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MARE ISLAND
SSIC NO. 5090.3.A

FINAL
MARE ISLAND NAVAL SHIPYARD
Restoration Advisory Board (RAB) Meeting Minutes

HELD THURSDAY, March 24, 2011

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, March 24th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:11 p.m. and adjourned at 8:58 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)
- Chris Rasmussen
- Miguel Buchwald
- Wendell Quigley
- Paula Tygielski

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

- Janet Lear (Navy Co-Chair)
- Brooks Pauly (Navy)
- Neal Siler (Lennar Mare Island)
- Steve Farley (CH2MHill)
- David Allard (CH2M Hill)
- Elizabeth Wells (Water Board)
- Gil Hollingsworth (City of Vallejo)
- Dwight Gemar (Weston)
- Joshua Bernardo (Solano County Hazardous Waste)

Community Guests in attendance:

- David Geist
- Rex K. Long
- Jim Porterfield
- Dennis Reifert
- Linda Reifert
- Cindy Spears

RAB Support from CDM:

- Carolyn Moore (CDM)
- Doris Baily (Stenographer)
- Wally Neville

I. WELCOME AND INTRODUCTIONS

CO-CHAIR LEAR: Okay. Welcome, everybody. Thanks for coming out in wet weather to join us here for the RAB. We usually start with introductions. I'm Janet Lear, I'm the Navy Co-Chair.

CO-CHAIR HAYES: And I'm Myrna Hayes and I'm the Community Co-Chair.

MR. RASMUSSEN: My name is Chris Rasmussen, I'm a resident of Mare Island.

MR. BUCHWALD: Miguel Buchwald, also a resident of Mare Island.

MS. TYGIELSKI: Paula Tygielski, Benicia.

MR. QUIGLEY: Wendell Quigley, Mare Island.

MR. FARLEY: Steve Farley with CH2M Hill.

MS. WELLS: Elizabeth Wells with the Water Board.

MR. HOLLINGSWORTH: Gil Hollingsworth representing the City of Vallejo.

MR. GEMAR: Dwight Gemar with Weston.

MS. PAULY: Brooks Pauly with the Navy.

MR. GEIST: Dave Geist, LMI.

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

MR. SILER: Neal Siler, Lennar Mare Island.

MR. REIFERT: Dennis Reifert, Vallejo.

MS. REIFERT: Linda Reifert, Vallejo.

MR. ALLARD: Dave Allard, CH2M Hill.

II. PRESENTATION: *Production Manufacturing Area/South Shore Area Munitions Non-Time Critical Removal Action Update – EE/CA IRAP*
Presentation by Ms. Brooks Pauly (Navy)

CO-CHAIR LEAR: Okay. Well, we have two presentations tonight. The first one is Production Manufacturing Area South Shore Area Munitions Non-Time Critical Removal Action Update, and the Engineering Evaluation/Cost Analysis. And that will be presented by Brooks Pauly of the Navy. And that will be followed by a Building 688 Update presented by David Allard with CH2M Hill for Lennar Mare Island. And we can get started, I guess. Brooks.

MS. PAULY: All right. Thanks, everybody, for coming out. Special thanks to Dwight and also Carolyn for getting me my presentation. It's most appreciated. Okay. So tonight we are talking

about the Production Manufacturing Area/ South Shore Area. This is the munitions non-time critical removal action update. We call that an NTCRA, and you'll hear me refer to this site as the PMA/ SSA.

Quite a while back we started an Engineering Evaluation/Cost Analysis [EE/CA] for the area after lots of history, so to give you a quick overview of my talk tonight: I'll talk about the site location; there's a lot of history on these two sites, so I'll give a little bit of background about that; and I'll talk about some of the responses, so these are munitions response history, basically removal actions, some emergency removals and other types of removals, some non-time critical like the one that we're planning to do; and then from those response histories we created a conceptual site model of what was actually out there from the history - I'll talk a little bit about that; the path forward for these two sites; and then get into the engineering evaluation and cost estimate -- or EE/CA as we call it -- and what's involved in an EE/CA; and then what the results of that evaluation were; and then the schedule going forward.

So PMA/ SSA, as you can see here on this slide, is located on the southeastern portion of the island -- the southern portion and the southeastern portion. The PMA was a former munitions production area from 1857 up until about 1972. The south shore also was more storage and handling from a little bit into the thirties up until 1972. And this is a more of a plan view, where you can kind of see it in relation to other things from an actual photograph. So I guess we call that the elevation view.

So the PMA area, as I mentioned, had a lot more to do with manufacturing various projectile, rocket warheads, propellant loading, and some powder bags. As you can see, this is one of the docks, sort of an on-loading procedure. As you can see, there are rail cars on the left-hand side of the slide. And then you can see the various munitions here in the lower left portion of the slide. I love this next screen. And speaking of handling, it's a very hands-on handling, so show some of the historical photos we have. I'm actually not sure of the exact devices in the photos, but as you can see, these are the kind of projectiles that were dealt with in the manufacturing area or the PMA.

In the South Shore Area there was much more storage. This photo in particular is from 1941. It's showing a little bit about the buildup of that area and some of the construction that was in the area. It was created from fill in the thirties and forties. Again, it was used more for storage and handling. They're talking about shipboard loading from Pier 35 down there as well. But [the SSA] did, like I said, support the incorporation of inert components to underwater mines, various types of batteries and anchors and then maintenance of the munitions shipping containers in that area.

So as we talked about more recently, after the base -- or actually right before the base was closed there were some emergency munitions response actions, as there were a lot of incidental disposal and accidental discarding of munitions in the area over the many, many years. And so from 1990 to '93 there were several emergency response actions to remove the most obvious munitions in the area, and some of the ones that were potentially the most dangerous. Then the ordnance preliminary assessment was done in '94 in anticipation of the base closure. The UXO site investigation proceeded from about '95 to '97. And I want to say too that all these response actions are discussed in the EE/CA as well.

So there were quite a few subsurface anomalies identified during the UXO site investigation. There were other site investigation anomalies that were found from 1997 to 2000. And you'll probably hear me talk about MEC, and that is munitions and explosives of concern. There was over 2,000 items recovered from about 21 locations during those years. And 75 percent were recovered near one of the shorelines. So it does support the idea in the conceptual site model that a lot of these [items] were discarded or they might have been lost during loading and unloading from ships. All of the items that we found are considered DMM, or discarded military munitions, meaning that they have not been armed, so they're unfired and they're less dangerous in that sense that they're not ready to go off. 100 percent of what we found at Mare Island has been DMM. So to date, in that period they had found over almost 1,300 tons of metallic debris that was not considered MEC. Some of this was possibly munitions debris, but not considered MEC or munitions and explosives of concern. But also, other times too in the investigation of the anomalies, you just find railroad stakes or other metallic items.

So [these are] some of the locations we were seeing the MEC recovered. This is in the PMA area. You can see a lot of them were recovered along the shoreline. A few more inland near some of the buildings. This just kind of gives you an idea of where some of the items have been found and what kinds of items there were. Here is a similar slide for the SSA. Again you can kind of see that there's a little bit more toward the shoreline, but then there are some up near the buildings and near roadways and such. In the SSA there's much smaller munitions found as opposed to the PMA area where a lot of the larger munitions were manufactured and also discarded.

So in our conceptual site model, as I mentioned, the PMA predominantly had larger projectiles, the six inch to 16 inch, and they were some of the older projectiles that were found. And then in the SSA you saw a lot more different types, and a lot more smaller ones, the 20 millimeter to the six inch types; fuzes; primers; grenades; things like that, from the Civil War, but also through the World War II era. So our thought is that the modes of disposition were the intentional disposal along the shoreline areas, but also incidental handling loss at the piers and in the various storage areas over the years. Potential for human exposure, again in the conceptual site model, to the MEC hazard is dependent on whether or not people have access to the site, if they're doing any kind of intrusive activity, or if they see exposed MEC and then mishandle it.

I want to do a little PSA here. If you see anything that looks like munitions on Mare Island, do not touch it, retreat -- help me out, Dwight. Retreat, report, what's the other R?

MR. GEMAR: Recognize, retreat, and report.

MS. PAULY: Recognize. Recognize it first, retreat --

CO-CHAIR HAYES: Run.

