gives you some idea of where the pipeline went to or came from. So there's a little bit of code there. Probably the most important thing is just looking at the diameter of the pipeline gives you an idea of how much material this thing could have passed.

MR. SILER: Thanks, Steve. Okay. So the last area I'm going to talk about is the -- around Building 971. That's the former or actually the domestic pump station for the sanitary sewer

system. And it's located right to the east of Building 121. That's Building 121 right back there, the former power plant. And you can see the location of the FOPL section right here. And in this area we removed about 375 feet of Fuel Oil Pipeline. And it was actually in a utilidor, and we had to remove all the pipes in the utilidor. Some were Fuel Oil Pipelines, some were not. Technically only one of them was a Fuel Oil Pipeline, the rest were not. So we removed about 1,900 lineal feet of pipeline.

And then we went back and took samples to see, after we took out the pipeline and the utilidor, we went back and took samples every fifteen feet to give us an idea of what contamination was there. And when we did remove that utilidor it was about 210 cubic yards of material, and we installed four temporary well points to give us an idea of what groundwater conditions were in that area.

BOARD MEMBER COFFEY: So you did remove the utilidor as well?

MR. SILER: We removed the utilidor as well. Okay. That's the work that we did. I'm going to just give you an idea of what we're going to do right now and that is what I mentioned. We're going to go back, take some additional soil samples away from the pipeline. We're going to put in those temporary groundwater points, put in some groundwater wells, and determine the lateral and vertical extent of the issue. And then we'll probably do additional removals once we determine what the lateral and vertical extent would be. So here are some of the observations from Building 971. You can see the utilidor right there. There are four or five pipelines in there of varying diameters.

That's a Fuel Oil Pipeline segment that we took out. And right there there's a bend there, they're actually removing the Fuel Oil Pipeline segment right there. And this is kind of interesting because when we looked at this it appeared that the Fuel Oil Pipelines themselves leaked and actually leaked into the utilidor. There was some evidence that they leaked in the utilidor. So we took all that impacted sediment out, removed the utilidor, and then we looked outside the pipeline. There were certain areas where we saw some heavy staining and fuel oil around there, and we removed all that material also.

BOARD MEMBER COFFEY: What were the pipelines usually made from?

MR. SILER: They're metal.

BOARD MEMBER COFFEY: Right, metal. Cast iron or steel or --?

MR. SILER: Cast iron or steel.

MR. KAISER: Normally when you encounter a situation like that where there's been a release along these lines, how far normally did you have to step out before it really became low enough that you were comfortable with it?

MR. SILER: Well on this one it depends. Usually in most of the pipelines it's in a very, very narrow band. It usually is around the backfill material. But this one here it appears to go out a little bit farther because of probably the fill aspects in the area. So we're going to have to go out a little bit wider, and we have not determined the actual lateral extent yet, so we're going to have to take a look at that. But normally it's the width of the backhoe bucket. Maybe anywhere from two feet to five feet, and that's about it.

So just a summary of what we've done. We've looked at the FOPL segments in the three areas I talked about, Buildings 121, 207, 971. We've got a lot of work that we're going to do in the future

after we've done quite a bit of removals, about 2,000 lineal feet of pipeline, about 950 cubic yards of material. We've got monitoring wells installed. We're going to be doing sampling. And we'll continue to do monitoring of those wells in the future.

The planned work. We're going to do some additional soil sampling. We're going to install and sample groundwater wells. We're going to talk to the agencies, present the results to them so we can develop remedial alternatives to go ahead and address these issues. And we're trying to get all this done, this investigative work, by the end of this year, and that's our goal. So that's the end of my presentation. Does anybody have any questions?

BOARD MEMBER COFFEY: Neal.

MR. SILER: Yeah, Mike.

BOARD MEMBER COFFEY: It seems every time we open up a utilidor or something you're always finding green sand. I mean are you guys going to be investigating every utilidor in the island to see if there's green sand?

MR. SILER: You know, I don't think you're ever going to be free of green sand. But the protocol is when we find green sand along backfill material in a pipeline is we note it, but we don't follow it to its logical conclusion. If we do find green sand, anything over four cubic yards we go ahead and catalog and have a form we fill out, and we actually remove anything over four cubic yards. But we don't do that when they're going along backfill pipelines because we could follow it forever.

