

**Mare Island Naval Shipyard
Restoration Advisory Board Meeting
Mare Island Conference Center,
375 G Street, Vallejo, California
July 25, 2013**

This packet contains the following list of items:

- July 25, 2013 Restoration Advisory Board (RAB) Meeting Notice.
- Agenda for July 25, 2013 RAB Meeting.
- Draft Minutes from the May 30, 2013 RAB Meeting.
- Comments or Corrections to the Draft Meeting Minutes Form: Please complete this form and return to Janet Lear or Myrna Hayes at the conclusion of the RAB meeting. All corrections will be included in the draft final copy of the minutes, which will be located in the RAB library for review and comment.
- RAB Meeting Agenda Request/Comments Form: Please complete this form and return to Janet Lear or Myrna Hayes.

NOTE: Minutes from previous meetings that are to be finalized this month will only be sent to the information repository for review. Past RAB meeting minutes can be viewed on the following website: <http://www.bracpmo.navy.mil>

Future Mare Island RAB meetings are listed below:

July 25, 2013
September 26, 2013
December 5, 2013



PUBLIC MEETING
MARE ISLAND NAVAL SHIPYARD
RESTORATION ADVISORY BOARD (RAB)
July 2013 MEETING



The Department of Navy (DON) invites interested members of the public to attend updates and presentations with members of the Restoration Advisory Board (RAB) made up of representatives from the local community, Navy, Federal and State regulatory agencies. The DON encourages the public to keep informed about the environmental cleanup at former Mare Island Naval Shipyard (MINSY), Vallejo, California.

July 2013 Featured Topics

**Production Manufacturing Area/South Shore Munitions
Non-Time-Critical Removal Action Fieldwork Summary**

**Recent Site Investigation Activities and Results Summary
Buildings 116 and 386
Investigation Area C2, Eastern Early Transfer Parcel**



Date: Thursday, July 25, 2013

Time: 7:00 p.m. to 9:00 p.m.

**Location: Mare Island Conference Center
375 G St., Vallejo, CA**

Ask questions and voice your concerns. You Can Make a Difference!

FOR MORE INFORMATION CONTACT:

Janet Lear, (619) 532-0976 or Myrna Hayes, (707) 249-9633

Navy BRAC Web Page: <http://www.bracpmo.navy.mil>

Mare Island Environmental Web Page: <http://www.mareisland.org>



AGENDA

MARE ISLAND NAVAL SHIPYARD

Restoration Advisory Board (RAB) Meeting No. 200

July 25, 2013 – Mare Island Conference Center
375 G Street, Vallejo, CA

| | | |
|-----------|---|----------|
| 7:00 p.m. | Welcome and Introductions (Janet Lear, Myrna Hayes) | 5 mins. |
| 7:05 | Presentation: <i>Production Manufacturing Area/South Shore Area</i> <i>Munitions Non-Time-Critical Removal Action</i> <i>Fieldwork Summary</i> Ms. Brooks Pauly, Navy | 25 mins. |
| | <i>Discussion</i> | 5 mins. |
| 7:35 | Presentation: <i>Recent Site Investigation Activities and Results Summary,</i> <i>Buildings 116 and 386</i> <i>Investigation Area C2, Eastern Early Transfer Parcel</i> Mr. Neal Siler, Lennar Mare Island | 25 mins. |
| | <i>Discussion</i> | 5 mins. |
| 8:05 | Public Comment Period | 5 mins. |
| 8:10 | 10-minute break | 10 mins. |
| 8:20 | Administrative Business and Announcements (Myrna Hayes, Janet Lear) | |
| | a) May 30, 2013 Meeting Minutes | 5 mins. |
| 8:25 | Focus Group Reports/Discussion | 20 mins. |
| | a) Community (to be determined) | |
| | b) Natural Resources (Jerry Karr) | |
| | c) Technical (Paula Tygielski) | |
| | d) City Report (Dan Marks) | |
| | e) Lennar Update (Neal Siler) | |
| | f) Weston Update (Dwight Gemar) | |
| | g) Regulatory Agency Update (Janet Naito/Carolyn d'Almeida/ Elizabeth Wells) | |
| 8:45 | Co-chairs' Report (Myrna Hayes, Janet Lear) | 10 mins. |
| 8:55 | Public Comment Period | 5 mins. |
| 9:00 | Adjourn | |

THE NEXT RAB MEETING WILL BE HELD September 26, 2013

For more information concerning environmental restoration at Mare Island, contact:

Janet Lear, BRAC Environmental Coordinator & Navy Co-chair (619) 532-0976;

Myrna Hayes, RAB Community Co-chair (707) 249-9633

Janet Naito, Department of Toxic Substances Control (510) 540-3833; Carolyn d'Almeida, US EPA (415) 972-3150;

Elizabeth Wells, Regional Water Quality Control Board, (510) 622-2440;

RAB Support Contractor: Jessica W. Cooper, Sullivan-Weston Services JVA, LLC (415) 321-1782

Navy BRAC Web Page: <http://www.bracpmo.navy.mil>

Mare Island Environmental Web Page: <http://www.mareisland.org>



DRAFT

MARE ISLAND NAVAL SHIPYARD

Restoration Advisory Board (RAB) Meeting Minutes

HELD THURSDAY, May 30, 2013

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, May 30th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:04 p.m. and adjourned at 9:25 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)
- Maurice Campbell
- Paula Tygielski
- Michael Coffey
- Chris Rasmussen

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

- Janet Lear (Navy Co-Chair)
- Carolyn D'Almeida (U.S. EPA)
- Dwight Gemar (Weston Solutions, Inc.)
- Steve Farley (Weston Solutions, Inc.)
- Janet Naito (Department of Toxic Substances Control)
- Reginald Paulding (Navy)
- Sheila Roebuck (Lennar Mare Island)
- Neal Siler (Lennar Mare Island)
- Elizabeth Wells (San Francisco Bay Regional Water Quality Control Board)

Community Guests in Attendance:

- Mike Chamberlain
- Virginia Demetrios
- Jim Durkin
- Mike Franklin
- Trina Mackie
- Philip Marshall
- Mark O'Brien
- Fred Ousey
- Jim Porterfield

RAB Support from Sullivan-Weston Services JVA, LLC:

- Jessica W. Cooper (Sullivan International Group, Inc.)
- Wally Neville
- Doris Bailey (Stenographer)

I. WELCOME AND INTRODUCTIONS

CO-CHAIR LEAR: Welcome, everyone, to the Mare Island Restoration Advisory Board meeting. Wally wants to tell us a little bit about some new audio equipment.

MR. NEVILLE: Tonight we're going to be conducting a cheap experiment, which is not to be confused with a cheap trick; it's an experiment with cheap equipment. So we have some handheld wireless mics that just have a little bit of amplification, but I wanted to just demonstrate that it doesn't work too well like this, but it works better this way. So if you will speak directly into the mic for the presenter and for the public, it will make it easy for our stenographer to hear every word.

CO-CHAIR LEAR: All right. So we'll start with introductions. My name is Janet Lear, I'm the Navy co-chair.

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

MR. CAMPBELL: Maurice Campbell, a community member of Vallejo.

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

MS. TYGIELSKI: Paula Tygielski, RAB member from Benicia.

MR. SILER: Neal Siler, Lennar Mare Island.

MS. WELLS: Elizabeth Wells, Water Board.

MS. NAITO: Janet Naito, California Department of Toxic Substances Control.

MS. COOPER: Jessica Cooper with Sullivan International Group.

MR. GEMAR: Dwight Gemar with Weston.

MR. PAULDING: Reginald Paulding, contract support to the Navy.

MR. OUSEY: Fred Ousey, Envirotech Services.

MR. CHAMBERLAIN: Mike Chamberlain, DiHydro.

MR. FARLEY: Steve Farley with Weston.

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

MR. DURKIN: Jim Durkin, community member.

MR. O'BRIEN: Mark O'Brien, City of Vallejo.

CO-CHAIR LEAR: And I just wanted to let everyone know that Jessica is our support for the RAB. She's taking Carolyn Moore's place, doing all those good things for us to keep things moving. So thanks.

II. PRESENTATION: *Investigation Area (IA) K Remedial Investigation for the Munitions Response Program* **Presentation by Ms. Janet Lear (Navy)**

CO-CHAIR LEAR: So we can start with our first presentation, which is investigation area IA-K. IA-K is the offshore portion of the Navy property, and this is the remedial investigation for the munitions response program. The presentation will be given by Reginald Paulding.

MR. PAULDING: Okay. If this doesn't work out. A few things here before we start. So I'm going to be, as Janet said, talking about IA-K. So this will be the first presentation as far as MEC, or "munitions and explosives of concern," are concerned within the offshore area since at least 2010. So it's a longer than [a] typical presentation.

And then the other thing to keep in mind is that the goal of this remedial investigation is slightly different than your typical, say, on-land investigation in that we're not trying to say that the area is clear or clean for MEC, but trying to get a better idea of what is out there. So here, if you open up your slide packet, you'll see on the first slide in we have just the outline of the presentation. Today I'll go through the offshore sites, the offshore unexploded ordnance sites. That's the terminology given to those prior to the terminology we use today, which is the "munitions and explosives of concern."

And then we'll go through a little bit of the history of those sites. We'll talk about some pre-2010 investigations (that's what I'm calling prior) to the current offshore MEC investigations or work that was done 2010 to today. We had a series of scoping meetings with the Water Board, DTSC, and EPA, "we" being the Navy. Then we'll talk about some of the dredging history at IA-K, and how that plays into the MEC situation. And then we'll also talk about some of these sonar and bathymetric surveys that we've done in 2011, 2012. And then we'll go through the remedial investigation work itself.

Okay. So you all have a map here. You also have a blowup in the back of your packet. It shows that there's four Unexploded Ordnance (UXO) sites in the offshore at Mare Island. Going north to south you have UXO Site 10, which is the Fleet Reserve Piers. You have UXO Site 11, Berths 1 and 2, just south of the causeway, right here where we are. UXO Site 6 is the section adjacent to the PMA, and includes Pier 34, which is an important pier for the loading and off-loadings of munitions. And you have UXO Site 12, which is adjacent to the South Shore Area at Mare Island. And that has Pier 35, which is also a pier that was used to load and unload munitions from ships.

All right. So some history on the Fleet Reserve Pier. It was constructed between 1945 and 1946. And it was operated by the Pacific Reserve Fleet to preserve ships that weren't being used at the time. They were to keep them, it was a mothballing process. It closed in 1976. And munitions were off-loaded from ships prior to berthing at the Fleet Reserve Piers down at Piers 34 and 35 in the PMA, SSA area. Berths 1 and 2 we have – we don't have a firm date, but we have construction, oh, in the mid-'40s. They were used for mooring of destroyers and submarines. And Pier 1 – or Berth 1, sorry, was also known as a freight pier for, I guess, loading of items onto ships. And that was removed in 19 – between '51 and '54. And again, munitions would have been off-loaded in the PMA/SSA area prior to berthing at those berths. Okay. If you go back to your figure at the back of your packet, you'll see in UXO 6 there's a lot of berths and piers. We have – and going from north to south you'll see dike 8 or Pier 4, and that was constructed around 1904 and removed in 1951. You'll have the oil wharf constructed again in 1904, removed in 1923. The torpedo boat wharf, 1904 to 1929. You'll see Pier 3, 1911 to 1960. Pier 2, 1911 to 1947. You have this Naval Ammunition Depot wharf 19 – sorry, 1896 to 1941. And then that was replaced by Pier 34 in 1941. And those piers, the Naval Ammunition Depot Wharf and Pier 34 were used for off-loading and loading of ammunition in, from the ammunition that was stored in the PMA. And operations, the munitions loading and unloading were ceased in 1975, when the ammunition depot at Mare Island was closed.