MS. PAULY: Right, Run, right, that's the other R, run. Okay. So in addition to the eagle eyes of people that are looking around -- you should see nothing, but just on the off chance that you do. And I should say that the PMA and SSA areas are restricted areas, they are not open to the public currently. So they're currently being remediated by the Navy –

And part of that is doing geophysical surveys, one of which was reported in the EE/CA, is the one that was performed in 2006 utilizing obviously best available technology at the time for ferrous and all metals detection. So it was a combination of mag and flag, which is ferrous only detection, but it's great for larger and deeper items that were predominantly believed to be in the PMA area. And then EM-61 surveys which can also detect non-ferrous as well as ferrous items, but they're a little better for the shallower and smaller items, this included the accessible areas and the crawl space of several buildings, a couple buildings. And there are some other buildings that we're looking at investigating in the future. So approximately 29,000 metallic anomalies [were found]. That doesn't mean that it's all MEC or even munitions debris, it might, again, be the railroad ties or other metallic debris that's out there.

CO-CHAIR HAYES: You mean railroad line, not a tie.

MS. PAULY: You're right. You're exactly right, Myrna. Not the ties. I'm thinking spikes.

CO-CHAIR HAYES: Spikes.

MR. RASMUSSEN: Spikes in the ties.

MS. PAULY: Spikes in the ties, exactly. Okay. So after we had gotten the information from the geophysical survey, we can use that information to prioritize the anomalies for investigation. And so the conceptual site model was a document that was produced, and you can reference that in the IR and also the admin record. And it was in the EE/CA. Then we take the information where the different sectors were created in the conceptual site model to categorize the anomaly. So in areas of the PMA and the SSA where it would most likely be actual MEC or DMM, discarded munitions, those were categorized as Category A. And then everything else, all the other areas were categorized as Category B -- areas less likely to have MEC in them; those are based on the history, some site photos, past usage of the buildings, procedures of loading and storage and things like that, and you can see those. For the PMA you can see that, as we discussed in the site model or the conceptual side model, you'd see a lot more Category A areas closer to the shoreline where we'd expect the munitions to have been lost, more likely. And then more of the green areas are the Category B areas. And the little dots on this figure in particular are the areas where MEC and DMM have been removed in the past. Here is a similar slide for the SSA.

In an EE/CA we have removal action objectives or RAO's. And our RAO's for this EE/CA were to reduce the threat to human health, welfare, and the environment posed by hazards from potential Buried MEC. Pretty simple. And then by doing that, support and be consistent with the future land uses for this area which is expected to be industrial. All right.

CO-CHAIR HAYES: Wait a second. What's expected to be industrial?

MS. PAULY: Well, the PMA area especially. And the land uses -- and I'm sorry, I don't know them by exact sub-area -- but they're all in the future use plan. Help me out, Janet.

CO-CHAIR LEAR: The reuse plan.

MS. PAULY: The reuse plan, okay.

CO-CHAIR HAYES: Gil, would you speak to that? You actually have a proposal into the National Park Service to request their acceptance of the Production Manufacturing Area and the South Shore as a park. So --

MR. HOLLINGSWORTH: Well, they're evaluating it, yes, and they've never -- they've completed their evaluation and sent it to Washington, but we have not been informed of what it is.

CO-CHAIR HAYES: Well, I think --

MR. HOLLINGSWORTH: Yes, there is a proposal, and it's basically to kind of alleviate the cost that we would have to incur into the future by making it into a park, as you said, a national park.

CO-CHAIR HAYES: So maybe you can clarify. Do you suspect or did you imagine that national parks would continue to retain the designation that we currently have as industrial? I assume not. And then, if that's the case, then the Navy and your consultants, how would that change your environmental cleanup plan? Maybe not at all; given that this is munitions, you probably would clean it up to at least the level of park land anyway, I suppose.

CO-CHAIR LEAR: My question would be, Gil, is the proposal to the parks, that's just for the -- is that just for the area that you had already designated as park area --

CO-CHAIR HAYES: No.

CO-CHAIR LEAR: -- or is that for the industrial area as well.

MR. HOLLINGSWORTH: Working with the regional, the area National Park Service, we identified some areas that the City would go along with them incorporating into a park. One of 'em was the Chapel and Chapel Park, that was our highest priority. And then there were other things. And it all goes into the evaluation of the thing. It is literally a way to save money into the future. Where we don't have the money to maintain some of those facilities, we would hope that the federal government would establish a park. They have a very, I'll call it, strenuous process for determining a national park, and it's very long in time. It starts off with a local evaluation, and that is what's been completed. So that's step one, and we're waiting to see what they come back with.

CO-CHAIR LEAR: Okay. I was just asking for curiosity. But as far as the actual munitions removal, that really wouldn't change. So it may be the CERCLA response actions [that would change]; for instance, if it became designated other than industrial, we might do the CERCLA response actions a little bit differently.

CO-CHAIR HAYES: Can you just -- some people are new, like Miguel. Can you say actually what CERCLA response is?

MS. PAULY: I know.

CO-CHAIR LEAR: Comprehensive Environmental Response Compensation Liability Act.

MS. PAULY: Act, yes.

CO-CHAIR LEAR: And we are talking tonight about a munitions removal whereas it's slightly different for the CERCLA program deals with chemical contaminants, and where we would have certain cleanup goals; for instance, for lead or TPH, Benzene, and those are designated industrial criteria, residential criteria, and we do risk evaluations for particular receptors. Now, for the munitions program, which we're talking about here, there's not that kind of a distinction between industrial and residential or industrial and park lands. But we always knew that part of the PMA was going to be park, that was part of the reuse plan.

MS. PAULY: Right.

CO-CHAIR LEAR: And the SSA was going to be park. So this really doesn't change this particular part of the program, although it's certainly good to have that information for some of the other portions of the environmental cleanup.

MS. PAULY: My mistake. I work on both of the sides of this so I'm thinking -- I'm thinking about the CERCLA side of it more than the MEC side of it. So tonight we're just talking -- and, absolutely, as Janet is saying, the CERCLA side deals more with chemical issues, whereas MEC and munitions deal more with a physical hazard, the immediate physical hazard of a potential explosion.

So going on, great lead-in to the removal action alternatives in the EE/CA. These were the four alternatives that were considered. You might say why not just number them one to four? It's because the category one is the no action Alternative one, and then the other categories are all various types of, levels of excavation. And so the 2A alternative was excavation of just the Category A Sectors. And you'll remember those were the ones where they had the highest likelihood of having the MEC in them. There were about 13,000 anomalies identified. And then, there are twelve remaining buildings with crawl spaces that we wanted to check out. Alternative 2B had the Category A anomalies and the buildings, but also taking a 20 percent check of the Category B areas, and then doing some step-outs. And I'll talk more about step-outs later. And then category -- yeah, Alternative 2C was excavation of everything.

So obviously, I think you can probably guess in the evaluation of the alternatives, Alternative 1, doing nothing, does not satisfy the removal action objective, that does not meet the objective of being protective of human health and the environment. Obviously 2A would be moderately effective. I mean it's really the areas that are most likely to be impacted. We would get all of those anomalies out. But it doesn't really help us confirm our conceptual site model just to check the other areas. And that's where Alternative 2B really has the highest degree of effectiveness at a mid-range cost. So it satisfies our RAO's, it allows us to double check our conceptual site model, and it gets all of those Category A areas. Obviously Alternative 2C would be the most effective, just go after every single thing you can possibly find. But there's really an incremental benefit to try to get all of those Category B anomalies, because there's much more likelihood that they're just going to be the railroad stakes and other just odd metallic debris.

And I'll get into the Category B step-outs now. Essentially what we're envisioning doing is if we're going to investigate 20 percent of the Category B anomalies. There might be areas that we

think might, you know, around buildings we want to check a little bit more just in case. But basically if we find MEC, then we're going to just step out in a 25 foot radius and look for all the anomalies in that 25 foot radius, because what we've seen at Mare Island in the past is that MEC tends to be in clusters. So the idea was that, in the conceptual site model, is that they would have a place to put things or to dump things and so we tend to see them in clusters. And so if we actually find an item, we'll step out in that 25 foot radius. And if we find anymore MEC in those anomalies that we investigate, we'll then step out again until we don't find anymore.

MR. RASMUSSEN: Brooks, just a quick question.

MS. PAULY: Yeah

MR. RASMUSSEN: Do you have any sense of how deep these excavations may have to go?

MS. PAULY: Absolutely. In the past they've found these items between about four and eight feet. So obviously some of them have been found on the shorelines, so at the surface, but usually when they're below the surface they've been buried over, a little bit, with good reason.