Now, we found some large concentrations of green sand, we found it in former -- appears to be basements where what they did to level the basement out when they had new construction over the top of it was just fill it with green sand. There's an underground storage tank that I'm working out right now where we have a petroleum hydrocarbon issue. But what they did was they had green sand, and they used it as backfill material after they took the underground storage tanks out. So I'm removing all that green sand. But usually when we go along any kind of utilities we don't follow it to a logical conclusion. We note it's along this utility, and go ahead and report it to the agency as such. Yes, Carolyn.

MS. D'ALMEIDA: I'm wondering if there might be some value in doing some forensic analysis on some of the fuel oil -- spilled fuel oil from these pipelines, just to compare with data that the Navy's collecting at the DRMO yard for forensic analysis to see if there's any connection between the two? Have you discussed --?

CO-CHAIR BLOOM: No. I mean we're doing that at the DRMO.

MS. D'ALMEIDA: Yeah. Yeah, but what are you comparing your forensic analysis at the DRMO to?

CO-CHAIR BLOOM: Our consultant is looking at just the --

BOARD MEMBER COFFEY: The makeup of it?

CO-CHAIR BLOOM: Yeah, the chemical makeup of it.

MS. D'ALMEIDA: Right. But for what purpose?

MS. DREYER: If I could add? We're basically comparing it to each other. Basically we're comparing the samples to each other. We're taking them in areas where we know TPH exists, both from the Navy side and the non-Navy side. And basically we're comparing those to each other to

see if there's any sort of similarities in their -- is it chromatography? Am I saying that right? And to see if the areas of TPH we're seeing on one side of Azuar or Dump Road is the same as the TPH we're seeing on the other side of Azuar and Dump Road.

MS. D'ALMEIDA: And what's the decision to be made then?

CO-CHAIR BLOOM: We're not there yet, Carolyn.

MS. D'ALMEIDA: I know, but what --

CO-CHAIR BLOOM: We're not even in the field. We're going to be --

MS. D'ALMEIDA: Why is that interesting to see if it's the same?

MR. FARLEY: If I could add just a little bit here? Because the Navy has been very kind and cooperative in helping out with the work that they're doing, giving us some insights into what they're doing and the kinds of data they're generating and the kinds of evaluations they're attempting to make. And the key to the forensic -- and this isn't the whole story. But the key to the forensics is, is this stuff different than this stuff? It's not how does this compare necessarily to a national standard for diesel or motor oil or gasoline.

MS. D'ALMEIDA: Right.

MR. FARLEY: The question is, is this stuff the same as this stuff? And if it is, in the whole realm of the conceptual model for a site, is it reasonable to assume, based on all the data including the forensics, that this came from someplace other than this. And part of the question is, are they the same thing or not? And so the point is that the forensic work that's being done is part of developing the entire conceptual model. If we look at diesel and motor oil and gasoline concentrations at a site, you can have these recorded concentrations for diesel at four or five or ten different locations, but the total makeup for that entire range of petroleum hydrocarbons at a given location may have a very different set of ratios of the different fractions of TPH. So the purpose of the forensics, as we look at it -- and I think as the Navy is looking at it -- is to try and discern whether or not there's different types of material out there that the forensics can tell us above and beyond saying, well, it has more diesel than it has less petroleum or it has no gasoline.

MS. D'ALMEIDA: And my question is, is there a value in getting samples from the Fuel Oil Pipeline too to see if it's the same stuff as well?

MR. FARLEY: And the short answer is no. And the reason for that is when we do an analysis of the fuel oil, at least this is for the EETP and the work that we're doing. When we look at the contamination in the sediment and in the groundwater, we look for PCBs, and we look for TPH, and we look for metals and a whole range of things, depending on the site. And knowing that this petroleum that came from that pipeline -- cause you can see the break in the pipe or you can see the oil in the bottom of the utilidor, understanding the forensics of that isn't that important because what we really care about is, is there a bunch of PCBs and a bunch of pesticides in this as well, or because the pipelines were generally used for virgin product, it was for actual product used to fire boilers and that sort of thing, understanding whether or not a release from this end of the pipe and that end of the pipe has a different forensic signature is not as important.

MS. D'ALMEIDA: So the DRMO product was actually waste and used already and disposed?

MR. FARLEY: Well, that's one of the questions.

MS. D'ALMEIDA: That's as far as --

MR. FARLEY: That's one of the questions that's being looked at. Nobody knows that it is waste, but that is one of the questions that's being looked at, I believe.

MS. D'ALMEIDA: Okay.

CO-CHAIR BLOOM: Any other questions for Neal? Okay. We'll move to our first public comment period. Any public comments? All right. We'll take our break.

(Thereupon there was a brief recess.)