Okay. Then you have UXO Site 12, which is the offshore of the SSA. And again you'll see there's dike 12 and dike 14, which were built to control sediment in the Carquinez Strait. And those were constructed in 1908. And then you have the Pier 35 which was constructed in 1942. And that was also known as the Mine Wharf Pier, and it was used to load, transfer mines from Building A-195 to ships. And again, operations there ceased again in 1975.

Okay. So we have the one big prior offshore MEC investigation that was performed in 2006. And it was performed in two phases. Phase one was a geophysical survey of the shoreline of IR-04 unit. And again – you have a picture, I think, on the – or a map on the next slide that shows the results of that work. And then, based on the geophysical findings, they went out and did a[n] intrusive investigation. And they selected 1,897 anomalies, 49 of which were identified as MEC. Okay. So a large percentage were some form of scrap metal, you know, you just find a lot of different things. And then you have greater than 90 percent of the MEC was found at or near the surface, within two feet. And an interesting fact, I guess, is that the smaller MEC items were found in the SSA and larger items in the PMA.

So you have this. This is included on that slide, and it's a larger map in the back of your packet. And the thing here, so you can see some of the – these items that stick out, the red are actual MEC items, and you can see where those were located. And then again here in the PMA and in the SSA. And the yellow – oh, I'm sorry, you can't hear me? The yellow are the debris items, and the blue turned out to be, the yellow is munitions-related debris, and the blue would just be scrap metal or other items. Okay. So I'll move on. Now, again, when I say "current," I'm talking post-2010, or 2010 to today. So we did a series of – "we" again the Navy did a series of tech memos talking about technologies to identify MEC in the offshore areas. And – oh, I'm sorry, I skipped ahead. This here we're talking about actual, the probability of MEC in the offshore. And we looked at a stretch from the causeway to Berth 24. For people who weren't familiar exactly with what Berth 24 is, it would be the finger piers that you see down on the south end, that's where the Army reserve area is today, that –

CO-CHAIR HAYES: 24 is about where the S is on "Strait."

MR. PAULDING: Right. And the findings of that tech memo were that it's highly improbable that there would have been munitions or explosives of concern in those – in that area. We looked at historical maps and records. We looked at – and then we also considered Navy safety protocols that would require, again, that munitions be off-loaded on ships coming into Mare Island Strait at the SSA or PMA piers. And that the shipyard had stringent protocols, safety protocols. And then obviously there was approximately 98 years of dredging of the channel. And any items that would have inadvertently found their way into the strait, most likely, and we know that they did find their way into those dredge ponds.

CO-CHAIR HAYES: Which would actually, from what we've seen in the dredge ponds, and knowing where they dredged, probably negate your previous statement that the Navy had really stringent requirements. Because if they did, they obviously had a lot of bad actors, because there's an awful lot of that material that must have been dredged somewhere in that area, or else it was brought around in a very cumbersome way to get into those other – those other ponds.

MR. PAULDING: Okay. So then our next tech memo would be the one I was talking about previously. This would be the one about technologies which would be useful, so to speak, in an underwater environment. So what you have to, I guess, take into account is that a lot of work has been done on, you know, MEC investigations on surface, on dry land; but there's very few

projects where people do this type of work underwater. And working underwater has its own risks. And then dealing with munitions has its own risks. And then you combine the two and it creates a very risky, dangerous situation. So the technologies that were evaluated were divers equipped with handheld metal detectors which you would typically see on land. Magnetometers and electromagnetic induction sensors which is just, you know, very standard, something which you might use or see somebody, a hobbyist on a beach kind of thing, maybe a little bit more high tech than that, but the same principles, picking up the, you know, the electromagnetic coming off of metal. And then you would have a mechanical raking device of some sort that would drag the bottom. We looked at that. And dredging, obviously we're all familiar with dredging as an option where you just, you know, remove the sediment and everything with it. And then an acoustic system which is kind of a sonar type system where it would send out signals and they would come back to a system and you would get a picture based on the speed and the angle of the return of that signal.

So all of those technologies were evaluated, and for one reason or another it was decided that they were either too risky; for example, the divers. And Mare Island Strait is pretty murky, it's strong currents, and it would be a dangerous situation for divers, so that was ruled out. The sensors, they were ruled out because of, they really only work in shallow sediment situations. So if you have an item that's deeper than, say, two feet or so, it really – it's hard to identify or see that item, so to speak. And I'll show you what I mean. There's a – later on in the presentation we have an example of what the geophysical readings would look like. The raking was decided there that it wouldn't be a good solution, in that the mud in the river is pretty thick and heavy, and it was unlikely to be a successful solution or technology. Dredging, in that it's non-discriminate and everything, you know, comes up, and then, you know, how do you separate the soil from the scrap metal or the munitions was a difficult problem. And then the acoustic systems, again, would only work if the MEC item, or whatever the item is, was laying out on the surface, you know, in a very – like in a prone position. And if it was covered you wouldn't see it. So that was ruled out.

So then we were like well, we gotta figure, what are we going to do here? How are we going to try and get an idea of what's in IA-K and these UXO sites? And we came – I guess put together some ideas. And what was determined was they were going to use this remote controlled ROV bot, what we're calling a benthic crawler, and we're going to equip it with some of these magnetic sensors, electromagnetic sensors. And that is what we're going to talk about a little bit later. All right. So fast forward from – or at the same time that the tech memos are being put together, we're also having a series of meetings with the BCT or the BRAC Cleanup Team. And in those meetings we talk about different things. Starting in December 2010, we discussed the geophysical survey approach and equipment and coverage. And we identified areas likely to contain MEC. And, again, we talk about where things, where ships were loaded and unloaded. And then we start to narrow down the areas of IA-K that we're going to consider looking at. And then in May we have a second meeting. And we look at: Where are areas, what areas of IA-K or the, the offshore are accessible to the public? you know. Where can someone, say a fisher, walk down to the shoreline and access the shore? So we identified piers as areas that were accessible. And then we also looked around and said, okay, well, which areas, you know, there are quay walls, maybe they can't access the mud in those areas, so that's less of a concern. Then in June we said – Well, I'm sorry. So at the end of the May meeting we said, well, maybe we need to go out and, you know, it's one thing to look at things on a map, but let's go out and see what they actually look like in real life, okay? So in June 2011, the team went out and said,

Let's walk this, see what it looks like, get a better idea. And that's what they did in June. And came to some – said, well, okay, so we got an idea now of what areas are and are not accessible generally to the public, so – but now we need a little bit more information, so let's pull together these bathymetric and sonar surveys of the offshore to see, again – go ahead, Myrna.

CO-CHAIR HAYES: Oh, well, sorry to interrupt. Where's the map that shows what you decided was not publicly accessible? Do you have that? I can't see it here.

MR. PAULDING: That map is not in this presentation, no.

CO-CHAIR HAYES: How come?

MR. PAULDING: Well, I guess for a couple of reasons. We've got a lot of stuff in here, and we thought that – we'll get to it in a way that the areas that were identified are – mainly there were four areas which are the four piers. There were – it was the Fleet Reserve Pier, it was the Berth 1 and 2 area, it was Pier 34 and Pier 35. There were – and then those were the areas that we have that I'm going to talk about in subsequent slides.

CO-CHAIR HAYES: Well, that was an interesting bit of information, but it wasn't an answer to my question.

MR. PAULDING: The question being –

CO-CHAIR HAYES: Should I repeat the question?

MR. PAULDING: – why was the map not in that presentation?

CO-CHAIR HAYES: Uh-huh.

MR. PAULDING: I guess the only thing I can say is it was an oversight on my part.

CO-CHAIR HAYES: Well, I definitely hope that you'll be sending that to us, somebody on that BCT team will be sending that map to us. Because I think without, you know, I mean you guys walked the land, but you're not fishermen, fisherpeople, and you don't – you don't live here, and you haven't been actually accessing the properties for the last few years. And copper thieves have been successfully accessing the entire PMA and south shore. So if they can do it, why couldn't anybody else from the public? So your blanket statement that you went out and you decided where the public would and wouldn't have access, this presentation is incomplete if you can't provide a map that shows us what you were thinking or gives us an opportunity to early and often, that's what the RAB is about, "early and often" communicate what your thinking is, and get our feedback, our input.

MS. TYGIELSKI: Input from the public would have been helpful in deciding what places the average fisherperson would want to access.

MR. PAULDING: That's a valid point.

CO-CHAIR HAYES: And I had a group of fishing peoples come into our visitors' center where we do – we make every effort to do education on munitions and explosives of concern on behalf of the Navy. I mean, the best we can. And they demonstrated that – they claimed that they had actually fished up a kind of large-sized munition that had barnacles on it. So for you to just say, oh, well, there's just these little discrete places where the public could get access; without seeing a map, I – I – was there anybody else who's here in the room today who can tell us where that – those sites would be who serves on the BCT?

CO-CHAIR LEAR: Reggie, was that map in the work plan, do you know?

MR. PAULDING: I don't believe it is in the work plan.

CO-CHAIR HAYES: Okay.

MR. PAULDING: Well, it is in the meeting minutes from June 7, 2011. And if those meeting minutes are included as an appendix or an appendix to the report or the work plan, then they would be. But I'm not certain if the meeting minutes are included.

CO-CHAIR HAYES: But, like, are you a member of the BCT? Is Ms. Naito a member of the BCT? Ms. Wells?

CO-CHAIR HAYES: Yes.

MS. NAITO: Yes.

CO-CHAIR HAYES: Ms. D'Almeida, can any of you tell us just generally, just do a sketchy map over there on the blackboard there to tell us what your thoughts were, what you were thinking, and where you went?

CO-CHAIR LEAR: There's a couple of things that went into the thought process. First of all, we considered most of the PMA/SSA accessible from the shoreline, okay. However, we do have a lot of data already collected from a great portion of that. This investigation is focused on collecting data where we don't have data and getting more information. So there's a lot of different things that came in. We're not saying that these four areas that the remedial investigation are focused on are the only publicly accessible locations; what we're saying is these are the locations that we didn't have good information for already, geophysical information, I mean, and that we feel have a high priority of having munitions unloaded, off-loaded, from ships. But yes, we will – and the accessibility issue is constantly being revised as the shoreline situation changes, as erosion happens, and all that. So it was just one way of focusing the investigation, it wasn't the end of the story. And, as you know, Weston is down in the south end doing a lot of work, getting more information to us every day about the changing shoreline situation there. So this is a moving dynamic process that we're trying to incorporate everything we can get into the picture. And I think Dwight had a note a little bit, you were saying accessibility was zero to –

MR. GEMAR: Yeah, we –

MR. COFFEY: Good save.