So I'm jumping -- I was jumping ahead in my last discussion, but this is kind of what we would do: if we see -- so based on the target list from the 2006 DGM survey -- and that's digital geophysical mapping. Did I get that right? -- we have several options for targets, areas with a history of recovered MEC or Category A Sectors. So obviously we're going to reacquire a hundred percent of those selected anomalies; following the arrow down to the anomaly investigation, after they've been investigated and either shown to not be a MEC item or removed; similarly with MEC storage and handling areas, those are also Category A; and then, of course, the Category B, we're just going to reacquire and excavate about 20 percent of those, and again, investigate it to a depth of about four feet. If they're still seeing a signal and we haven't seen anything we'll evaluate those on a case by case basis. But most of them have been around the four foot range. And then, you know, if it's found, great, we need to investigate in the 25 foot radius, as we've talked about. And if it's not found, then the investigation at that location would be considered complete.

So our schedule going forward. As you can see, some of these items have passed. We did submit the Draft Final EE/CA and IRAP. We're currently -- there's been a little bit of delay based on some CEQA issues that I think have been resolved as of today. We've had some delays based on lack of funding and such, but I started on the project in, I think it was about October of last year, so getting up to speed. So thank you all for bearing with me on that. We did send out our fact sheet and mailing for the thirty day public review of the official Draft Final EE/CA. We're expecting to get responses by next month. And then we'll finalize what we call our AM or action memo. That's basically a decision document that codifies that we chose Alternative 2B, doing 100 percent of the Category A Sectors, and 20 percent of the Category B. And we're getting our work plans together, that's quite a big process. But it goes through a thorough review. And once we get those finalized, we're really hoping to start the removals in early fall. So does anyone have any other burning questions? Okay. Thank you all again.

CO-CHAIR HAYES: Don't leave quite so fast.

MS. PAULY: Okay.

CO-CHAIR HAYES: First of all, this is a fairly serious topic, so I guess from some of the training that we've had on munitions conversations, one of the things that I recall is that as much as possible -- I know this is a very informal group here, but as much as possible when you're talking about munitions, in particular -- I would encourage you in the future to be a little more serious than you have been in your presentation. You have kind of a flip style that's fun, but in this topic, like if you're going to be talking to a totally unaware public, kind of ratchet down the humor. It's just what we've been taught in classes that I've taken on this topic, because it gets people really worried. So that's just one thing. And then I'm confused because you said that -- on page eight you said that these 75 percent of MEC items were recovered on the shoreline 2,089 munitions and explosives of concern, and you said that those were accidentally deposited. But then on page ten you say that the modes of deposition were intentional disposal. And it's been my understanding that, just in even talking with former employees who actually did the disposal, that it was primarily intentional disposal. And so I was confused when you said that it was accidental.

MS. PAULY: My apologies, it's a mixture of both from our understanding of the history.

CO-CHAIR HAYES: You don't have that in your modes of deposition so, on page eleven, so, at least from when I talked with, to quite a few workers, they didn't accidentally deposit anything, they were instructed to deposit and instructed where to deposit.

MS. PAULY: Okay.

CO-CHAIR HAYES: At least in the sixties and seventies. Those are the timeframes in which I've had conversations with like former commanders, former operations commanders, and former employees. So I guess if there was a large part of accidental depositing going on, maybe change your modes of deposition so that it's reflective of what actually happened.

MS. PAULY: I'm not sure we know about percentages, so that's -- yeah, that's a good point.

CO-CHAIR HAYES: There isn't anything about percentages on page eleven.

MS. PAULY: Right.

CO-CHAIR HAYES: Just modes.

MS. PAULY: Right. So just intentional, as you mentioned.

CO-CHAIR HAYES: Maybe add accidental and, you know, explain that, you know, just cause that's confusing.

MS. PAULY: Okay. Yeah, that could be a good update to the presentation.

CO-CHAIR HAYES: And the other thing, when you said you're not going to see anything on Mare Island, but if you do, and you kind of, you know, well -- let's not go there on whether you're not going to see anything at Mare Island. There's a possibility -- let's say, after today's rain -- that you will see something. I really don't want the Navy beginning to get that message out that you won't see anything.

MS. PAULY: Oh, I think that's definitely not the message. It's less likely in areas where there was less likely to be handling.

CO-CHAIR HAYES: All right. So just be careful when you say you're not going to see anything. But if you do, let's go ahead and just assume that the message is it is in certain areas, it's possible that you could see something, and then go on with the recommendation that you made earlier about recognizing it. And there's a lot of education that needs to be done if, even in today's world, long before you complete this environmental cleanup at this area, and allow legal access to this area. I think that you have a lot of opportunity to begin again, to continue to inform the public about where the risks are, where the potential exposures are, and what recognize means.

MS. PAULY: Absolutely.

CO-CHAIR HAYES: What report means. What retreat means. And I would encourage you to, through the Restoration Advisory Board -- we had a little bit of a conversation about this, Janet and myself, and Patricia McFadden this week -- through the Restoration Advisory Board you have the tools all ready to be able to make that information common knowledge. And if the State of California and its regulation over your facility here has anything to say, has anything to learn about munitions education, it's that it must be now and forevermore on property that had munitions on it. And Tierra Santa being the case in California that drives all decision-making and all risk management on these kinds of properties, and that is where there was a development similar, I would just assume that everyone here did not know that story, and I've repeated it, spoken about it before, but it's worth repeating here. That there was a development of homes with a large open space set aside adjacent to it -- and you munitions people can correct me -- and it had been cleared to a certain depth, and there was a land use control put in place, and the initial home buyers, like we had here a few years ago, were well informed about what they were buying into, and that there was a robust education program in the schools and through the fire department. And as the initial developer moved out of the picture and homes were bought and sold and bought and sold, the initial developer's commitment to ongoing education and the homeowner's knowledge of the risk, potential risk of exposure to munitions was kind of forgotten. And three young boys were playing, I believe it was, in the open space area, and they found a munition item, and they ended up -- actually one child was killed; is that correct? Two children were killed –

MR. GEMAR: Two.

CO-CHAIR HAYES: -- and one was injured. And so that set the bar. That incident set the bar for the State of California and its regulation of munitions. And I think it goes far beyond the state, but it did occur in this state.

So in my own thinking about this, you can make a presentation like this at the Restoration Advisory Board, and you're going to get a handful of us, two or three people who live on the island, you know, a few people who work on the island. But I believe it really is your responsibility now, through the Restoration Advisory Board process, the early and often communication about environmental cleanup issues is the law that drives the Restoration Advisory Board's presence. And I think you have an opportunity and an obligation to do much

more education about those three R's right now than you're doing. And I've offered to help you with that. And I know that you've been really good about having materials at the Mare Faire, and at the Shoreline Heritage Preserve. Right now we don't have any of those materials, so we need some more from you, public education materials. And also you've had displays at the Flyway Festival. But I think now is a really good time to begin to just -- there are a lot more people living on the island, people who weren't the original owners of the properties that they purchased from Lennar a few years ago. And it's not very expensive to get some good educational materials out there and really get people beginning to understand, as you say, where it would be more likely or more possible to be exposed to a risk to munitions. And how to stay safe; stay on the trail, don't go climbing over the dredge pond levees right now. But that's something that kids really need to hear, and children who actually live here need to hear, and people who come to visit the island need to hear. And the same thing with, just hoping that people don't go around your fences at the south end and the west side. I don't think it's probably the best policy. I think there needs to be more than just hope, there needs to be some real educational signage and displays and presentations. And I think that the community outreach aspect of the RAB could be a really kind of simple way to accomplish that work. And the other thing that I also wanted to mention is that when Janet said that this was the recommendation for the topic for tonight on the agenda, and of course the agenda actually says that it's an Engineering Evaluation/Cost Analysis blah, blah, blah, blah, blah update. And actually we've already had this presentation, so what is an update about it?

MS. PAULY: The schedule.

CO-CHAIR HAYES: The schedule? We could have had that in your Navy report.

MS. PAULY: Agreed.

CO-CHAIR HAYES: So why would you have a complete report all over again? Isn't there anything new out at the engineering --

MS. PAULY: No, that's the problem.

CO-CHAIR HAYES: I thought I was told that the EE/CA, there was something new out of that.

MS. PAULY: No.

CO-CHAIR LEAR: I'm not sure what you're referring to.

CO-CHAIR HAYES: Well, I'm not either sure what I'm referring to. It's just that I was told this was -- when we made the agenda that there was something new about this, and I don't see anything new about it.