#### **IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Michael Bloom)**

CO-CHAIR BLOOM: All right. We are going to start. We'll kick it off with admin business and announcements. I would say if you have any comments on the July minutes, please get them to myself and/or Myrna. I don't have any other announcements. Anything, Myrna?

CO-CHAIR HAYES: No.

CO-CHAIR BLOOM: No. All right. We'll go into focus group reports.

#### **V. FOCUS GROUP REPORTS**

##### **a) Community (Wendell Quigley)**

CO-CHAIR BLOOM: First is Wendell, community.

BOARD MEMBER QUIGLEY: Nothing to report.

##### **b) Natural Resources (Jerry Karr)**

CO-CHAIR BLOOM: Jerry is not here tonight for good reasons. Happy anniversary, Jerry.

##### **c) Technical (Paula Tygielski)**

CO-CHAIR BLOOM: Next is Paula with technical.

BOARD MEMBER TYGIELSKI: I have nothing to report.

CO-CHAIR BLOOM: All right, Paula.

##### **d) City Report (Gil Hollingsworth)**

CO-CHAIR BLOOM: Gil with the city.

MR. HOLLINGSWORTH: The city has nothing to report.

##### **e) Lennar Update (Steve Farley)**

CO-CHAIR BLOOM: Steve.

MR. FARLEY: I have an hour to report.

CO-CHAIR BLOOM: No, you don't.

MR. FARLEY: Simple handout.

CO-CHAIR BLOOM: And I'll make sure of that.

MR. FARLEY: Let's start in the lower left corner here where we have the various statuses of various documents and public review periods and such. The main changes there are that we issued

the draft Building 461 Feasibility Study and RAW, or Remedial Action Workplan. Under significant upcoming documents there are three listed here, these are all major documents. I'm sure Paisha will get through them in a matter of no time at all.

BOARD MEMBER COFFEY: Steve, keeping those to yourself, because we don't seem to have –

MR. FARLEY: Oh, there -- I printed 25 of those things which is usually what I print.

BOARD MEMBER COFFEY: They're dinner mats right now.

MR. FARLEY: Okay. What I'm going to do is provide some extra copies via electronic to CDM folks. I apologize for there not being enough. Who took like five? Wendell?

Environmental Site Closure Status. No changes from last month, but Paisha has been screaming around and getting some things turned around. We actually expect to get some more of these sites closed within the next thirty days or so. And we actually got the Geotracker or the case numbers from Paisha. And Paisha, I want to tell you, you know, in this forum, thank you very much for that, it really streamlined some things for us. Thank you. If you look at the body of this thing there's a whole bunch of UST sites, Underground Storage Tank sites located. There's a whole wide range of work that's going on, sort of similar to the things that Neal talked about for the Fuel Oil Pipelines, we have investigations, groundwater monitoring reports, requests for closure, tank removals, a whole wide range of things. I don't think there's a point in going through a lot of it but you can see how many tanks we're working on right now. Let me focus first -- Chris.

BOARD MEMBER RASMUSSEN: Out of these USTs, did most of them have FOPLs leading out from them?

MR. FARLEY: Many of them do. Many of them are just simply fed a boiler in a building or was an emergency generator tank. They range in size from tens of thousands of gallons down to 20 or 30 gallons. So a very, very wide range. Many of them were somehow tagged or connected to Fuel Oil Pipelines but that's not a rule, some were not.

BOARD MEMBER COFFEY: Were these all ones you guys have known about, nothing new is cropping up?

MR. FARLEY: Well, you know –

BOARD MEMBER COFFEY: Every once in a while something shows up?

MR. FARLEY: Yeah.

Let me draw your attention to IR-15 sort of in the middle of the figure. That's an Installation Restoration Site 15. It's a site with probably the most significant groundwater problem at Mare Island, at least for the ones that we're working on. Basically solvents in groundwater. And we're doing a major investigation, pilot study, bench scale testing. We put in a number of new monitoring wells in the last month or so, and we're getting started in earnest on a feasibility study for the groundwater problems at that site. That's a major, major activity for the Lennar Mare Island team, and there's a lot of emphasis and a lot of effort going on there right now.

So the photographs. The two on the left show the work that we've been doing at UST 231. I think we've reported on this in the last couple of months. We're nearly done with that, a little more excavation on the western wall.

And then in the upper right, this is an example of what Neal was talking about earlier, the Building 121 FOPL. This is the alignment of that utilidor that got removed. And you can see we removed the utilidor, excavated some dirt, backfilling. And that's that little compactor to compact the dirt down. So --

CO-CHAIR HAYES: Steve, I have a question. I saw tons of gravel sitting here. When do you decide to use gravel and when do you use clean fill of other substance?