MR. GEMAR: Excellent. Yeah, as part of the ongoing Production Manufacturing Area and South Shore Area investigation, our UXO technicians have identified a more updated boundary, if you will, of the accessible areas that they mapped out using GPS during the low low tide, you know, zero to minus one foot of tide, which are infrequent tides. And based on that we have a pretty good boundary of what is, what we consider accessible. And we've investigated anomalies all the way up to that boundary in the mudflat area. So I'm pretty confident, at least in the Production Manufacturing Area and the South Shore Area, that any area where someone could walk out at low tide has been checked.

CO-CHAIR HAYES: Okay. Well, "has been checked" as in is a part of this map or this review or?

CO-CHAIR LEAR: Different.

MR. PAULDING: Well, I think he's talking about the time critical removal action project they're doing.

CO-CHAIR HAYES: Well, I know what that is. Boy, do I know what that is. All right. Well, I'll just leave this alone because obviously we're not going to get the information that – so that's a missing link right here, okay. So I'm just going to ask formally, on the record, that when it's convenient for you, when next you can get to it, when the BCT can get their memory going or your minutes can be found, it would – even though it seems to be an amorphous and moving target and all kinds of other things, I would like to know, I would like to see what areas you have concluded are not accessible to the public, and would not, to quote you, require additional investigation. Again, this is the Restoration Advisory Board. I'm not meaning to be a bully here, but I'm just reminding people, because I happen to have been a RAB member as long as Paula has, longer than anybody else in this room, nineteen years, that the purpose for the RAB is early and often communication regarding plans for environmental cleanup at a DOD or DOE site. And that's what we're here for. And this is June 7, 2011. This is almost two-years-old old news. And I'm – it's great that you're giving us a briefing on these scoping meetings of the past, but I'm just asking you for this information, and that's it. That's all. I don't want any kind of conversation about how it's a moving target. I mean, that's – I just want that information. And we might be able to help you.

MR. PAULDING: Okay. And part of that June meeting was – a decision was made to get some more information about the underwater surface, the Strait surface, using bathymetric and sonar surveys. So a bathymetric survey gives you underwater to the ground or to the bed surface of the Strait. And then the sonar survey will tell you what obstacles, debris, what-have-you, are on the surface of the Strait. And then in March and September of 2012 we met to review the findings of those surveys.

[What] you have here is a historical dredging depth for different areas of the Mare Island Strait. You have the main channel, you have the areas around the Fleet Reserve Piers. Here to the north, Berths 1 and 2 along the north Mare Island Strait area where you have the dry docks, where you have the finger piers. Down along the PMA around Pier 34, you can see generally what the dredging depths were. And then the color codes tell you when the last known dredging would have happened. So obviously the darker the reds, the browns, were areas that were dredged prior to 1978 and then not dredged again. The green areas were most recently dredged. So we have several series of bathymetric surveys that were performed; in 1998 and 2006, and then again in 2011, 2012. So some of the importance of the bathymetric data again, remembering that that tells you the depth of the surface to the bottom, gives you an idea of if the depth of the water changes over time, that's telling you either: A), that you have sedimentation occurring where you have deposits of sediment on the bottom. Or what you have, what we call "scouring" happening, scouring, where you're eroding away the bottom of the Strait bed. And that will happen for a couple of reasons, the currents mainly. So you'll have some areas where you'll get deposition, some areas where you'll get scouring. And that changes over the course of time just based on how the river itself changes or the strait. So that's good important data.

Keep in mind that one of the limitations on the technology is that it can't or it won't be able to reliably see, you know, a metal object that's deeper than two feet. And then again we had some sonar data. And, again, the sonar data is important because it will tell you if there's something there which will inhibit the movement of our, the benthic crawler on the surface. So that – you know, where we have piers that have been broken off underwater or something along those lines.

Okay. So the findings from the four areas, again the Fleet Reserve Pier, Berths 1 and 2, Pier 34, Pier 35 areas, were that there were portions of all four of those areas that were free of obstructions using the sonar data. Portions of those areas showed less than two feet of sedimentation where munitions and explosives of concern could be detected. And that – those – that data is a result of the bathymetric surveys. And then we have these publicly accessible areas as were determined at the time, the Fleet Reserve Pier, Pier 34, Pier 35.

So to jump to the results. Here you'll see we have what we show as these green and like pinkish salmon areas. The green areas are where a survey is possible due to the two factors of less than two feet of sedimentation since the last dredging event, and no obstacles or obstructions. Okay. And then what you see, these pink or – I'm sorry – purple circles are obstructions in the area, whether they're piers or some other kind of underwater obstruction. And the green areas are the areas that we will be looking at with our – the geophysical survey using this benthic crawler which I'm going to show you a little bit later here. So here's the Berth 1 and two area. This pier is no longer here. This berth has been removed again back from between 1951 and 1954. Again you have the same thing with the green and pink areas. The green areas are areas that can be surveyed. The pink, for one or two reasons, are not. Here you have Pier 34. And what you can see, again, is you have the green, you have a couple obstructions, and then areas that have more than two feet of sedimentation. Pier 35 in the South Shore Area, same thing. Same thing, you have the green areas, you have some obstructions. You'll have – and then you have a line of obstructions in this one, and then you also have some dots, most likely piers.

MS. TYGIELSKI: What are those purple lines called?

MR. PAULDING: The purple lines. I mean, to be honest with you, I don't personally know. I could guess. I could tell you that they're maybe some utility lines.

MR. COFFEY: They look like FOPL's to me.

MR. PAULDING: They very well could be.

MR. COFFEY: Cracks in the hockey stick.

CO-CHAIR HAYES: What's this on Pier 34? What does it mean by "50-foot buffer"?

MR. PAULDING: Yes, that's a good – thank you for bringing that up.

CO-CHAIR HAYES: Well, it's on both of them.

MR. PAULDING: Well, actually it should be on all four of the figures, but we can talk about Pier 34. So the idea behind the 50-foot buffer was that it was the width of a destroyer, is that – and five foot – plus five feet on each side. So what that meant was that was the area that was deemed realistic, so to speak, for if there were an unapproved discharge of MEC, that's where it would have been. Someone, say, on the deck would have tossed something. It wouldn't have gone – hopefully, right, it would be within that five foot range off-side of the ship.

CO-CHAIR LEAR: Most probable area.

MR. PAULDING: Most probably unless they, you know, they should have been in major league baseball somewhere.

CO-CHAIR HAYES: Well, so, if I could again make a recommendation, the legend could be a little bit more accurate by describing what that means, "50-foot buffer" might be a safety buffer for a UXO tech or something might be –

MR. PAULDING: Well it's –

MR. COFFEY: Rubber bumper baby bumpers.

CO-CHAIR HAYES: Buffered aspirin, yeah. Anyway, clarification there, I don't know what it means.

MR. PAULDING: Okay. So at this point in the presentation we're going to – we're going to fast forward or talk about the future here, things that haven't quite happened yet. So we're talking about – so, site selection criteria. Well, this slide is all, as Myrna has pointed out, I guess it's already baked. But the future ones aren't quite so. We have the field work site selection criteria. Again it was the shoreline or pier that was accessible to the public. The less than two feet of sedimentation since the last dredging event. And areas that were free of obstructions that would allow equipment access.

CO-CHAIR LEAR: And the other part of this that we also inadvertently left off is the other criteria here was that in areas that we didn't have data already.

MR. PAULDING: Okay.

CO-CHAIR LEAR: So my apology for that.

MR. PAULDING: And then we also have – so then the final three areas that we're looking at, and again I would remind everyone that again the idea behind the – this field work isn't to come back and say, we'll see, you know, IA-K is clean or clear, but more along the lines of what is there underwater? We have a lot of – this is one of our first – our first attempts at finding what was underwater in IA-K. So we have the Fleet Reserve Piers. Pier 34. And Pier 35. And then Berths 1 and 2, that area was not selected for the pier, Berth 1 was removed and it was deemed to not – if it's not there, then it's not accessible. And they – and the tech memo from 2010 that said that there was this lack of MEC between the causeway and Pier 20 – Berth 24.

MS. TYGIELSKI: What told you there's no MEC there?

MR. PAULDING: So there was a tech memo that we had discussed back in April of – I'm sorry, yeah, an April 2010 tech memo where the findings were or the conclusion was that MEC is highly improbable between the causeway and Berth 24 for a number of reasons, including the fact that MEC was supposed to be removed from ships in the SS – in the South Shore Area and the Production Manufacturing Area – before it made it to north Mare Island Strait.

MS. TYGIELSKI: Okay.

MR. PAULDING: All right. So we're on slide eighteen. And here on slide eighteen we're talking about the conceptual site model for this work, and what will be, I guess, our hypothesis that we're going to try and prove or disprove during the course of this – of this field investigation. So we've got munitions and explosives of concern, and munitions constituents, which are the chemicals that would be inside of a projectile in the sediment near piers or former piers. That's kind of – that's what we're looking for, okay. And then we have potential receptors; humans, industrial workers, recreational users, and wildlife. You've got benthic communities, snails, small fish, birds, mammals. So those are the two, you know, large categories of impacted receptors. And then exposure pathways would include industrial workers having direct contact with sediment. Some kind of mechanical disturbance of the MEC, you know, a ship drops an anchor, for example. Recreational users. Again, direct contact if you're in the, you know, in your hip waders in the Strait for some reason, or you're ingesting fish or

shellfish. And then, again, wildlife coming into contact with either the MEC item or the – or munitions constituents. So you have hazards. Obviously you have an explosive hazard, potential but minor based on a low distribution of MEC in the sediment. And wildlife. Potential again, but minor because of, again, there's little, hopefully, low distribution. And then wildlife is transient, right, it doesn't necessarily stay in one place. Chemical risks. Risk, you've got potential but minor again based on the – the chemical risk would be from the munitions constituents. If you had a munition that was somehow compromised and broken, that the chemicals inside of that item would be released into the environment, but if you don't have the item you don't have the constituents. But again, the industrial worker, if it were there, they could come into contact with it, or a recreational user could come into contact with it; in one of two ways: either direct physical contact or by, you know, consuming fish. And then wildlife could, if it were there, could come into contact with a munitions constituent.

CO-CHAIR HAYES: Reginald, so this looks like a broad range of potential access, but some, you say somewhat remote or a low risk. Maybe you or the DTSC representative can tell us about what kind of risk model you use for munition items or MEC and this MC that's different from other constituents of concern that you're cleaning up at Mare Island on land, for example. And then, what kinds of restrictions, land use restrictions would you place on these if you decided that you weren't going to go out, you couldn't or weren't going to clean this up, you were just going to leave it in place. For example, you know, there have been several proposals recently put forward to the city council by the city's Economic Development Department or other businesses that they've been representing proposals to use the South Shore Area and, I don't know, possibly the PMA, but definitely south shore for intermodal shipping. It has been designated in the specific plan as "recreation." But if these proposals get steam[ed] up, I would assume they're going to be needing to dredge. And you say there is an abundance of, abundance of MEC and sedimentation.

MR. PAULDING: That, unfortunately, sorry to cut you off, but that term "abundance" should have been – it's a misnomer. It's saying that the distribution and the likelihood is low.