MS. PAULY: It was just the schedule. It's just, it's hard to come up with topics --

CO-CHAIR HAYES: It is?

MS. PAULY: -- every month.

CO-CHAIR HAYES: All right.

MS. PAULY: Any other questions? Thank you.

III. PRESENTATION: *Building 688 Pits Update*
Presentation by Mr. David Allard (CH2M Hill)

CO-CHAIR LEAR: Okay. So now we have our next presentation which is the Building 688 Pits Update from David Allard with CH2M.

MR. ALLARD: Good evening. Thank you all for being here. The presentation tonight is Building 688 Pits Update. Some of the things I'll be talking about is the location and background of the Building 688 and the pits: a description of the site; and the site is the pits inside the building, the ten pits inside the building; some of the previous sampling that's gone on in the pits; the more exciting part, the planned cleanup activities; our schedule going forward; some of the activities going forward; and then I'm sure we'll have some time for questions.

Building 688 is located -- it's the southern portion of the Eastern Early Transfer Parcel. It's in Investigation Area C-2, C-2 next to the strait. And Building 680 the big blue building, is the landmark right next to it, right next door off Railroad Avenue. We have an air photo that's a little bit easier to see. Mare Island Strait. The building is right here. Building 680 is currently unoccupied. And then XKT's, the big steel manufacturing facility, steel fabricator is right across the street.

A little bit of background. Historically it was a steam test facility, pump test, steam equipment test facility. The date on the plans was 1941, so I'm sure shortly thereafter is when it started. It's been added onto a couple of times. It's currently used by an industrial coating contractor, Jeffco Painting is in coatings. They use it to store their equipment there, they use it to repair their equipment, and they also store quite a bit of their product they use, supplies. The proposed future use is industrial.

There's a picture of the building. You can see 680 in the background. This is from Railroad. This is the main door, you kind of see that in a lot of the photos coming up. This is the main entrance going in and out. This is what Jeffco uses every day to bring, to come in and out, bring their equipment in and out, get their supplies. It's a very busy area. Here's a closer view. It's a little dark inside, but you can see this is a doorway. This is kind of their main thoroughfare where they bring their trucks in, bring their equipment in. Right here, these are some racks of equipment, and quite a bit of equipment. It's sitting right over some of the pits. Right here, this is a point of reference we'll see in some other photos later and some slides, but Pit 9 is about right there, kind of in the center, right in the middle of their driveway.

CO-CHAIR HAYES: Is that -- is that some kind of -- what is this material on the floor? Is that -

MR. ALLARD: Right here?

CO-CHAIR HAYES: Yeah.

MR. ALLARD: It's concrete, and it's a railroad track.

CO-CHAIR HAYES: Why is that kind of real blue right there and then the other is a different color? Just a different era of concrete?

MR. ALLARD: I'm not sure. It's some different concretes, and then a coating manufacturer, and I think just the wear and tear coming in and out right along here. I don't know if they scrape the concrete or anything.

The site description. There are ten below-grade pits inside the building. The pits are seven to ten feet wide, ten to twenty feet long. Five of the pits are shallow, they're about a foot to a foot and a half deep. And four of the pits are known to be deep, a couple of them are about seven feet. Pit 10 is about twenty feet deep. And Pit 9 is fifteen feet [deep]. Eight of the pits are covered with these interlocking steel plates, very heavy. We've seen them in a lot of the buildings on Mare Island, very hard to deal with. And two of 'em are covered with steel road plates, kind of the plates of steel you'd see if they were doing trenches in the road and temporarily cover it, that's over two of the deep pits. Two of the pits that we know of contain water.

And a schematic plan. If you look, this is the building. I'll point it out, but here's the outline of the building right here, down here. Here was the door we looked into. So we were looking in the door looking this way, kind of looking at Pit 9. Okay. This is color coded by phases. Jeffco's operating facility, they're in there every day, they're working every day, they're very busy. We have to do this in three phases to allow them to move equipment back and forth and only work one at a time. So this kind of shows you the color codes. These three right in kind of the middle, that's the first phase, those are all deep pits. The purple ones are the second phase; Pit 8, and these two which are deep. Pit 2 is actually an unknown depth, we haven't been able to get access to it at all. These are open, pretty easy to get to. This one has a large shed that kind of sits on top of it full of supplies. There's racks of equipment that sit over there. This area here is kind of their shop for their repair of their equipment. They've got a machine shop. And then there's another storage cabinet that kind of sits right over Pit 2. So the access is very limited, and Jeffco is going through a lot of work in helping us out to move stuff around and move around so that we can get access to these pits and clean 'em out. Here's a more detailed description of each of the pits, their length, their width, so you'll have this. Here's the depth. Pit 2 we haven't been able to get in it, we can't get access to it, they have to move a big cabinet full of supplies out of the way. So when we get in there we'll know. We believe it's similar to Pit 1. It wasn't on the original drawings so it was built later, but we're anticipating it's like Pit 1. But we don't know, so we're prepared for it being shallow or deep. Most of them have these interlocking steel plates; [Pits] 9 and 10 are very deep. I've seen inside 10, it's twenty feet deep, there's no water in it.

CO-CHAIR HAYES: Gil, did you say -- or David, did you say what these pits were for?

MR. ALLARD: We've seen 'em in a lot of buildings, and they tend to put these steel machine racks, you see 'em in a lot of the machine shops, 680 had a bunch of 'em in it. A lot of the buildings had it, but it formed a nice steel platform, very level, very sturdy platform where they had equipment or could work on it to do some of their fabrications and stuff. But I don't exactly know what they used these two Pits, 9 and 10, for; they actually had steam equipment in it, vertical tanks, vertical steam tanks in it, so that's what those held. But what the others were used for exactly, I don't know. I have some pictures of 'em, they're not a lot of fun to deal with, but

they're pretty interesting in the construction and stuff at Mare Island. This is Pit 5. It's a deep pit.

These are how we sample through these little sampling ports. We call them sampling ports, they were inspection ports or something. It looks like they are a lot of steel slats. They are not. This is about ten feet this way, and ten feet that way. This is two plates. The plate is split right here. You can barely see the seam when you're starting over it. They're very highly machined, put together very well. This is how we're going to gain access to it. This is how, when they started the job, this is how they put 'em together from underneath. I have a picture underneath. Here's Pit 9. This is just one of those steel road plates, move it off, move it back on every day. And Pit 10, this one is at least twenty feet deep.

And again, that's another steel plate. This is the racks of equipment that we talked about that's sitting on top of some of the shallow pits. And Pit 8 is a little bit over to this side. Some of the interesting construction underneath. This is a picture underneath Pit 5. This is kind of the bottom of the steel plates. They have these I-beams that are -- look like there was a joint in it, it's an I-beam. This is like about a foot long and there's about five of these that are all cast together in one piece. They weigh about 3,000 pounds apiece. When they put these in place they're bolted to these concrete beams. They're bolted up to the steel plate. They used to go on there and level 'em from underneath, and that's how they bolted 'em, and that's the only way they can take these plates out of the deep pits. So they're very difficult. You can't cut 'em without using like a plasma torch. Very heavy, very heavy steel. They're difficult to work with. I know we've talked with XKT, and they've tried to put 'em back in -- and these guys work with big steel all the time -- and they've had difficulty with it.

Here's the underside of a shallow pit. As you can see, it just sits on this. This is the concrete wall, and this is going the other direction so the plates kind of look like they're going this direction. So it's very shallow. It's about a foot of this, and about six inches of space underneath. And you can see the reports and talk about sediment, but it's pretty much dirt and debris, sixty, seventy years of dirt and debris in your garage that's kind of accumulated on here. So there's not a lot -- in most of them em there's really not a lot of debris in there. These were the shallow ones. Because they just sit there we've lifted them out before.

I'll talk a little bit about the previous sampling we did. As part of the closure for the entire floor which is a different, kind of a different site, different PCB site, we collected samples of sediment from Pits 3, 4, 6, and 7; water from Pits 1 and 5. Like I said, the other pits were just inaccessible for initial sampling. There's two soil borings inside the building. We did two soil borings. And we took soil samples from that, and some groundwater samples, grab groundwater samples. Also we took soil samples from these two downstream monitoring wells just outside the building, and we've taken soil samples from there. The samples, the sediment samples, primarily sediment samples in the pits were collected for polychlorinated biphenyls [PCBs], metals, and pesticides. Some of the soil borings and wells soil were tested for total petroleum hydrocarbons [TPH], the water was tested for that [TPH], volatile organic compounds, semi-volatile organic compounds, and polynuclear aromatic hydrocarbons.