MR. FARLEY: It's all clean fill.

CO-CHAIR HAYES: I mean when do you use fill dirt?

MR. FARLEY: It depends on the site. It depends on a whole bunch of factors.

MS. D'ALMEIDA: Traffic maybe.

MR. FARLEY: It depends --

MR. SILER: It depends on the reuse is what it depends on.

MR. FARLEY: And it depends on the size of the site, it depends on the depth, where it's at, whether it's rock or bay fill. A whole bunch of factors go into that decision. And those issues are described in our work plans that go through agency review. So that's all I have. I'd be happy to answer any questions anybody might have. Thank you, Michael.

CO-CHAIR HAYES: Just a recommendation that you mark area C-2.

MR. FARLEY: Well, C-2 is marked; it's C-1 that's not marked.

CO-CHAIR HAYES: Oh, C-1, you're right. I'm staring at it.

MR. FARLEY: Quite an irony we'd have Neal give a presentation on C-1 and it's the only area not marked on the map.

MR. SILER: I did that on purpose.

CO-CHAIR HAYES: Yeah, but I caught it.

MR. FARLEY: I just wanted to see if Myrna was paying attention tonight.

CO-CHAIR BLOOM: All right. Thanks, Steve.

**f) Weston Update (Dwight Gemar)**

CO-CHAIR BLOOM: Weston is up next, Cris.

MR. JESPERSEN: Thank you, Michael. I'll let you read through the documents that have been submitted for agency review this month and are coming up, I won't belabor that.

Let's move onto the IR05 update. As you might recall, IR05 is a former munitions handling and treatment area down at the south end of Mare Island. And associated with the Navy's Time Critical Removal Action, Weston has already excavated over 18,000 cubic yards of soil that exceed ecological cleanup levels. And we've taken that soil and consolidated it within the Investigation Area H1 containment area, but we've still got some additional soil that needs to be removed this summer and this fall. It's rapidly becoming fall, isn't it?

A biological assessment was submitted by the Navy this week to the Fish and Wildlife Service in order to obtain a biological opinion under the Endangered Species Act. The biological opinion will

document the appropriate controls that will allow excavation of the remaining hot spots in IR05 that impact the salt marsh harvest mouse and pickleweed habitat. Along with that it will give us some guidelines on how we need to restore those habitat areas. Currently we're also transporting and staging clean soil for backfill for areas that have been excavated. And once the agencies have confirmed the post excavation confirmation sampling, we'll backfill those areas.

Investigation Area H1. Right now the schedule for completing the remaining portion of H1, the containment area, the engineered cap has been extended to allow us to consolidate soil from IR05 after we get the biological opinion from Fish and Wildlife Service. The soil from the Paint Waste Area, which is another Time Critical Removal Action that was approved last year for cleanup, is also to be consolidated in the area H1 containment area. And right now we're targeting work at the Paint Waste Area to start in late September, early October. And we'll continue for about two months. And we've also got the first annual monitoring inspection of 8.2 acres of wetlands that were created within H1.

And, finally, coverage of the new wetland area with targeted wetland plant species progressing ahead of schedule this year.

CO-CHAIR HAYES: That's because you're watering it.

MR. JESPERSEN: That's true. And, finally, an update on the Sanitary Sewage Treatment Plant Outfall. That area was located in the western portion of Mare Island within Investigation Area H1. It was in operation from the mid-fifties through the early seventies. The treated effluent was discharged off the western shore of Mare Island to the San Pablo Bay. And we've conducted some previous sampling of the mudflats in the vicinity of the effluent plant -- the pipe discharge point, referred to as the Sanitary Sewage Treatment Plant Outfall. And the samples or the analysis of those samples have indicated elevated levels of mercury and polychlorinated biphenyls, compared to samples of sediments in other portions of San Pablo Bay. And after consulting with the agencies, Weston has decided to conduct additional sampling in early September at 31 additional locations to better characterize the area. Sampling will be performed with a pontoon barge using a tool called a vibracore sampler and will extend to the sediments at a depth of seven and a half feet. Sediments will be sampled at one and a half foot intervals within each of the cores. And we're hoping to have the sampling results available in late September. And you can see the two very small photos there in the bottom right-hand corner show the approximate location of the outfall, where we're going to be sampling from. That was all I had. If there's any questions?