CO-CHAIR HAYES: Abundance of MEC and sedimentation.

MR. PAULDING: Yeah.

CO-CHAIR HAYES: But the sedimentation is, you know, is a reality there. It looks like from your map that it hasn't been – some of these areas have not been dredged.

MR. PAULDING: In quite some time, absolutely.

CO-CHAIR HAYES: In quite some time, and you would just expect that there probably would need to be some dredging. So are you going – I mean, and obviously you are basing your environmental cleanup based on this specific plan that the city currently has before you, but it's – they're certainly entertaining other types of land use. And I know you really are bound by the Re-Use Plan, and I would think that recreational use of the shoreline, you know, that you could pretty easily manage the risk exposure through that land use. But if you're, if you have the political machinery fomenting for other types of use, then I don't think your model can hold up to that quite so well, unless you're going to develop a land use scenario, future scenario that would, you know, require them to come back, come to you, and require this other kind of dredging maybe or whatever. But I'm just thinking that your conceptual site model for risk is maybe a little bit different for munitions than it might be for some other contaminant.

MS. NAITO: Yes.

CO-CHAIR HAYES: True?

MR. PAULDING: Okay.

MS. TYGIELSKI: In other words, see the future, you know.

MR. COFFEY: Embrace the future.

MR. PAULDING: Embrace the future? Well, I mean, there is – unfortunately there's no –

MS. TYGIELSKI: Might be different uses in the future.

MR. PAULDING: There might be different uses in the future. And unfortunately, as Myrna said, we're kind of bound to look at what is the current plan.

MS. TYGIELSKI: Yeah. But maybe some sort of use control about – if you plan to use this in another way, you need to notify.

MR. PAULDING: Absolutely. I mean, that's part of every institutional control. If the plans change, then we would have to re-evaluate. So here we have a flow chart. And this is of the field work, the field work flow chart for the proposed investigation. I mean – and we're going to talk about, I guess kind of starting with the geophysical surveys and then moving forward to MEC kind of intrusive sampling of the investigation units. That's what IU's are. So we're going to look at, again, geophysical surveys, investigation unit selection. We'll talk briefly about sediment sampling, intrusive sampling, and wrap it up.

CO-CHAIR HAYES: Reggie, what's GSV again? Is that –

MR. PAULDING: Geophysical survey –

CO-CHAIR HAYES: Validation?

MR. PAULDING: Validation. I don't think that one's in the back, sorry.

CO-CHAIR HAYES: Try not to use acronyms when you talk or when you write. You could have easily made this box bigger and spelled this out. You could spell out "mobilization" instead of just M. So just go ahead and spell it out, it's cool, works for me.

MR. PAULDING: Will do. That was an oversight, sorry.

CO-CHAIR HAYES: Oh, I'm not trying to, you know, but let's try to do that.

MS. TYGIELSKI: What about SAP?

MR. PAULDING: SAP, that's a Sampling and Analysis Plan. This figure was pulled from a Work Plan, and it wasn't designed specifically for this presentation, so I apologize for the acronyms that are here.

MS. TYGIELSKI: And IU is what again?

MR. PAULDING: That's an investigation unit, and we'll talk about that on an upcoming slide. But that is where we're going to actually do the intrusive removal based on the results of the geophysical survey. So – and here on this slide, slide 21, we're talking about the geophysical survey itself and how we're going to try and go about doing it. And this here, the picture that you have is of this C-Talon benthic crawler. And "benthic" being underwater. And as you can see, it's got some, what you would say, tank treads on it, try and make it a little bit more robust,

movable under, you know, over uneven surfaces underwater. So we have this submersible, underwater, remotely-operated crawler. And these – they're going to have a 2-meter-wide or approximately 6-foot wide magnetometer, which is the magnetic sensor that will be on top of – which I'll show you, we have a picture of on the next slide.

MS. TYGIELSKI: What's fluxgate?

MR. PAULDING: It's just the type of magnetic sensor. It's going to – sends these waves back and forth between the sensors. And I don't understand all of the technology.

CO-CHAIR HAYES: Do we know based on, again, the work of Weston – and you're probably the ones that have been working on this, the shoreline the most, but also from the previous offshore evaluation – do we know what percentage or what the chances [are] that we would run into something greater than 80 millimeters in diameter? I mean, besides the MK mark six depth charge. But it – I mean, do we know that this – I mean, is this a good use of our, of this little gadget that must be extremely expensive to operate? Or could we all have one of these? Is it so affordable now that you could get it at Best Buy or Home Depot?

MR. PAULDING: It's definitely not available at Best Buy. I think the crawler itself wasn't that expensive, I mean, relatively speaking. It was all of the – what do you call it? – after-market add-ons; the fluxgate magnetometers, the, you know, sonar, so on. There's a lot of different biz wing things on here.

MR. COFFEY: Give me that, I got one that cleans my pool.

CO-CHAIR HAYES: Well really, that was a serious question though. What – how many metallic anomalies have we gotten onshore that were greater than 80 millimeters in this area that you're going to be using this device? And the second, then, follow-up question is: This looks like this is on a nice, sandy beach somewhere. Has this been proven? Have you tested it on our particular type of –

MR. COFFEY: Sticky mud.

CO-CHAIR HAYES: – environment?

MR. PAULDING: Well, I can answer, I think that the 80 millimeter is kind of – I mean, there's a range. So the 80 millimeter is like a hundred percent reliable. Lower than 80 millimeter, you know, is a little bit less than, you know, how the – obviously the Number One item found at Mare Island is like the 20 millimeter and 40 millimeter shell.

CO-CHAIR HAYES: Uh-huh.

MR. PAULDING: So – but I think part of the conceptual site model is that these smaller items, the 20 millimeter, the 40 millimeter shell casings, so to speak, would be difficult to recover almost under any scenario. The larger items were the items that are a greater risk to the public and the items that we, if they're there, we would definitely want to find.

MS. TYGIELSKI: Best technology, not proven.

MR. PAULDING: To your point and to Myrna's question about they are currently in kind of the mobilization stage where we have our contractor is testing this equipment out, you know, they're fixing it and trying to make it as robust as possible so that it will, you know, do what we need it to do. However, as we were looking at the technologies earlier on, there really are limited available technologies for underwater investigations. And what we're looking at is not

necessarily the best, but it's the best available technology. And it's not proven, so we've all got, we got one finger, you know, or two fingers crossed, and hopefully –

MS. TYGIELSKI: So we are again out in the forefront proving a technology for future use?

MR. COFFEY: We're cutting edge.

MS. TYGIELSKI: We're cutting edge?

MR. PAULDING: In this respect, absolutely, cutting edge.

MR. COFFEY: Training ground.

MR. PAULDING: Right. So these crawlers have been used for other things, they've been used underwater. They haven't necessarily been used underwater for MEC investigations, they haven't necessarily been used in this even – in this type of an environment.

MR. CAMPBELL: Have they been used in mud?

MR. PAULDING: They have been used in mud, but, I mean, we have other concerns other than mud; there's piers, there's rough surface under, there's rocks, there's –

MR. COFFEY: Volkswagens.

MR. PAULDING: There could be Volkswagens. I mean, there's the riprap that the Navy put out there to secure the shoreline.

CO-CHAIR HAYES: Can it get toppled over by a ferry wake? I mean, what kind of operator – is this – all robotic? Or what kind of operator safety?

MR. PAULDING: Yes.

CO-CHAIR HAYES: And this thing, if it sinks, I suppose you're going to pay for it, not the company?

MR. COFFEY: It's got a rope around it.

MR. PAULDING: Yeah, it has a rope. It has a rope, we can retrieve it.

CO-CHAIR HAYES: Probably copper thieves could, too, 'cause it looks like it has some copper on it there. Paint it a different color. Do you – the other thing is, are you getting the experimental price on this, like you were for the Navy Lab Berkeley Livermore? Or this the top dollar of that Donovan chamber?

MR. PAULDING: You know –

CO-CHAIR HAYES: Glass chamber.

MR. PAULDING: – I'm not sure.

CO-CHAIR HAYES: You cannot reveal or you're not sure?

MR. PAULDING: I'm not sure where it falls in there.

CO-CHAIR HAYES: Uh-huh.

MR. COFFEY: What did you know and when did you know it?

CO-CHAIR HAYES: I mean, of course I'm asking this question for a good reason. I think we had the budget person here a couple of months ago, and that was prior to sequestration. And,

you know, if this thing is going to cost us – you know, just 'cause it's cute, and it really is, I hope you get some good press for it, and I like the name and everything. But if this is going to take up a whole bunch of money so that we can't have use of the – and, therefore, safe use, safe access to the property that's already been laboriously cleaned up in the last year, that was a year last Friday, I think, then it just seems like you should set this whole project aside and let a few, you know, fishermen catch a few fish with, you know, munition component, and a few copper thieves just, you know, there's more where they came from.

MR. COFFEY: Just tell 'em it's out there, leak it to the press that there's lots of copper out there.

CO-CHAIR HAYES: Yeah, right. But, I mean, do you get where I'm going? I mean, if you can't tell us, I mean, this looks like a really neat thing to try to test, and I think it's great that you're selecting Mare Island as the first place maybe to test it in these kinds of conditions, and that's noble; but if it's going to cost a ton of money, who's deciding where that limited amount of money is going to be going? I'd rather see it go to the shoreline – I mean, the shore – onshore where people are really more – more likely to use the property. This seems like not a very good bang for your buck if you don't have many bucks.

MR. COFFEY: Okay, Reggie, answer me that.

MR. PAULDING: I mean, I would say this, Myrna. We go through a competitive bid process and although you're right, it is expensive, I don't think it's in the – comparatively, unfortunately to, you know, what we pay for a lot of these other projects, it's not over – it's not out of the norm. And the feeling on the Navy's side was that this was, you know, a worthwhile project. I think that the BCT also felt that it was a worthwhile project, and that it's important to try and get some information on the underwater environment. And to – and to your point, we also will, the Navy, the United States people will have this benthic crawler. It's not going to go back to the contractor, it will be our piece of equipment.

CO-CHAIR HAYES: Well, you know, maybe for another day, I don't know how everybody is deciding budgets, we used to have a role in that.

MS. TYGIELSKI: So the money is already spent, and if it works in this location the Navy can use it to clean up another base someplace?

MR. PAULDING: Yes.

CO-CHAIR HAYES: And we can get the money from that base to come back here because we – like – own it. Well, yeah.

MS. TYGIELSKI: We can rent it out.

CO-CHAIR HAYES: Yeah, rent it out.

MR. COFFEY: Let lease.

CO-CHAIR HAYES: I guess my point is this, is that we, as the Restoration Advisory Board, as members of the community, used to participate in the prioritization and the budgeting. And if you have these two simultaneous tracks, land and off-land, and they all need transferred, why are you jumping ship? I mean, why are you going off the land to go out to the shore when it sounds like it's a rather remote chance that anybody is going to, you know, touch any of the untouchables out there? And when you have such a limited budget? I mean if you were still

being funded at the relatively good numbers of the past, then it seems like that would make sense. But where did we go off down this road and just keep on going down this road instead of having the flag person say, hey, stop, stop, stop, wait a second? Because we'd like to be able to have safe public use of the onshore before you go meddling around with what looks like maybe kind of a small risk offshore.