What did we find?

Oh, a couple pictures. This is Pit 3, this is how we had to sample that, as you can see. A lot of equipment around, a lot of stuff we had to work around. This is Pit 6. Again you can see this is their racks of equipment that they're going to have to move and are moving for us. And again, there's a little sample hole, it's about six inches on top. Pretty heavy. It's only about, you know, three or four inches inside, it's very heavy steel, everything's very heavy.

What did we find? None of the soil or groundwater from the borings or wells around the pits had any exceedances of the screening levels. None of the samples from Pits 1, 3 -- water in Pit 1 or the sediment in Pit 3 or 6, there was nothing detected above screening levels.

Where we did have exceedances. Samples from Pit 4, of the sediment, exceeded for PCBs, arsenic, lead, mercury, which causes some problems in cleanup and everything else, and a pesticide, Dieldrin. Pit 7: sediment, PCBs, some metals, copper, and lead. And Pit 5, that's the one you saw underneath, kind of oily looking, that one had total petroleum hydrocarbons as diesel and motor oil.

CO-CHAIR HAYES: Were any of these materials known to be anything that the painting coating manufacturer would have been working with? Or can you just assume that this is all materials that were there previously?

MR. ALLARD: Well, TPHs, PCBs, metals, they're pretty much in a lot of these buildings that we see here when we're doing these pits and stuff. The mercury, that came up, to me -- this was a steam test facility, a lot of gauges, a lot of pressure gauges, probably mercury inside them, thermometers, somebody dropped them on the floor and it fell in. So there was nothing that, you know, volatiles or anything that seemed to come from Jeffco, but –

Here's just a slide showing the items and where they're from. This is Pit 7. The red ones are the sediment exceedances, the green ones are the water exceedances. The pit number is kind of the last number here if you want to know the pit number. But again, we had some metals and PCBs in Pit 7. Metal and cadmium in Pit 6. More of that in Pit 5. TPH in the water in Pit 5 -- I'm sorry, this was Pit 3 over there. And then a lot of arsenic, PCBs, pesticides, lead, and mercury in Pit 4. Kind of the same data, if you want it with numbers on a table, with the screening levels that were used. And another way to have the data a little easier to look at, but on a table.

What are we going to do? Okay. First of all, as we talked about, we've got to do the work in three phases. It's like when you're cleaning the rugs in your house, you have to move stuff around, do one, and then the other. These guys, they have to work every day, they have to be in there every day. They've got a lot of work going on, they have to keep busy. We've also got to do the work outside of their work hours. They go home at 4:00, 5:00 o'clock at night, we're going to be in there then, work, get our shift in, and everything has to be cleaned up. Certain area plates have to be back in place, and everything set so they can go to work the next morning. In general the steel plates are going to be removed, we can just lift those out of the shallow pits. And they'll be recycled. Pits 9 and 10, those are deep pits but they have the steel road plates, we can slide those off, do our work that day, and slide them back on. The deep Pits 1, 2, and 3, we're going to have to be down inside the manways underneath working there, that's confined space, that's probably respirator work, not a lot of fun. What we'll do with each one, we'll go in, we'll measure the water. If there's water we'll pump the water out, we'll grab a sample of the

water. And then it will go into containers to be tested and shipped off-site. Then we'll measure the sediment. They'll clean the sediment out. If it's thick they'll use shovels and stuff, and then they'll vac it out. Cause we're concerned about air quality, the vacs will either have HEPA filters, and also because of mercury they have to have special mercury vapor filters. So we'll get all the sediment all cleaned out, it will all be containerized, it will all be tested, characterized, manifested, and shipped off-site to a proper place.

Then the fun starts. We're going to go in and we're going to power wash with a light surfactant, the cover plates, the interior surfaces, the floors, the walls. Then they'll go ahead and they'll vac all that water and sediment out of there. Then the interior of the pits are going to be visually inspected. What we're going to look for is we're going to look for cracks in the concrete, we're going to look for pipe penetrations, anything that could indicate that what's in the pit could have gotten out. We'll take pictures of that, we'll document anything we see. In the past what we've seen in these pits, they're pretty darn solid. They're on piles, they're heavily reinforced, they're usually in pretty good shape, and we're hoping that's the case here. But we've got to be ready to do that. One of the things we do if we do see a penetration or something like that, we're going to resample the sediment we got out of there so we can double check or sample for stuff we haven't checked before to see what's in the sediment that could have gone out so we don't have to look for it later. After it's cleaned out, all the sediment is taken, it's been inspected, we'll collect concrete chip samples, a composite from the floor area. And then if the sediments come up the side, if there's heavily stained areas on the sidewalls or anything else, we'll collect a sample for stains on the sidewalls. They're all going to be analyzed for PCBs and metals. There's a few other things. The one that had the pesticide in it will all be checked for pesticides. And there was some toxaphene, we had an issue with the initial sampling on the detection limit so Pit 3 has to be tested for toxaphene. Sampling methods, the gridding, the number of locations all based on U.S. EPA guidelines for PCB, working around in the pits.

Okay. After we get our samples back, we're all hoping it's all clean, it's all nice, we can pick up and go home. If not, we may do additional washing in some of the areas that came back above cleanup goals. We may have to do some concrete removal of the walls. It's pretty limited. I mean we've got a structural thing, we can't break it up too much, people are working, we've got to maintain the integrity of the structure, so we have some -- a little bit of concrete removal if we can, if needed, and then we'd have to resample, if that is the case. Shallow pits, the ones we can pull up the grates out, they're going to be backfilled with reinforced concrete, give them a nice even floor to work on. So that will take care of those areas. The steel covers, those are going to remain in place. A couple of things if it doesn't come back clean, if we've chipped as much as we can and cleaned as much as we can, we have some options as to encapsulate the bottom -- that would work for certain levels. Also we can, under TSCA, we're allowed to define or designate the pits-below- grade as a low occupancy level, which limits the amount of time anybody can spend in them. But nobody's spending any time in 'em anyway, so –

All right. Anticipated schedule. The PCB notification was approved by EPA in February. The cleanup plan was approved by DTSC on March 8th. We've prepared our plans, our procurement documents. We've bid it out to industrial cleaning contractors. They've come back with bids. And we plan on awarding at the end of this month. The cleanup activities are going to occur during April and May. Because we have time between when we do one phase and when they move stuff around and do the other phase, it's going to take a couple months, and that's if things

turn out right. If we're doing a lot of chipping and a lot of removal it will be even longer. With a goal for regulatory closure by October of 2011.

A summary of the path forward. Next step is to perform these cleanup actions with the sampling. Prepare the cleanup action summary report for submission to the regulatory agencies. If for some reason we had to designate one of the pits as a low occupancy level, there'd be a site specific land use covenant. And if for some reason we had to encapsulate with concrete, there would be an O&M plan and some more requirements that would have to take place. Any questions from anyone?

MR. REIFERT: With all the work you're doing, why would you rent the place out?

MR. ALLARD: It's already being used. It's currently being used by Jeffco and they're using it.

MR. REIFERT: Right, that's what I'm saying, how did they get the rent when you're going to do all that work on it?

MR. HOLLINGSWORTH: We rented that back to them back in early, say around '94-ish.

MR. REIFERT: Oh, okay.

MR. HOLLINGSWORTH: And in this particular building, Jeffco leased from us a huge area --

MR. REIFERT: Right.

MR. HOLLINGSWORTH: -- and we needed the money. And so we still need the money.

MR. REIFERT: Right.

MR. HOLLINGSWORTH: And so that's why. I mean in this case CH2M Hill has bent over backwards to accommodate the lessee and has done a terrific job in doing that.

CO-CHAIR HAYES: And one other thing to note on that question, those leases with all that money pouring in did have a condition in 'em that as the environmental cleanup progressed they -- and it was found that it needed -- some work needed to be done on their property, you know, that was part of the deal that they were going to have to accommodate that cleanup. And I'm sure CH2M Hill has worked with them, and I'm sure they put some extra time in. And I wouldn't doubt that they might be being paid a little bit for putting that extra time in, I don't know, on the lessee's part. They must be getting something out of this deal to make it worth their effort, huh?

MR. ALLARD: Any other questions?

CO-CHAIR HAYES: I had a question about why you would bother to fill those shallow pits.