MR. HOLLINGSWORTH: Well, yeah, I do have a question on H1. You say that the schedule for completing the remaining portion of H1 containment area has been extended, but you didn't say till when.

MR. JESPERSEN: Into 2009. Part of that is going to be dependent on what the weather is like this year.

MR. HOLLINGSWORTH: Apparently dry.

MR. JESPERSEN: And what the weather is going to be like at the end of this year too.

MR. HOLLINGSWORTH: And hot.

CO-CHAIR BLOOM: Okay. Thank you. Thanks, Cris.

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

CO-CHAIR BLOOM: Next is regulatory update. No representation from DTSC. So we'll move onto EPA, Carolyn.

MS. D'ALMEIDA: Can you hear me? Am I talking loud enough?

CO-CHAIR HAYES: Why don't you bring it, see if you can bring it over. Because then you'll have to repeat yourself.

MS. D'ALMEIDA: And then I can pass it to Paisha too.

Well, I've been working my way through a big stack of PCB submittal documents, some of them from the Navy, some of them from CH2M Hill. I went out earlier this week with Mike Sanchez of CH2M Hill, and we looked at all of their buildings that they have backlogged, and so I'm now getting the final letters out. I sent about four out today and a bunch --

MR. FARLEY: Thank you.

MS. D'ALMEIDA: And a bunch last week. So those are all coming out in the next few days. Other than that, we had a meeting a week ago on the IR-17. They had just gotten the data back from their passive sampling, soil gas sampling grid. And it looks like the sampling worked really, really well for defining the extent of the soil gas that was found out there. And it's probably going to be very helpful for excavation, because it looks like some of the areas where they originally had proposed to excavate may not need to be excavated, and there are other areas that might actually need to be excavated. So the next step is to collect active soil gas samples to quantify what's actually out there. And we also talked about doing some trenching, and maybe taking some cores to see what is actually present under the site. And once that's done then we'll be able to make decisions about what actually needs to be excavated. So I think Navy said they would have all that data wrapped up just about November, which is the time when the city wanted to be out there to start their excavation, and it sounds like the work can probably dovetail together pretty well to not put too much of a delay on the project for the cancer treatment center. And that's about all I have.

MR. JORGENSEN: As the new Water Board project manager, Brian has been or I have been receiving lots of reports and files from Brian. I saw him today actually with his Simple Green and rag cleaning off his now newly bright clean desk, and unfortunately I can't see the surface of my desk anymore. So I'm getting about a report a day from either the Navy or Lennar, and I'm going to try my best as possible to get through all those. So bear with me, I'm learning the site, and so far I've enjoyed working on it.

CO-CHAIR BLOOM: Thank you.

## **VI. CO-CHAIR REPORTS**

CO-CHAIR BLOOM: Next is -- do you want me to give mine first? Yes?

CO-CHAIR HAYES: Yes.

CO-CHAIR BLOOM: Here we go. Okay. The Navy did perform some fieldwork over the last month. First I would like to say thank you, Marie, for coming up and representing the Navy at the Mare Faire on August 9th. The Navy did participate at our booth there.

We completed our backfilling where we did our Non-time Critical Removal Action at the Defense Reutilization and Marketing Office or DRMO. We finished that on August 22nd. In addition, we went out and were able to complete the Time Critical Removal Action in the area of IR-04 where

we had four more areas, or I guess cells or sites within that area that had abrasive blast material. So we were able to finish that. I believe it was finished also on August 22nd. Continuing on that -- which is not on here -- we began the Horse Stables Area, which was part of that Time Critical Removal Action, I believe. Was it started today, Dwight, or yesterday?

MR. GEMAR: Today.

CO-CHAIR BLOOM: Today. And we're actually out there watching it. So that's good. That's ongoing and should be completed very soon.

We have five documents that we submitted this last month. You can read them on here, as well as some of the reports that EPA has commented on, Carolyn mentioned the PCB areas. The Water Board also submitted comments, and DTSC did as well on various documents. Other than that, that's all I had to say. There's a very beautiful picture of Marie on the back page.

And I'll turn it over to Myrna.