CO-CHAIR LEAR: Well, one point of clarification is this project was actually funded quite some time ago. And as you could tell by all the meetings that happened and all the various sonar surveys, et cetera, it was funded quite some time ago. So it's been in the hopper for some time, and if we shut it off now we wouldn't get that money back to use elsewhere. So we're going forward with it to get what we can from it.

MR. COFFEY: And God forbid we should not spend any money.

CO-CHAIR HAYES: Talk to our Congressmen about this.

MR. COFFEY: That's a waste of time, too. What are the possibilities of these areas ever being dredged again?

CO-CHAIR HAYES: Sounds pretty good if you talk to the Economic Development.

CO-CHAIR LEAR: It's quite, you know, it's possible.

MR. COFFEY: To me that would be a reason to proceed with this, because if they were going to be dredged again, that would be the time that, you know, something could go awry.

CO-CHAIR HAYES: Yeah, but they'd have – the burden would be on them.

MR. COFFEY: I don't think so.

CO-CHAIR HAYES: With the land use covenant that says no dredging.

MR. PAULDING: Okay. And also as part of the investigation we would do some soil sampling, surface sediment sampling, in the zero to half-a-foot interval. And the soil samples would be analyzed for explosives and picric acid and metals. And here you have kind of what we have already touched on on some of these items.

But the benthic crawler here, this is the crawler again. This is kind of in its, you know, testing phase. So we've got power running to it. They're testing data acquisition. They're testing navigation. Trying to get all those things working in the, you know, "back at the lab" kind of a thing. And then when they bring it out here we're going to do another test. But we should hopefully, you know, it will be good to go. So we should be, they're going to do some off-site testing in water starting in June here. And then, yeah, we'll bring it in.

CO-CHAIR HAYES: It's going to be –

MR. COFFEY: We're going to see a crawler?

CO-CHAIR HAYES: – tested offsite August through September? When is it actually going to –

MR. PAULDING: Well, June through August.

CO-CHAIR HAYES: – do something here?

MR. PAULDING: Well, right now we're in the draft work plan phase, and we do have a schedule slide, but the goal here is to get in the field here in September.

CO-CHAIR HAYES: Could test it offsite. All right. Well then, okay, after all this we'd like, I would like to request here in these records informally a site visit to see this thing in operation when it gets here.

MR. COFFEY: That would be so cool.

CO-CHAIR LEAR: Absolutely.

MS. TYGIELSKI: We want to see the new toys.

MR. PAULDING: All right.

CO-CHAIR LEAR: Maybe we'll have an early RAB tour this year.

MR. COFFEY: Maybe we can christen it.

MR. PAULDING: Okay. So the intrusive investigation here – we're on slide 23. So, again, we touched on all of these items during the course of, I think, this presentation. But just to sum it up, we're going to –

The idea is to confirm our conceptual site model. We're going to review the geophysical survey data and select one investigation unit in each of those three remedial investigation areas: the Fleet Reserve Piers, the Berth 34, the Berth – Pier, sorry – Pier 34 and Pier 35 areas. The IU's – these investigation units will generally be 10 meters by 2 meters. Again, the 2 meters across is the length of that sensor on the crawler. And 10 meters long, and then 2 feet deep. Again remember that 2 feet is kind of our reliable zone interval for detecting these metallic anomalies. And then we're going to excavate 100 percent – or reacquire and excavate 100 percent of the anomalies within that investigation unit. And what you have here on the right-hand side of your figure – and then there's a better, clearer version of that figure on the back, I think the last page of your handout – it shows kind of how this schematic of the investigation unit, which will still be that benthic crawler, but then there's going to be a suction hose attached to it, and then they'll be up on a barge on the surface, there's going to be a motor that will operate, you know, will apply that suction to the hose. It will be like a venturi pump that will apply and remove sediment. It's a small dredge machine basically. And then in the – in the off-chance that there will be an item, say, that's too big, too heavy to come up the hose, we'll also have a magnet available to extract that item from the surface or the bed.

CO-CHAIR HAYES: I thought you said dredging wasn't practical and now we have a little dredge going to operate here. Is this like [a] gold mine kind of a size or gold mining size?

MR. PAULDING: It's pretty small in that it's going to be on the hose or it's going to be on the crawler, another attachment. So it's not going to be what, I mean maybe that's a bad term that – and my fault that I shouldn't have used, but, I mean, I'm just trying to give you a picture –

CO-CHAIR LEAR: Like a vacuum.

MR. PAULDING: It's more like a vacuum.

CO-CHAIR HAYES: Well, suction, dredgers are vacuums.

MR. PAULDING: So, okay. Here on this slide what you have is kind of some typical result of a geophysical output, you know. And what you'll end up with is the transects. You kind of pull those transects together. You crunch the data, and then in an ideal world you get a nice clear picture where you can see an area with – you know. Okay. So clearly, you know, this red area is

where we're going to go look, that's got the high density of anomalies. And so this would be our investigation unit. So what we'll do is: we'll process the data, we'll look at the data, and in each of those three areas we'll identify an investigation unit. And then we'll target that, remove the anomalies. And then at that point we're going to say, "Well, okay, what do we have here? Do we have scrap metal? Do we have munitions? Do we have munitions debris? Is there something here that's out of the norm more than something that we didn't expect?" And that's what we'll present in the report. And speaking of the report, right, so as I said, we're in the work plan stage currently, we're hopeful that we'll be able to move through the work plan stage and then be out in the field in the September or October time frame of this year. And then there should be a report based on the field work in 2014. And in that report we're going to evaluate the data, you know, so on, present some conclusions, refine a conceptual site model, and then move onto a feasibility study.

CO-CHAIR HAYES: Would you have any clue as to what the explosive safety arcs are going to be for this work?

MR. PAULDING: We do have some preliminary arcs that we've looked at, and those are included in the work plan. I think that they were based on what, the items that have to date been found in the PMA/SSA area. And they would be impacts to the ferry, for example. So we would have to coordinate the field activities with the ferry schedule, and there may be times where there could be some impact.

CO-CHAIR HAYES: When you – what about impacts to the Mare Island Shoreline Heritage Preserve or the golf course?

MR. PAULDING: I am not – from the maps – from the figures I've seen, I don't think that that's the case, but, I mean, don't quote me on that. It looks like – 'cause the work is going to be in the water and away from those, those areas.

CO-CHAIR HAYES: Unless you find the big one?

MR. PAULDING: Yeah, absolutely.

CO-CHAIR LEAR: And I believe, Reggie, that the arcs would only apply during the actual intrusive work; is that correct?

MR. PAULDING: The arcs would only apply during the intrusive – when they were removing sediment and items and bringing those to the surface.

CO-CHAIR HAYES: Not just because like you have before.

CO-CHAIR LEAR: So the – and the total field time is like two weeks?

MR. PAULDING: Well, it's scheduled for two weeks in the field.

CO-CHAIR LEAR: Right.

CO-CHAIR LEAR: But if the darn thing falls over, it will be real quick.

MR. CAMPBELL: Is it question time?

MR. PAULDING: Yes. Yes. Question and answer time.

MR. CAMPBELL: First off, I have a question about the 50-foot buffer zone, you mentioned the destroyer. There seems to be some work on a cruiser or cruisers here. For instance –

CO-CHAIR HAYES: Oh, Maurice, you gotta use this, nobody can hear you.

MR. CAMPBELL: Sorry. Yeah, you were talking about the buffer zone, 50 feet, and you mentioned a destroyer. There was some work on cruisers. Namely, one of the ships I'm concerned with is the *Indianapolis*. And there's a particular reason why I'm concerned about – that ship was rebuilt here, from the historical documents I read. Also there are two stories that I have actually read in the history: one, Little Boy and Fat Man was transported by train to Mare Island and loaded upon the *Indianapolis*. I've seen the statement from McVeigh and the chief medical officer saying it was loaded on Hunter's Point. So, number one, I'm concerned about the 50-foot buffer zone. What size is that buffer zone? Does it fit a cruiser, or does it fit a destroyer?

MR. PAULDING: It's my understanding that it was 5 feet on each side of a destroyer. So if the destroyer was at the dock –

MR. CAMPBELL: So what happened with the cruiser? The *Indianapolis* was rebuilt here at Mare Island, the historical record shows that.

MR. PAULDING: I don't – I don't dispute that. I think that the reason why the destroyer was selected or the width of a destroyer was selected was because that was the typical or predominant ship, say, at Mare Island. There clearly were other ships here. But the feeling was that that was representative – I can't say, I'm not – I don't know the dimensions, so to speak, of a cruiser and whether or not that's larger than a destroyer.

MR. CAMPBELL: Slightly larger.

MR. PAULDING: Slightly larger. So, I mean, that would be perhaps, you know, something. If it would fit within, I don't know, so if it's 50 feet, then perhaps there's – it would be – that ship would be outside of our 50-foot area.

MR. CAMPBELL: So if there was anomalies in the water from work on that ship, then it would be outside of your target zone; is that correct?

MR. PAULDING: Absolutely. In a situation if it were, you know, beyond 50 feet then. In this investigation plan we would not see it.

CO-CHAIR HAYES: Well, I think to clarify that the work on ships versus at the shipyard versus loading and unloading at piers, we have a photo of the *Rochester*, a cruiser, being loaded at Pier 34, for sure, but working on them at the shipyard would be a little bit different than –

MR. CAMPBELL: Well, no, the *Indianapolis* was loaded before it left.

CO-CHAIR HAYES: True. And there's some record that it was loaded there at those piers.

MR. CAMPBELL: Right. I'm also just curious about Little Boy and Fat Man that was loaded supposedly in the historical record at Mare Island.

CO-CHAIR HAYES: Yeah.

MR. CAMPBELL: If so, was there contaminants? Did the HHRA reflect it?

CO-CHAIR LEAR: HRA made no mention of that. I will go back and look at it in more detail.

MR. CAMPBELL: Okay. Very interesting. When you do a suction-type dredge, what happens if you pick up a hot, unstable item? Is that risk – is the Navy doing it, or will a contractor be doing it?

MR. PAULDING: Excuse me. The contractor will be doing the work, but they are, you know, they are trained, skilled. As far as hot, I mean, are you saying explosive or are you talking radiological?

MR. CAMPBELL: Either/or.

MR. PAULDING: Well, I mean, they're trained to identify these items, to bring them to the surface. Unstable? I mean, we have to date not come across an unstable, so to speak, item at Mare Island.

MR. CAMPBELL: Okay. Well, there are some explosives that over time become critical to movement.

MR. PAULDING: Right. Which is one of the concerns that we had, and it's one of the reasons why we did not, for example, use divers to do this work, in that it's supposed to be remotely controlled. So, I mean, we are looking – I mean, everyone is cognizant of that concern.

MR. CAMPBELL: Okay. Thank you.

MR. PAULDING: Any other questions? Was that an hour and a half?