MR. ALLARD: Well, if we left 'em after we took the plates off -- first of all, the plates are very hard to get 'em back in place, get 'em aligned right. They're very machined. They're tongue-in-groove. They're very heavy. They're hard to get in line. So otherwise we're going to have holes in their work area, so with --

CO-CHAIR HAYES: Well, yeah, I wouldn't expect you were going to leave it like that, but I thought that, you know, the geniuses that put them in there could surely figure -- you guys could surely figure out how to put 'em back. But if it's just faster to just put concrete in 'em, and you don't expect that those pits are ever going to be needed to be used with the plates. I just remember you were telling us that at the XKT property there were some plates that they wanted left in place --

MR. ALLARD: Yeah, well, the work --

CO-CHAIR HAYES: -- and so I'm just curious about that.

MR. ALLARD: They had a steel grated area that they had some presses on and that they liked to use, and it was amongst their stuff, and we did leave those there, but we couldn't clean underneath those, those had to have a cap underneath those. So -- okay. Thank you.

CO-CHAIR LEAR: Okay. This is time for the first public comment period. Do you have -- do we have any public comments?

(No response.)

CO-CHAIR LEAR: Okay. Ten minute break.

(Thereupon there was a brief recess.)

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Janet Lear)

CO-CHAIR LEAR: We are now at administrative business. And as always, we need to get any of your comments on meeting minutes from the last RAB to Myrna or myself so that we can finalize that. And Myrna, did you have anything?

CO-CHAIR HAYES: (Shook head.)

V. FOCUS GROUP REPORTS

CO-CHAIR LEAR: Okay. So we are at focus group. Wendell, do you have some update for us, report?

a) Community (Wendell Quigley)

MR. QUIGLEY: I have one update. Last Thursday I discovered we have two white swans in the dredge pond. And because I seen them first, I got to name them. And their names are Myrna and Gil. And they've been there every day.

MR. HOLLINGSWORTH: If they were black swans I could buy that.

CO-CHAIR HAYES: And they're probably fighting tooth and nail, right?

MR. QUIGLEY: No, no, they're together. I think there will be babies in the spring.

CO-CHAIR HAYES: Unlikely.

MR. FARLEY: Let's get this meeting over with.

b) Technical Report (Paula Tygielski)

CO-CHAIR LEAR: Okay. Technical report, Paula.

MS. TYGIELSKI: Nothing to report.

c) City Report (Gil Hollingsworth)

CO-CHAIR LEAR: City report.

MR. HOLLINGSWORTH: City has nothing to report.

d) Lennar Update (Steve Farley)

CO-CHAIR LEAR: Lennar update.

MR. FARLEY: We have a -- our normal monthly handout, oop, I'll get in trouble. We have our eleven by seventeen handout again. Let's start with the photographs. In the upper right, that's the removal of an underground storage tank inside Building 84. I included this photo just to demonstrate how difficult some work on the interior can be. And sort of in the spirit of the presentation Dave gave tonight, they're shoring. You can see the size of the equipment. The piece of equipment in front that's sort of lit up in yellow from the sunlight, that's a little bucket there to remove the soil, and in the background is a little excavator. You can see the sheet piles, that tall beam that's sort of in the center of the photo. There are sheet piles there, sheet piles in the back, and the tank sits in underneath the small excavator. It came out in pieces. We had to cut -- oh, good point. The tank was intact, it was not riveted. That gives us some idea of the age of the tank. And we had to cut it up to take it -- to actually get it out of the building. If you look at the folks working you can see that they're wearing Tyvek®, that's the white overalls that they're wearing. They've got blue gloves on, hard hats, goggles, and they're wearing respirators. It's all safety precautions for working inside of that building.

On the left-hand side are photos of the injections that we did, injections at IR-15 for putting the substrate in the ground. And the purpose of injecting the substrate is to increase the biological activity and get the bacteria to grow so that they break down the chlorinated ethenes, and down -- hopefully down to ethene, and get rid of the concerns over the chlorinated ethenes.

MS. TYGIELSKI: So that's the cheese whey?

MR. FARLEY: That's the cheese whey, yes. And the photo on the --

CO-CHAIR HAYES: Is there another whey?

MR. FARLEY: Okay. The image on the top is mixing of the substrate, also known as cheese whey, into the pumps that injected the substrate into the ground surface. And you can see the hoses and their various apparatus that was used to inject the substrate. So all of that work is done. And again, you can see that they're working at night. The crew that did that work worked many, many hours, seven days a week, long hours, multiple shifts, and it was done successfully and without any health problems, nobody got hurt. So that was a job well done for everybody.

CO-CHAIR HAYES: How would they get hurt?

MR. FARLEY: There's a lot of slip trip, falls. You can see all the cables here. We had lots of pieces of equipment moving around. We had multiple drill rigs. There were excavators. There were many, many different types of equipment moving around, vehicles of different types. And the main health concern, not the only, but one of the main health concerns out here was the physical health concerns of getting hit by something or run over by something, trip over something, those kind of hazards. It wasn't from the exposures to --

CO-CHAIR HAYES: To cheese whey.

MR. FARLEY: -- the cheese whey. It wasn't Brie so -- but it's all the physical. It's all the physical hazards, potential hazards.

MS. PAULY: Have you characterized the microbes that are out there?

MR. FARLEY: Yes, and we're preparing -- nice segue. We're preparing an implementation report right now for the work that we did out there that describes all the work that was done putting in the remedy. So the remedy, simplistically putting in the permeable reactive barrier, injecting the cheese whey, and then also injecting some other iron filings and some other solids into the ground to get the chlorinated ethenes to degrade. Basically there were two types of mechanisms to dechlorinate the ethenes. One is a biological procedure where the bacteria actually dechlorinate, and the other is the iron which, when the ethenes contact the iron it pops the chlorines off as well. The name of the bacteria, it's not in my arena, but it's about 47 letters long, and I couldn't tell you what it is, but if anybody had any interest I could find out and report back.

CO-CHAIR HAYES: Does it have nickname?

MR. FARLEY: Bacteria. I don't know.

MS. PAULY: Is it that dehalococcoides?

MR. FARLEY: It probably is, but I hesitate saying because --

MS. PAULY: There are other ones.

MR. FARLEY: There are, and I don't know.

CO-CHAIR HAYES: It is that one from last time.

MS. PAULY: Just a thought.

MR. FARLEY: When I read the implementation report I read through that, and I know that that's not my forte, so what I remember is that it was -- it was some type of dehalococcoides, but I don't know what the exact species was. So, yeah, so it's something in that arena.

CO-CHAIR HAYES: And did you already tell us before and it's just slipped right through my mind why you chose cheese whiz instead of like molasses or high fructose corn syrup which is the big thing now for everybody to eat?

MR. FARLEY: Yeah, there were lots of evaluations that were performed by our chemists. And I know that molasses and a few other substrates were considered. Why they settled on cheese whey I don't know, but there were lots of different possible substrates that were being considered. And it went on for some period of time. And I -- well, I don't want to speculate because I don't know.

CO-CHAIR HAYES: Okay. You don't have to.

MR. QUIGLEY: I could. The overflow could feed the harvest mouse.

CO-CHAIR HAYES: That's a speculation.

CO-CHAIR LEAR: Because they like cheese better than molasses?

MR. QUIGLEY: Yeah.

MR. FARLEY: Let's move on.

CO-CHAIR HAYES: Maybe it's how slow molasses is.

MS. TYGIELSKI: They were concerned about the health and the bacteria, so they fed them cheese instead of sugar.

MS. PAULY: Their little hearts.

MR. FARLEY: This meeting's moving on a little too long. Okay. Moving onto the map, there's a few things that are highlighted here. Let me start --

(Thereupon there was simultaneous discussion.)

MR. FARLEY: I'm just not going to get through this, am I?

CO-CHAIR HAYES: Depends.

MR. FARLEY: On the left-hand side the Crane Test Area, also known as IA-B1, Investigation Area B-1, we've just submitted the Draft Implementation Report. That's the report that's submitted after all of the remedial work is performed. And that was submitted earlier this month to the agencies. In the upper right, IR-03, Installation Restoration Site 3, we've done some groundwater monitoring up there. And we are, we've submitted some reports to the agencies, and hopefully we'll get closure on the groundwater here in the not too distant future.

I'd mentioned IR-15. That was the photos that we just talked through. And we have now demobilized the site. We're done with all the surface work. The long term work out there will be groundwater monitoring, and of course monitoring the performance of the remedy, meaning the bacteria count and that sort of thing.