CO-CHAIR HAYES: Hi there. I would like to mention the Mare Faire on August 8 and 9, and thank the City of Vallejo and the U.S. Navy for access to their properties for that event. And then to especially thank Weston for their sponsorship, as well as is usually their custom, I can arm twist them as well as anybody into helping me out with some mowing and weed-eating. In that case the City of Vallejo stepped up to the plate as well, and a ton of volunteers. But I'd like to also thank some other Mare Island businesses, CS Marine Constructors, Lennar, and Lennar Communities -- actually not based on Mare Island, Touro University, and also Vallejo Sanitation and Flood Control District for their sponsorship that makes the event possible. And the City of Vallejo for the proclamations that they made for the 150th of the Naval Cemetery. And the military, even in this difficult time when they are doing way too many funerals, were able to bring together three honor guards from the Navy, the Air Force, and the Marine Corps. So I really want to thank them, they reminded us that we actually are a former military base. And I would like to thank the Navy for coming up and having a booth. Weston for having a munitions display.

And it definitely reminds us that the sooner that we can identify a building within the shore area maybe, that we can have a permanent bomb museum, a permanent education program, I think will be very, very important for the visitors to that site. We can't really talk them into going up to the visitors center until we mention that there's a display on munitions, and then, especially men and boys, make a beeline for bombs. Gil said something but I didn't hear it, so that's probably a good thing.

I want to mention coming up that Arc Ecology is hosting the second Saturday access still for the rest of the year; September 13th is the next date. We're open at the south shore from ten to seven. And bring a picnic and plan to join us at one. And the Sierra Club will be giving a walk to the south shore that day as well. And then October 11 is the second annual U.S.S. Wahoo Mare Island Memorial. That will be the 65th anniversary of its loss at sea. And this year, thanks to Larry Maggini of Weston staff, we're actually going to honor all seven submarines built at Mare Island that served in World War II and were lost at sea. And the reason I asked Michael to go first is because I can't remember number seven. But that would be the U.S.S. Jubilee, the U.S.S. Pompano, the U.S.S. Tang, the U.S.S. Swordfish, the U.S.S. Gudgeon, and the U.S.S. Wahoo. And one of them, and I think it was the Gudgeon, was launched in 1939, and it was the first dated color photo of a launching in the U.S. Navy history. So a little bit of trivia for you.

There's another sad story. There was a family of seven African American men from somewhere in the east, the parents encouraged all of them to go into World War II. And only one was in the Navy, and he was aboard the Jubilee, and he was on board as a cook, because at that time the Navy was segregated and that would have been the only role he could have played on a submarine. But he escaped being lost at sea with the Jubilee only to be lost at sea on one of the other vessels, I think it was the Tang. And all of his six brothers came home. So that was a sad story too. But you'll learn more on October 11, Saturday. And then the second Saturday event at the south shore will be on October 12th instead. And that's enough from me. Thank you.

CO-CHAIR BLOOM: Thanks, Myrna. Any public comment for our final public comment? Marie.

MS. DREYER: Is that okay if I talk from here?

CO-CHAIR BLOOM: Oh, I guess.

MS. DREYER: Not to open a can of worms -- or I guess I should say worms and clams -- but I just kind of wanted to touch upon the idea that the background that we select for IA-K has to be pristine. When we do a risk assessment, it's not necessarily the case that the background reference site that we use needs to be pristine. More what we look for is that a site is like the area that we're investigating had the industrial use of it not been there. That is, had the Navy not been present at IA-K. So we feel that the San Pablo Bay Wildlife Refuge is a good site for that. Sorry, Gaelle and I were tongue tied at the moment, I guess. Michael wants to add.

CO-CHAIR BLOOM: Thanks. Thank you.

MS. DREYER: Oh, and I'll be signing autographs later.

CO-CHAIR HAYES: You can go to our website, [www.mareislandpreserve.org](http://www.mareislandpreserve.org) for a photo show of that day. And I wanted to just follow up with that that the San Pablo Bay Refuge isn't located on any river, so I would think that that might have a very different constituent based on grain size and things like that. I don't know if that's going to end up making a big difference, but it's certainly quite a ways away from -- and a very different habitat type than the Napa River.

CO-CHAIR BLOOM: Okay. Thank you. Any other public comment? Okay. With that, we will adjourn. See you next month.

(Thereupon the foregoing was concluded at 8:50 p.m.)

#### **LIST OF HANDOUTS:**

The following handouts were provided during the RAB meeting:

- Presentation Handout – Investigation Area (IA) K Offshore Remedial Investigation Fieldwork – Navy
- Presentation Handout – Status Update on the IA C1 Fuel Oil Pipeline (FOPL) Program – CH2MHill/Lennar Mare Island
- Features within the EETP – CH2MHill/Lennar Mare Island
- Mare Island RAB Update August 2008 – Weston Solutions

- Navy Monthly Progress Report Former Mare Island Naval Shipyard August 2008