III. PRESENTATION: *Building 866 Voluntary Cleanup, Remediation Results and Land Use Change, Investigation Area C2*

Presentation by Mr. Neal Siler (Lennar Mare Island)

CO-CHAIR LEAR: Good job. All right. And without any breaks we are going to jump right into our next presentation, Building 866 Voluntary Cleanup Remediation and Land Use Change, Investigation Area C-2. And this will be given by Neal Siler of Lennar Mare Island.

MR. SILER: Come on, you can do it. Okay. To heck with this, I'll just do it like this for now. Thank you, Janet. When we last talked about the Building 866 area, it was back in November of 2012, and at that time we talked about what we were going to do. What I'm going to talk about tonight are the investigation and remedial actions that we have done since that time. And also going to go into the actions necessary to change the land use from a commercial-industrial re-use scenario to a residential re-use scenario, as it changed over time. And how I'm going to do that is: I'm going to refresh your memory a little bit about the description of the Building 866 area, and some of the historical investigations and actions that have been done there, with special emphasis on the work that's been done in the last few years as we have contemplated this change in land use from commercial to residential. I'm going to talk about the remedial actions that we implemented, and the results of those remedial actions, and the path forward to getting No Further Action certification for this site. So, to refresh your memory: the Building 866 area is located in the western portion of Investigation Area C-2. The site is approximately – covers an area of approximately 6.3 acres. It's dominated by the Building 866 itself, which was a five-story, 386,000-square-foot building that had very few windows in it.

MR. COFFEY: Yeah.

MR. SILER: It was constructed in 1955 and [until] its closure in 1994 it was used as an electrical or electronic shop. And it had a number of different interesting facilities. There were 40 actual work stations on this site, of which 23 were identified as potential source areas for constituents of concern. One of those was the Installation Restoration Program Site 11, which was the actual electric and electronic workshop. And in that area there was a transformer wash and work area where they actually did work on transformers. They cleaned them off, and there

was a clean drain that actually went out into a underground storage tank, which was Underground Storage Tank 866, which was also called the grease trap. In addition to that, there were nine PCB sites, there were nine fuel oil pipeline sites, and four underground storage tank sites at this facility. So you can see from this slide right here – that is really strange. It's like locked. Well, you know, Reggie, not only did you take a long time to talk, but you've wrecked the machine.

MR. COFFEY: There you go.

MR. SILER: There you go, got it now. Okay. So you can see from this slide here, this was the building itself. As you can see, there were a number of elevator lifts or stairways in it. It had a kind of a warehouse on the north side of it. And then you had the main facility that was the five-story building with very, very few windows. Now, when we contemplated the land use at this facility there really wasn't anything here that was reusable just from a compatibility standpoint for the surrounding area. Cause if you know anything about this area, on three sides of it you actually have residential land use that is scheduled for having residences built on that. On the east side there is an area that is commercial-industrial. But with that, the building needed to be demolished. Before it was demolished we did hazardous building material surveys, cleaned everything up from asbestos, lead based paint, mercury switches, PCB ballasts, everything we could think of. And then after that, the building was demolished, as you can see here in these photographs.

MS. TYGIELSKI: So you cleaned it before you dropped it apart?

MR. SILER: Yes.

MS. TYGIELSKI: Just because you didn't want contaminants to spread around?

MR. SILER: Well, yeah, I mean, that's the environmentally, competent, and sound thing to do, is make sure you clean all that up before you actually get involved in demolishing something where there could be a potential release.

MS. TYGIELSKI: Okay.

MR. SILER: You want to definitely prevent that from happening.

MS. TYGIELSKI: Okay.

MR. SILER: These slides here were the things I talked about earlier. I mentioned that there were 23 sites. I'm sorry about this slide, it hasn't come out really clear. But you can see some of the underground storage tanks here. This is 866 right here. This was the grease trap. This is the UST M57. This is M7. UST 122. You can see there's a number of different fuel oil pipelines that went through here. Some of these in red, they were removed. Some of these ones in yellow, they could not be found.

MR. COFFEY: Really?

MR. SILER: So you can see here there's a number of different PCB sites. Of these nine PCB sites, six were on the ground floor, two were on the second floor, and one was on the third floor. Okay. Why did we want to change the land use at Building 866? One of the reasons I told you before was this incompatibility with the surrounding land use on three sides having residential materials. And if anybody was around when we actually demolished the building, if you had some sort of a commercial or industrial facility going, and depending on the economy, you

know, as the economy ramps up and their products are purchased, they don't only want to work eight hours, they want to work 16 hours and 24 hours. It's really loud. So we wanted to make sure that we were compatible with the surrounding land use. And we also looked at a number of different factors. You see compatibility is up there, aesthetics, economics, marketability, entitlements, the environmental cleanup, and the schedule. And we do that on case-by-case basis, depending on what area we're looking at or what facility we're looking at.

So this site has a very long history of investigations, remedial actions starting back in the 1980s. So for over thirty years we've been – there's been work that's been performed at this site. I'm not going to go through all of these. You can read this, you can see things starting back in 1981 going up until 2013. But what I'd like to focus on is the work that was done to support the investigations and remedial actions to convert this facility from commercial-industrial use to residential use. And in 2010 we developed a work plan, Sampling and Analysis Plan to look at these 23 sites that we knew were still potential sources. We actually installed 37 borings. We advanced two trenches. We collected 58 soil samples, three groundwater samples, and two soil vapor samples. Analyzed that in the context of residential reuse. And after we evaluated that, we came up with a plan to remediate the site. And there were actually three facilities that we looked at that required some additional remediation. It was underground storage tank M57. FOPL segment E3/VAR/M57. And it's just a segment of that that runs right along the south side of the underground storage tank. And there was also the PCB site Building 866 sump. So at UST M57, FOPL or fuel oil pipeline E3/VAR/M57, we advanced eight excavations at different areas where we had constituents of concern that were above residential cleanup areas – standards, excuse me. We also encountered one unknown condition. We found green sand on the south side of the facility. And I'll talk about that when we get to it. We collected verification sampling, soil and soil vapor. There was one area where we had previously taken soil vapor samples and we were above the vapor intrusion guidelines. We had total petroleum hydrocarbons as gasoline at 23,000 micrograms per cubic meter of air. And the cleanup level right now is 5,000 of micrograms per cubic meter of air. We also disposed of the materials that we excavated offsite, and then we backfilled the excavations with material that was suitable for residential reuse. Did the same thing essentially at the PCB Building 866 sump site, except there we had one excavation where we had constituents of concern that were above the PCB residential cleanup level of 22 milligrams per kilogram. We had one area where we had 74 milligrams per kilogram, which was the commercial-industrial reuse, but we needed to get that down. And then we also wanted to look at one area on the north side of the PCB sump excavation because there was a pipeline that went out there, and we did do some very, very preliminary excavation work around that pipeline.

When we actually did the original work where we got closure for commercial-industrial, but we wanted to make sure that the pipeline, we could not find it, so we did some additional excavation on that side and actually cleaned up that area a little bit also. Collected samples, disposed of the materials, and backfilled the excavations. So this is photographs of work that was done at the UST M57 FOPL segment E3/VAR/M57. The photograph in the upper left, that's the excavator working in the area on the south side of the excavation area, and they're actually looking at green sand right there. This gentleman in the middle here, he's actually got a global positioning system that he's using to mark all the locations of the excavations and the samples. And the one in the lower right-hand corner, that is the site after we backfilled it.

So if you take a look at this map here. These were all the areas that were excavated. They're color coded to a depth, like this I think is 5 feet, this is like 9. So all of these different colors have a different depth associated with them. We went back, looked at constituents of concern. The main constituents were petroleum hydrocarbons as diesel and motor oil, and one polynuclear aromatic hydrocarbon which was Benzo(a)pyrene. After we did the excavations, and we did a number of iterations for the excavations, went back and forth a number of times, the maximum concentrations that we had left in place for TPH diesel was 38 micrograms per kilogram, the cleanup level is 100 micrograms per kilogram. The petroleum hydrocarbons as motor oil, the maximum left in place was 250 milligrams per kilogram. The cleanup level is 500 milligrams per kilogram. For Benzo(a)pyrene we had 7.2 micrograms per kilogram. The cleanup level was 38 micrograms per kilogram. So it looked like we got everything that we were looking for in this area. In addition, this is the area where we found the green sand. We only took two sidewall samples this way because we had already excavated out in this direction, the east-west direction here and we would have been sampling air. Also we took a bottom sample. After we took out the green sand we tested it for constituents of concern, mainly PCBs and metals. The only two metals that we found were nickel and chromium. We found chromium at a thousand milligrams per kilogram, nickel at 500. And then when we did our confirmation samples we tested for PCBs, polychlorinated biphenyls, and the metals of concern, and nothing was left in place above a residential cleanup level.

And then, in addition, on the next slide we did some soil gas work in this area, because this is the area where we had the high hit of soil gas, went back, took some additional samples after we excavated material out here that could have been a potential source. The maximum concentrations that we found for two volatile organic compounds, 1,1,2,2-tetrachloroethane and bromodichloroethane. Those were actually less than the detection limit, which was less than 0.93 micrograms per cubic meter of air. And then for TPH gasoline, total petroleum hydrocarbons gasoline, I mentioned that the cleanup level was 5,000 before. We only had a hundred micrograms per cubic meter of air after we did that excavation. So that was looking pretty good. So now this is the PCB Building 866 sump area. You can see we just excavated this area out. There were two areas of concern that we wanted to look at. Those are photographs of that. And this is the schematic. This was the main area that we excavated out. And this was the area where the pipeline had gone out before there were some high constituents of concern. We had 3,800 milligrams per kilogram PCBs in the pipeline, and we wanted to make sure nothing was outside of there, and see if this actually went off up to the north here. We excavated this area out down to a depth, I think, of 5 feet. I think the pipeline was discovered at about 3 feet. We took samples. We had nothing above a residential cleanup area, and we could not find any indication of the pipeline as we went forward. And in this area when we went back, took our confirmation samples, again, nothing was above the 0.22 milligram per kilogram cleanup level for residential reuse. So, with that we had seven sites that we wanted to take a look at. Four of these sites we discovered when we did our investigation work back in 2010. We didn't believe they needed any additional remedial activities. But the three sites where we believed additional remedial activities needed to occur, which was Underground Storage Tank M57, FOPL segment E3/VAR/M57, and the Building 866 PCB sump site, we did the work at those areas, and we will be requesting No Further Action certification in the near future. We have submitted the report for the PCB sump site to DTSC, they should have received that this week.

MS. NAITO: Got it.

MR. SILER: EPA is off the hook on this one because we met everything for the TSCA cleanup goal for one milligram per kilogram previously. So DTSC will be looking at this in the near future. And we will be requesting No Further Action certification for these sites. And then this kind of gives you a summary of all the 19 sites that we looked at, the year where NFA was approved or pending. You can see the seven sites we have commercial. Most of these sites commercial No Further remedial Action certification, but we're asking for No Further Action certification, so we can close this site out as a residential reuse area. So with that, that completes my presentation. I tried to do it in world record time.

MR. COFFEY: Bravo.

MR. SILER: And if you have any questions, please feel free.

CO-CHAIR HAYES: Neal, whatever happened to that – that – the PCB Navy pilot demonstration data? Is that incorporated into one of these?