There's a number of fuel oil pipelines or FOPLs that are in here, the B-493, B-971, 617. The fuel oil pipeline names, for example G1/10/7E, those numbers relate to the geographic grid, what buildings they tie to, and the middle number is the diameter of the pipeline. So if you look at the first one, B-493/971, that fuel oil pipeline connects between Buildings 493 and 971. In other cases, for example, G1-6-7E, the diameter of that pipeline is six inches, and the G1 and the 7E relate to the grids out at the island.

Moving onto the Triangle Area. We've submitted a final implementation report. We did get some additional comments on that. We're addressing those now. Dave mentioned the Building 688 work that we're doing. And down in the lower right, lower left corner, building or UST 84, that's the photo up in the upper right that we talked about. Let's move onto the reports. As I've mentioned a few times now in the last few meetings, you'll see things in those summaries here about implementation reports, summary reports, requests for closure. These are some of the documents that are in review or coming up. And you can see how many of them say implementation report on 'em. And that's, again, another indication of how far down the process we're moving for most of these sites. In the lower right corner, moving onto the environmental site closure status, there have been another -- a number of additional closures, one in particular from the Water Board for one of the fuel oil pipelines -- right? -- Elizabeth? And I think there was also a UST that's coming up, UST 102, that the closure letter is actually in process. So thank you for that. And with that, I think that's what I had for tonight. I'd be happy to answer any questions.

CO-CHAIR HAYES: You have something here that says excavation for removal of UST at Building 84. That's what these guys are working on right here?

MR. FARLEY: Yes, that's -- I'm sorry if I didn't mention that. The photo in the upper right corner is the removal of an underground storage tank inside Building 84.

CO-CHAIR HAYES: I thought we were going to have a presentation on issues around Building 84.

MR. FARLEY: Yeah, we had offered to do that last meeting, and I'm not sure what transpired on the agenda setting; but again, I think we're happy to do that, it just didn't get added to the agenda.

CO-CHAIR HAYES: I don't know why. Neal, can you make a note of that?

MR. SILER: Certainly.

CO-CHAIR HAYES: Yeah. And then I also want to follow up with you on the Crane Test Area. I do see that you did install potential flood warning signs on that area. That was effective until the signs fell down. And so obviously wind trumps flood signs. But it did work. So maybe you can figure out to secure them better to withstand the forces of nature.

MR. FARLEY: Okay. Thank you. Oh, wait.

MS. TYGIELSKI: Why is the Triangle Area surrounded by a purple dashed line? A purple dashed line is not in the key, not in the legend.

CO-CHAIR HAYES: Oh.

MR. FARLEY: Ooh, you caught me on that one, I'll have to add that. If you look at the area surrounding the Triangle Area, it's green. And there's a boundary around that that defines the boundary of IA-C3. The Triangle Area is a subsection of IA-C3, but we haven't broken it out as a formal IA. So, for example, where IA-B.1 is on the left-hand side, we also refer to that as the Crane Test Area, the B.1 and the B.2, the two other areas, B.2-1 and B.2-2, all of those three areas at one time were referred to as IA-B. But in order to facilitate moving things forward when they were ready, because some areas were ready sooner than others, we actually formally broke these out. In the case of the Triangle Area we considered doing that, but in terms of the schedule of things it didn't make a lot of sense. So we were treating that sort of as a site.

MS. TYGIELSKI: Okay.

MR. FARLEY: But what I'll do if I talk about that or if I discuss it next time, I'll put that in the legend. That's a good point.

MS. TYGIELSKI: Okay. Thank you.

e) Weston Update (Dwight Gemar)

CO-CHAIR LEAR: Okay. Weston update.

MR. GEMAR: Okay. Hopefully everyone had a chance to grab an update. On the left side is about half a dozen documents that are with the agencies to review, so they're starting to stack up like planes over O'Hare on a bad winter day. So hopefully we'll start seeing some of those come down final approach. I'm a former pilot, couldn't help that. And then we have two more documents that probably within the next two weeks are going to go out the door as well, and so the agencies should be seeing those pretty soon as well regarding the Investigation Area H1.

Then on the right-hand side, the only other kind of topic of note was, I think last month I mentioned that we had done some -- and I misspelled additional -- sampling out at IR Site 05, which is at the southern end of the island. And in the background photograph you can see the area that kind of juts out into the water, that's Installation Restoration Site 05. There were a number of potholes that we dug out there based on some notes that were in a logbook when we were digging up the 3,800 plus anomaly locations during the munitions response action. And these were locations where the unexploded ordnance technician had noted that there was either some odor or some discolored soil. And those were areas that were outside of the location where about 30,000 cubic yards of soil were excavated and removed. So we went back and dug potholes there. And there was only about half a dozen that looked like were of interest in terms of sampling based on visual are or odor. And out of those half a dozen locations, there were two locations where we did confirm elevated diesel at one location, which is kind of in the upper middle part of the site. And then a second location kind of near the Dike 12, down near the waterfront, that had elevated lead in a very small area, cause there was actually a number of anomalies right around it that had no elevated lead. So it looks like it's just a very small area. But nevertheless, we summarized those results and just sent 'em out to the agencies maybe this week to have everyone take a look at it. And basically we're recommending that we go out and do an excavation of those two small areas, do a step-out confirmation sampling, and basically

remove that soil so that we can eliminate those two exceedances of our cleanup criteria. And, of course, they're going to have to be sent off the island to a commercial landfill at this point. So we're going to see if the agencies are in agreement with that, and if so, then when and if the rain ever stops, and things dry out, we can go back out there and do this removal, which would be part of the time critical removal action, just be a very small additional volume as well. And that is what I have.

CO-CHAIR LEAR: Okay.

MR. GEMAR: Any questions?

f) Regulatory Agency Update (Janet Naito, Elizabeth Wells, Carolyn D'Almeida)

CO-CHAIR LEAR: And you are the regulatory update tonight.

MS. WELLS: Yes, I am the regulatory agencies tonight. And I'd like to say, I don't think we see them as airplanes taking off and landing, more like bombs being dropped that have all exploded in our offices. So Janet couldn't be here tonight, she actually had a public meeting for one of her other sites, I don't know if you all know that we do actually work on other sites as well. So she apologized for not being able to be here since we were the ones who couldn't be at the original date and, therefore, required the moving of this meeting. So she wanted to tell you that she's been concentrating this past month on the Eastern Early Transfer Parcel sites. Let's see. She worked with CH2M Hill to approve plans for completing the investigation and cleanup of two polychlorinated biphenyl or PCB sites. She worked with Lennar to record land use covenants for eight polychlorinated biphenyl or PCB sites within Investigation Area C3. And provided comments on numerous implementation reports, and approved two of them. And then the DTSC and the Water Board met with the Navy to discuss some additional investigation at Installation Restoration Site 4, also known as Investigation Area F2. And to discuss potential munitions investigation in the offshore. So she said that's it for her. All right. And then are there any questions for Janet? I can write them down and take them her.

MR. GEMAR: Tell her it's time to start working on the Western Early Transfer Parcel.

CO-CHAIR HAYES: Yeah.

MS. WELLS: So the Water Board, our focus is petroleum and water. So Steve was right. We actually in the last month, we gave concurrence of no further action for one underground storage tank, and for one fuel oil pipeline, FOPL segment D1.4B.290E and B.2-90W. And I'd like to note that the figure, this lovely figure from CH2M should say 91 FOPL segments are closed.

MR. FARLEY: I was going to say that but it was way too much detail.

MS. WELLS: That's right, we want credit where credit is due. And we've got a few other closures that are in process, or closure requests that are in process that are being reviewed. Let's see, what else did we do? We've reviewed and provided comments to CH2M Hill or Lennar on four documents. And the Water Board, one of the things that Janet Naito and I have worked out is in a lot of cases I actually provide my comments directly to Janet, and then she combines them. In some cases I've provided comments to Janet but they haven't actually gotten to the

recipient or she'll do the comments first and then we'll -- we try to do it collaboratively. Let's see. We reviewed and provided comments on one document for the Navy. And so that's kind of what we did this month.

A couple special notes. One is to let you know that I actually took over the Lennar portion of this lovely island in August of 2010 because the project manager left and we couldn't hire anybody to replace him, so the Water Board, in response to some requests from Lennar, provided some additional resources to CH2M Hill and to Lennar for review of documents in the form of me and a geologist who actually has other projects, but she was told to ignore them for a while, and we have a student who all she does right now is Lennar Mare Island and some Navy Mare Island stuff as well, but as of March 31st there are going to be some changes in terms of the priorities and the timing. One is because I'm taking on a three month assignment as a section leader for the waste management unit -- I have no idea what they do, but I'll figure it out. And the geologist, Alex, who's been working with me, is no longer going to be helping me. So we had another person leave, and she's going to be taking over all his work or most of his work. So, just to give you guys an example of what the Water Board has been doing, I did my work -- I have to do an annual work plan every year saying what all my work is, and so I worked 85 percent time, thanks to Arnold, the former Governor, but I have 170 percent work because of the projects that I work on. So I sort of have to figure out where to prioritize. And so I -- let's see. In November of 2008 I worked 130 hours on Moffett, and none on Mare Island in a month. And then in March of 2009 150 hours on Moffett and none on Mare Island. And then in November of 2009 Moffett was ninety hours and Mare Island Navy was 30. And sort of moving forward, March, 2010, Moffett was fifty, Mare Island was 75. November of 2010, Mare Island Lennar was introduced into my life, so Moffett went down to fifty, Mare Island Navy went down to fifteen, and Lennar went up to fifty. And March of 2011 is fairly similar. So I'm going to be reprioritizing and probably focusing a little bit less on the Lennar side of the work, and a little bit more on my other projects, Moffett and Mare Island Navy. So just wanted to let you all know that. We are hoping to be able to bring some people into our division, and so we're hoping to have other people come in, but we don't know if that's going to materialize. So does anybody have any questions?

CO-CHAIR HAYES: You can leave now.

MR. FARLEY: No. No. No. No.

MS. WELLS: Well, you guys can fight over who takes over all of the work.

CO-CHAIR LEAR: Did you want to go first, Myrna?

CO-CHAIR HAYES: No.

VI. CO-CHAIR REPORTS

CO-CHAIR LEAR: No. Okay. Navy report. So, this last month we did field work at the PMA, Production Manufacturing Area, and some PCB sites. We did the last bit of work out at the building decontamination in the Production Manufacturing Area. The last building we decontaminated was Building A-215. And we will be getting a report for that certifying that the buildings are munitions-free. PCB work was performed at Building 505A, 782, 900, and 1300.

Fieldwork included concrete scabbling -- which is concrete chipping -- some small soil excavations, some dewatering, and then, of course, sampling. We're waiting for the results of those samples, and then we'll develop a path forward at those four PCB sites. The Navy submitted one report this last month, which is the Draft Final Time Critical Removal Action for Building 742. We received comments or concurrence from DTSC on one document, and the Water Board on one document. And we received comments from EPA on two of our PCB site closure reports. We had BCT meeting earlier today. And our next RAB meeting is April 28th. Is there any questions on the Navy update?

CO-CHAIR HAYES: Yeah. I'm curious regarding your fieldwork for the PMA building decontamination work. It seems to me that my observation around the island that -- well, all over the -- the city maybe, that best construction management practices are applied in your areas where you've done a lot of soil disturbance. And I see a lot of straw wattle placed everywhere for sediment control. And it seems like this is a good time of year to have that in place. And I don't see any applied at that building decontamination work at -- particularly at Building 216, and I wonder if that's just waiting to be ordered, or if it's not available now, or if you weren't planning to put it in? And if so, why?

MS. PAULY: My understanding is that Building 216 has been covered with gravel, and so that is the BMP or best management practice for that location.

CO-CHAIR HAYES: Associated with it was a lot of soil disturbance, and there's an awful lot of run-off right now. I don't see any provision for protecting the strait from that run-off. Soil everywhere.

MS. PAULY: I can look into it.

CO-CHAIR HAYES: Yeah, that would be a very good idea, because that could probably not be a very good thing with the Regional Water Quality Control Board, would it be, Ms. Wells?

MS. WELLS: No, it would not be a good thing. So I can go out next week and look at it if I can get to it. I don't know where it is.

CO-CHAIR HAYES: I could show you right where it is. We can look through the fence, but they probably have the combo. Then the last thing that, regarding this -- and I can just segue to my own presentation, I guess, here -- is that I believe we were going to talk about an overview next month of all the work that's ahead or not ahead of us. I understand that either CH2M Hill and Lennar or Weston or both will be demobilizing fairly shortly or in some timeframe coming up, and that might change -- the Navy, at least, is hoping that that might change the frequency of our RAB meetings. And so I requested that before we just went with less frequent RAB meetings, that there be a presentation given by all three parties who are involved in the Restoration Advisory Board meetings, just an overview of what the work is that is planned ahead. And, you know, I think it's a good, practical conversation to have. Certainly don't want to have RAB meetings where, as Brooks said a little while ago, you had to be thinking up things to give talks about. So we don't want to waste people's time.

April 9th is the second Saturday that we always have something special going on at the Shoreline Heritage Preserve. And that is Kenn Browne's last walk that he'll be guiding to the south shore.

And he has been guiding that walk -- well, during the Flyway Festival for probably thirteen years, and on a once a month basis pretty much, maybe ten months of the year for maybe about the last six years. So if you want to come, if you've never been on one of his walks, Kenn just is steady as you go. And he's been there. Over the last three years he's been there or arranged for one of us to be there every single month on that second Saturday. So it's going to be a long time probably before you get to see him again since he'll be moving to Brooklyn as he announced last week. So please do come out on April 9 at 9:30 for his walk and at noon for a farewell potluck that we're having at the picnic grounds at the old town's court next to the cemetery. So that's at twelve noon. That also happens to also be our third anniversary of opening the preserve to the public. So there will be cake at 2:00. So for those of you who are more focused on cake than on the potluck earlier. And I think those are -- oh, and then here's the little cards with the schedule for when the park is open, and also an event we are calling May Day on Mare Island, not to be confused with the Navy's use of mayday which is a little more frantic than we hope this will be. It will just be a nice sunny spring day, guaranteed, with wildflower walks and guided walks, bird walks, daffodil tea, horse and carriage rides along -- along Captain's Row, that kind of thing. So here are cards, plenty of them to distribute to friends and family.

MS. WELLS: One more thing. I would like to say thank you to Wendell for bringing the brownies. And I would like to thank, in advance, Gil for bringing snacks to the next meeting.

MR. HOLLINGSWORTH: You specifically asked for pound cake, not snacks.

CO-CHAIR HAYES: Oh, yeah, lemon pound cake, that would be great.

MS. WELLS: Sure, with some strawberries maybe, and some whipped cream.

CO-CHAIR LEAR: She's adding to the order, are you getting it, Gil?

MR. HOLLINGSWORTH: Not a big deal to me.

CO-CHAIR LEAR: Thanks, everyone, for coming.

MR. FARLEY: One other thing before we go, if anybody wants that printout they're welcome to it, I'm not going to take it home.

(Thereupon the foregoing was concluded at 8:58 p.m.)

LIST OF HANDOUTS:

- Presentation Handout – Production Manufacturing Area/ South Shore Area Munitions Non-Time Critical Removal Action Update – Engineering Evaluation/ Cost Analysis (EE/CA) and Interim Remedial Action Plan (IRAP)
- Presentation Handout – Building 688 Pits Update – Investigation Area C2
- Presentation Handout – Features within the Eastern Early Transfer Parcel (EETP) – CH2M Hill/ Lennar Mare Island
- Presentation Handout – Mare Island RAB Update March 24, 2011 – Weston Solutions

- Navy Monthly Progress Report Former Mare Island Naval Shipyard March 24, 2011

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May 11, 2011
DCN: CAPE-3218-0003-0016

Commanding Officer
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San Diego, California 92132

Subject: Navy Contract No. N62473-07-D-3218, Task Order 0003, Community Relations and RAB Support for Former Mare Island Naval Shipyard, Vallejo, California
Final March 2011 Mare Island RAB Meeting Minutes

Dear Ms. Silva:

Enclosed are two hard copies (one bound and one unbound) of the Final March 2011 Mare Island Naval Shipyard Restoration Advisory Board (RAB) Meeting Minutes for inclusion in the Administrative Record. Also enclosed are two CDs containing the native file of the document and one complete PDF copy.

If you have any questions or require additional information, please call Shelley Samaritoni or me at (858) 268-3383.

Sincerely,

Larry Davidson

Larry Davidson, P.E.
Program Manager
CDM Federal Programs Corporation

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