MR. SILER: That is incorporated. If you look on the slide that talks about historic investigations.

CO-CHAIR HAYES: Yes.

MR. SILER: What she's talking about is, there was an EPA Navy kind of *in-situ* thermal desorption pilot program that was done there. And, of course, with, you know, any time you try to do something good, you know, the road to hell is paved with good intentions. What happens is when you heat up PCB, the by-product is dioxins. So we actually went back, did sampling for dioxins in that area, found nothing above residential cleanup goals, and were able to close that site out. But that was done quite a few years after that Navy had done that pilot test.

CO-CHAIR HAYES: So it naturally attenuated?

MR. SILER: No, think – I just don't think it was actually there. I just think whatever it was, if it was produced, it wasn't produced at levels that was a concern for a residential reuse. Jim, did you have a question?

MR. DURKIN: I was just curious about the green sand, is that sandblast grit?

MR. SILER: Yeah, that's exactly what it is. It's known as a "known unknown environmental condition" here on the island. So, Paula.

MS. TYGIELSKI: I was just asking, you're planning this site to be residential reuse. Are you planning apartment building, condos, individual little single-family homes? What are you planning?

MR. SILER: And I don't think that that has been all worked out at this time. So I'm just trying to get it set up for residential reuse, but I'm not exactly sure what type of residential, you know, structures they'll be building on the site.

CO-CHAIR HAYES: Well, theoretically they would be – they've said, the first thing they did almost, Lennar did was to uproot, I think Fred's old home over in – and other houses over in the National Register district related to the marine parade grounds area. And those houses actually used to be where Building 866 is. And there was the intention on the part of the developer to re – well, in a kind of an agreement with the Historic Commission, to bring that neighborhood back. And I think some people would hope that that National Register Historic District group of houses would not sit forever on a – on stilts or wheels or whatever they are. But that – I don't

know if that's the intent of the developer or not and, of course, we don't – that's not our purview really. But it probably would make a lot of people's heart sing, though I doubt it would make your heart sing for the cost of putting those houses back together, humpty dumpties as they are.

MS. TYGIELSKI: I'm glad that it has been cleaned to residential standards personally. I wish everything was able to be cleaned to residential standards.

MR. SILER: Any other? Fred.

MR. OUSEY: I just think you guys have done a really good job on that piece of property.

MR. COFFEY: Yep.

MR. SILER: Oh, thank you. And with that, I'm going to cut this off right now. Thank you very much.

CO-CHAIR LEAR: Thank you, Neal. We are at the first public comment period. Are there any public comments? (No response.)

CO-CHAIR LEAR: All right. Short break. (Thereupon there was a brief recess.)

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Janet Lear)

CO-CHAIR LEAR: All right. Let's get back going here. All right. We are at administrative business and announcements. As always, if you have any comments on the meeting minutes, please get those to Myrna or myself. I did also want to mention that we are – have a contract in place to do the Community Involvement Plan update, and I'd like to get the RAB members together for a focus group meeting to discuss that. I was looking at potentially before the next RAB meeting, but it appears we have a few people that are going to be on vacation, so that would have been July 25th. So I will send an e-mail out kind of pulsing everyone to see when they would be available, and then I will try to get permission to travel on an additional day.

MR. COFFEY: Please, Daddy.

CO-CHAIR HAYES: Don't you have a corporate jet you could send down?

MR. SILER: No, I don't.

CO-CHAIR LEAR: So, yeah, be looking at – looking for an e-mail from me so we can set up a date. And Paula, you don't pick up your e-mail so I'll just call you.

MS. TYGIELSKI: I'll check it. I'll check it.

CO-CHAIR LEAR: Okay.

MS. TYGIELSKI: But soon.

MR. COFFEY: Send her a letter.

MS. TYGIELSKI: But soon my husband and I will be getting into our ancient motorhome and traveling to Tennessee and back. So we may be gone a long time.

CO-CHAIR LEAR: So how soon [is] soon?

MS. TYGIELSKI: My guess is we'll leave sometime in the middle of June and probably not get back until, well sometime in August.

CO-CHAIR LEAR: Okay. So we might have to –

MS. TYGIELSKI: Meet without me.

MR. COFFEY: – Skype.

CO-CHAIR HAYES: Skype. I can see Paula doing Skype.

MR. COFFEY: You are technical, right?

MS. TYGIELSKI: I don't think we have a –

CO-CHAIR HAYES: When it comes to chemistry maybe, but –

MS. TYGIELSKI: I don't think we'll have a computer on the motorhome. It is a 1972 motorhome.

CO-CHAIR HAYES: They might not get to Tennessee, maybe Winnemucca.

MS. TYGIELSKI: No, it's a Dodge.

MR. COFFEY: I thought you were going to say it's an AMC.

MS. TYGIELSKI: No. No. This is the only motorhome that was ever made by an American motor vehicle, you know, one of the three companies.

MR. COFFEY: Wow. Wow.

MS. TYGIELSKI: Only one ever made. All the other models are special manufacturer, so it's a historical –

CO-CHAIR HAYES: BMW, Mercedes type.

MS. TYGIELSKI: Yeah, it's of historical interest because it's the only –

CO-CHAIR HAYES: This is why our minutes are so fun to read. Okay. I do not have anything else to contribute to the administrative business.

V. FOCUS GROUP REPORTS

CO-CHAIR LEAR: All right. So we're at focus group reports.

a) Technical Report (Paula Tygielski)

MS. TYGIELSKI: Nothing to report.

b) City Report

CO-CHAIR LEAR: Neal, you're up. Well, actually I should say we do have somebody here who's representing the city. Mark O'Brien is in the back. Did you have anything you wanted to report on behalf of the city?

MR. O'BRIEN: We have nothing specific to report tonight.

CO-CHAIR LEAR: Okay. All right.

c) Lennar Update (Neal Siler)

MR. SILER: Okay. So for the LMI update you should have this 11 by 17 figure right here. Thank you very much. And I'll speak right directly into it. Not a lot has changed since the April submission. We did get comments back from the Water Board and DTSC on some of the

sampling and analysis plans that we had submitted last month. And those are down at the bottom of the documents submitted or new modification. And that's the Sampling and Analysis Plan for soil vapor and Underground Storage Tanks 243 dash one and dash two; the Sampling and Analysis Plan for underground storage tank 84-lower; Sampling and Analysis Plan for storm sewer system near IR-21, and the Buildings 386 through 390 area; and the Sampling and Analysis Plan for sediments east of the quay wall underlying a portion of IR-03. So we did get comments back from that. We're working on those comments to respond to those, and hopefully we'll get it back in the regulators' hands soon so we can get approval to go out into the field either late this spring or early in the summer. In addition to the – those Building 781 PCB sites, AL01 land use covenant termination notice, we did get approval to work forward on that from EPA, but I don't think we have approval to work forward on that from DTSC at this time. So hopefully we'll be able to get out in the field and move that along.

MS. NAITO: So is that your highest priority for me right now?

MR. SILER: We will get to that in a little bit. One other plan that was added to the documents submitted is the site characterization and cleanup action summary report for the Building 866 sump PCB site that I talked about during my presentation, so that has been submitted also. Some of the upcoming documents you can see on here, that really hasn't changed much since last time. We're hoping to get these things in so that we can start moving forward on a number of other sites. The one field work that we actually were able to get done this month was the second quarter 2013 groundwater monitoring event at IR-03, IR-15, industrial pump station number 4, T-2 oil water separator. And they actually got that work done on Tuesday and Wednesday of this week. So we're just waiting for the analytical information to come back. And once we get all those plans approved by the regulatory agencies, we've got a lot of field work that we want to get implemented here during the summer of 2013. Then as far as the photographs are concerned, the one in the upper left-hand corner that shows work that Weston is doing for us in Building 91. They're actually doing some PCB remediation in that building. We're working through to get that issue – issues resolved. The photograph in the upper right-hand corner is a site that we're going to start working on here in the near future. We're selecting a contractor. And we're going to get the contractor to get the cleanup plan and notification in place so we can start working at that site, and that is the Building 688 UL-01 PCB site. So anybody have any questions for anything that's on the update? (No response.)

MR. SILER: If not, then I'm going to hand it over to the next deserved talker, presenter.

d) Dwight Gemar (Weston Solutions)

CO-CHAIR LEAR: Which would be the Weston update.

MR. GEMAR: As the deserved talker. In the interest of time, we have some documents that are listed on the Weston update, a couple for Investigation Area H-1 that are in the hopper, and then I also listed a couple of documents that will be coming down the road here pretty soon for investigation area site – or Installation Restoration Site 05 in the western magazine area. And that will be pretty much it for the Environmental Services Cooperative Agreement work for Weston for the city. And then also we're continuing to watch the grass grow out at Investigation Area H-1, although we did have enough oil collected in our oil water separator recently that we de-inventoried that unit, about 840 gallons of oil and oil and water. For those folks that have been on the RAB a long time, you might remember that there's a former oily sump disposal area within the containment area, and occasionally we get enough oil in it that we have to, you know,

we collect it in our oil water separator and remove it. So we finally, after about a year, collected enough oil that we de-inventoried that unit. That's about it.

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

CO-CHAIR LEAR: Okay. The next deserved presenter, regulator update.

MS. WELLS: Okay. The first thing I'd like to say is I think it might be nice if Paula showed us some photographs after her trip of Tennessee. I don't really want to see any of Africa.

MR. COFFEY: Ever again.

MS. WELLS: Ever again.

MR. GEMAR: I'd like to see the Jack Daniels –

CO-CHAIR HAYES: Yeah, factory, distillery.

MS. TYGIELSKI: I have good photos of Africa.

MS. WELLS: I don't want to see any of Neal's.

MR. COFFEY: Never mind.

MS. WELLS: What did the Water Board do? In the last couple of months the Water Board, the Board itself approved the rescission of some waste discharge requirements for a soil treatment facility that the Navy operated in 1997. So we successfully rescinded an order. And our goal over the next few months is going to be working with the Navy at some of the other Water Board orders that are no longer applicable, and having them rescinded now that H-1 is moving towards its final, final, final.

MR. COFFEY: Almost final.

MS. WELLS: Yeah. I don't know what else to say. I don't remember what else I did. I'm working very hard on Lennar sampling and analysis plans.

MR. SILER: As always.

MS. NAITO: As you can see, there's probably a boatload of documents sitting on my desk, I'm a little behind. I apologize. Hopefully next month will be a better month than this month was. This month I was caught up in project management sessions with every single project manager in my office. So hopefully next month will be a better month.

MS. D'ALMEIDA: And I'll start off my report with a comment. I see on the Navy's progress report here that I've only got nine letters that are credited to me, and I don't know when you start counting on this, but I just had my mid-year performance review and I counted 36 letters that I have submitted since the beginning of the fiscal year. So maybe – yeah – so maybe that could be fixed or updated.

MR. COFFEY: They're lost in the mail.

MS. D'ALMEIDA: E-mail?

MS. NAITO: I think you gave me credit for hers.

MS. TYGIELSKI: Yeah, there's a discrepancy, nine, 36.

MS. D'ALMEIDA: Yeah.

MS. TYGIELSKI: That's a big difference.

MS. D'ALMEIDA: I would say so. And for my progress report, the progress that I have to report is that tomorrow my youngest is going to be graduating, at age eighteen, from Napa Valley College with three transfer degrees: an AA in math, an AA in natural sciences, and an AA in Spanish, Phi Beta Kappa, and working 40 hours a week too. And so she deserves a trip, and Sunday she and I are heading off to Spain and France for about two and a half weeks.

MR. COFFEY: Wow.

MS. D'ALMEIDA: So, that said, I'm – I cleaned off my desk this week, that's one of the things that I got done. And Janet just passed me a note that Chris and Heather want to talk to me about a PCB site. And I did see Chris's e-mail about PCB site Building 215. This is an ordnance manufacturing warehouse in the PMA where they sent me a closure plan and there was a – there had been a PCB spill on the outside of the building right off the loading dock, and the samples were collected, and the site there was cleaned up. But then I thought about that for a minute and I said, well, wait a minute. Why is there a – if there's a PCB spill on the loading dock outside the building, didn't they use PCBs in the building? So I wanted to look in the building. And I looked in the building and it looked like, you know, the other stains on the floor there looked like there's areas on the floor where there might have even been chip samples collected but not really documented, and maybe it was a long time ago, maybe reports were lost, I don't know. But it seemed to me that the fact that there was a spill on the outside of that building indicates that this building should be investigated for PCBs. And so I think that was the question that Chris had: that we don't know how to proceed with that. But my letter, I think, was pretty clear in saying that we need more samples from inside that building. So if you could maybe take that message back to Chris and clarify that we'd like that building characterized.

CO-CHAIR LEAR: Okay. Will do.

CO-CHAIR HAYES: By the time you get back from Spain.

MS. D'ALMEIDA: Whenever. I'm not in a hurry.

CO-CHAIR LEAR: I don't really know all the questions that Chris and Heather had on it, but I will certainly –

MS. NAITO: But since she's going to be on vacation, they can't ask her.

CO-CHAIR LEAR: Yes. But I will definitely pass that on. Excellent. All right. Navy update. So we continue to work on PCB sites and the Production Manufacturing Area South Shore Area. We worked at five different PCB sites over the past month. Activities included cable inspection, vault inspection, scabbling. And then we also continued the intrusive investigation work for the munitions non-time critical removal action. 25,000 approximately anomalies have been investigated to date. And we're almost to 970 munitions and explosives of concern recovered during that removal action. Let's see. Oh, Battelle, one of our contractors, will be back out there starting, I believe, next week, to finalize the investigations under the remaining buildings. And they'll only be out there for three or four weeks. And Weston – where's the wood to knock on? Cross your fingers – plans to be out of there within the next four or five weeks.

MR. GEMAR: Yeah.

CO-CHAIR LEAR: Hopefully. And let's see. We have removed a lot of asphalt down there during all the removal actions, and that asphalt was crushed and used to restore the roads on the

south portion of Mare Island. And there's a photo on the back of our lovely new crushed asphalt roads. It looks really nice down there.

MR. COFFEY: That's not bad.

CO-CHAIR LEAR: It used to be a muddy pit.

MR. COFFEY: Yeah.

CO-CHAIR LEAR: So that was good, and an example of re-use, so that's always a good thing to report. We submitted five documents during this period, and we received concurrence from DTSC on two. And Elizabeth, you're noticeably absent on this.

MS. WELLS: I'm noticeably absent –

CO-CHAIR LEAR: On my list of receiving things from people.

MS. NAITO: Then I won't send them the concurrence letter with the work plan because she's ignoring you.

MS. WELLS: Sorry.

CO-CHAIR LEAR: I'm ignoring you. Did you send me something?

MS. WELLS: No.

CO-CHAIR LEAR: Okay. Anyway, I'm just teasing.

MS. NAITO: That's okay, we're trying to figure out two of these we're not sure we actually got, so okay.

CO-CHAIR LEAR: Of the reports?

MS. NAITO: Yeah.

CO-CHAIR LEAR: Really?

MS. NAITO: Uh-huh.

CO-CHAIR LEAR: Oh, the draft CTA North and DRMO beneficial use acceptance request actually was supposed to go out today, and I – and I think it did. 'Cause I went to Chris, I went to Chris like two days ago and I said, "Are you sure you want me to put this?" "No, it's going to be out by the end of the reporting period." So he wanted credit for it this month, so that's why you probably are not familiar with that title: it's in your mailbox.

MS. NAITO: Great. I'll look forward to that.

CO-CHAIR LEAR: Was there another one you hadn't seen?

MS. NAITO: The next one.

CO-CHAIR LEAR: The FOST. Okay, I will check.

MS. NAITO: It was the one building.

CO-CHAIR LEAR: Yeah, it's the – it's a little parcel down by western mag that had our – the mag that we stored the RAD in.

CO-CHAIR HAYES: RAD, uh-huh.

CO-CHAIR LEAR: So we cleared, we moved those RAD items to a different magazine and cleared that building. And so there's nothing remaining on that little parcel that would prevent it from transferring, so that's ready for transfer. All right. And I will check on your number of comments, Carolyn, and we'll get that all fixed up for next time. Next meeting is on July 25th. I'm going to turn it over to Myrna now.

VI. CO-CHAIR REPORTS

CO-CHAIR HAYES: I just want to note that, for the record, that you have passed the one-year anniversary on your munition cleanup on the south shore and PMA. So something that was just – this is an example, folks, of, you know, time, budgeting, and expense. This was supposed to maybe take a few months, maybe August or something like that, and here we are at more than a year. And regarding – but it's very good news that it's unlikely that we'll have closures to the preserve, at least the portion of it adjacent to the Production Manufacturing Area. So that's a big sigh of relief. Speaking of H-1, there is a wedding planned there in June, so on the public access trail.

MS. NAITO: Are you getting married?

CO-CHAIR HAYES: Not me, no, no. It's too late. I didn't say my wedding, I said –

MS. NAITO: I was going to say, I didn't get my invitation.

CO-CHAIR HAYES: No, you probably won't. But we're helping to arrange that with the city. So that's – that just shows you the breadth of uses that that trail is drawing. I want to note that we have, according to the Golden Gate Rafter Observatory monitoring teams, we have at least a dozen osprey nests on Mare Island. And for the second year, one of the nests is producing three young. And what's interesting about that nest is that they don't have on record that the male also feeds, normally the male hunts and the female feeds, but they are both busy feeding on that site. And I think that's on Pier 34. And as many as fourteen on Mare Island Strait. So this is a new phenomena. And I would like to go on record as requesting that the Navy and their contractors consider working with us. We may even be putting together a symposium this summer just to kick off the public – public interest, and make the public aware, give some public tours, primarily on our property, but we might be asking for access, you know, a license request sometime in July when they're fledging. And because this is – and also looking forward to trying to get the science side of it up to speed so that we can maybe get a banding program, webcams, kind of learn something about why they're here. Some people say it's because the sediment from the Gold Rush is finally settled, the water quality is better, the Napa River, RCD, friends of the Napa River, Resource Conservation District, and the Friends of the Napa River are touting that they have opened up as much as 65 miles of the tributaries of the Napa, and providing tremendously improved habitat for steelhead and other fish. So it could just be that we're a hot spot for their feeding. And Tom Stienstra covered this story recently on his blog, so – as well as the triangulation of the three planets, you can go to his website and see our friend who photographed from the top of the Mare Island hill. So don't think for a minute that we're not using the lands that you have, your environmental cleanup has made possible. We're getting great coverage for that, from weddings to photos of planets that make a triangle, not until 2021. There is also at least one – Wally can, he's monitor for this – one heron nest on the Navy property with three young in it the last time he checked that.

And I would – again, I want to go on record as requesting and recommending, once again, that the Navy seriously consider the use of goats as – for fuel reduction on their property because of how important. And Lennar uses a goat contractor right now if you need to know where to go get them. But as an – this shows that, how fragile these populations are; this being the only for-sure heron nesting in our park, whereas in the past there were, you know, pretty good numbers down on the light poles, now the osprey have taken those over. And as they have, the herons have moved into the housing residential areas into those trees. And there we have at least one case where we know for a fact that there was a nest, and then mowing went on about, you know, three years ago. So we really, and there is a pretty good fuel load again on the property, yet we don't want to see the Navy mowing. So there's a real problem right now, especially in a dry season like this. You know, we'd like to see the resource that's there protected, and fire suppression, reducing fuel load would help. But at the same time you have this fragile balance. So I want to go on record as requesting that the Navy consider the use of goats as the reduced – for the mowing, on at least the housing area if not the whole PMA South Shore Area.

And I think I've come to the end of my lineup here. Yep, that's it. And we did just receive another packet of the brochures that the Navy and contractors put together regarding the history of the ordnance production and storage at Mare Island and the environmental cleanup. And I think we're getting close to around 1,700, 2,000 of these, you know, as of this new delivery of these having been distributed through our Mare Island Shoreline Heritage Preserve at the visitors' center. So I really want to thank you for this information. And it's – every weekend people want to know, and they're coming, and I hope that makes some of [us] feel good that we're doing God's work. Thanks.

CO-CHAIR LEAR: Okay. We have one more public comment period. Any takers? Okay.

CO-CHAIR HAYES: Sorry, I don't know if this is a public comment period item or not. But Chris, I don't think you would mind me bringing this topic up. The city budget refers to – the Vallejo city budget refers to a contract coming – funding of a contract, as part of the budget funding of a contract that includes environmental oversight services or something. The budget isn't really specific and it mentions buildings that have asbestos and –

MR. SILER: Potentially hazardous building materials, lead-based paint.

CO-CHAIR HAYES: Lead-based paint and asbestos. And the budget isn't specifically very clear. And I think there's been some concern and interest on the part of the Restoration Advisory Board members regarding that budget item. And while asbestos and lead in soil are not considered CERCLA items, and so the property may have already – that's being referred to in this budget item may have already been transferred from the Navy to the city, it doesn't mean that this topic isn't timely for the Restoration Advisory Board. We don't necessarily over – have oversight through CERCLA, but the Restoration Advisory Board isn't actually limited to CERCLA-only review. And so I would like to talk about, with the city and with Janet, in making a schedule for the future or agenda, possibly putting that topic on the agenda.

CO-CHAIR LEAR: So is that something I should take up with the city representative? Because I don't know anything about their city budgets.

CO-CHAIR HAYES: Well, you don't need to. I'm just saying that we need to discuss it for a potential agenda topic.

CO-CHAIR LEAR: Okay.

CO-CHAIR HAYES: All right.

CO-CHAIR LEAR: Well, thank you very much for coming. Drive safe, and we'll see you next time.

(Thereupon the proceedings ended at 9:25 p.m.)

LIST OF HANDOUTS:

- Presentation Handout – Investigation Area K, Remedial Investigation, Munitions Response Program
- Presentation Handout – Building 866 Voluntary Cleanup, Remediation Results and Land Use Change, Investigation Area C2
- Mare Island Draft Navy Field Schedule
- Weston Solutions Mare Island RAB Update
- Navy Monthly Progress Report, Former Mare Island Naval Shipyard, May 30, 2013

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- I would like a copy of the final minutes of the above noted meeting.
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