

**Mare Island Naval Shipyard  
Restoration Advisory Board Meeting  
Mare Island Conference Center,  
375 G Street, Vallejo, California  
January 30, 2014**

**This packet contains the following list of items:**

- January 30, 2014 Restoration Advisory Board (RAB) Meeting Notice.
- Agenda for January 30, 2014 RAB Meeting.
- Draft Minutes from the December 5, 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:

March 27, 2014

May 29, 2014

July 31, 2014



**PUBLIC MEETING**  
**MARE ISLAND NAVAL SHIPYARD**  
**RESTORATION ADVISORY BOARD (RAB)**  
**January 2014 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.**

**January 2014 Featured Topics**

**Investigation Area (IA) F1 Feasibility Study**

**Eastern Early Transfer Parcel (EETP)  
Update and Path Forward**



**Date: Thursday, January 30, 2014**

**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. 203

January 30, 2013 – Mare Island Conference Center  
375 G Street, Vallejo, CA

7:00 p.m.	<b>Welcome and Introductions</b> (Janet Lear, Myrna Hayes)	5 mins.
7:05	<b>Presentation:</b> <i>Investigation Area (IA) F1 Feasibility Study</i> Ms. Brooks Pauly, Navy Remedial Project Manager	25 mins.
	<i>Discussion</i>	5 mins.
7:35	<b>Presentation:</b> <i>Eastern Early Transfer Parcel (EETP)</i> <i>Update and Path Forward</i> Mr. Neal Siler, Lennar Mare Island	25 mins.
	<i>Discussion</i>	5 mins.
8:05	<b>Public Comment Period</b>	5 mins.
8:10	<b>10-minute break</b>	10 mins.
8:20	<b>Administrative Business and Announcements</b> (Myrna Hayes, Janet Lear)	
	a) December 5, 2013 Meeting Minutes	5 mins.
8:25	<b>Focus Group Reports/Discussion</b>	20 mins.
	a) Community (to be determined)	
	b) Natural Resources (Jerry Karr)	
	c) Technical (Paula Tygielski)	
	d) City Report (Mark O'Brien)	
	e) Lennar Update (Neal Siler)	
	f) Weston Update (Dwight Gemar)	
	g) Regulatory Agency Update (Janet Naito/Carolyn d'Almeida/ Elizabeth Wells)	
8:45	<b>Co-chairs' Report</b> (Myrna Hayes, Janet Lear)	10 mins.
8:55	<b>Public Comment Period</b>	5 mins.
9:00	<b>Adjourn</b>	

THE NEXT RAB MEETING WILL BE HELD March 27, 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, December 5, 2013**

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, December 5<sup>th</sup>, at the Mare Island Conference Center, 375 G Street, Vallejo, California. The meeting started at 7:07 p.m. and adjourned at 9:00 p.m. These minutes are a transcript of the discussions and presentations from the RAB Meeting. The following persons were in attendance.

#### **RAB Community Members in Attendance:**

- Myrna Hayes (Community Co-Chair)
- Michael Coffey
- Paula Tygielski

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

- Janet Lear (Navy Co-Chair)
- Carolyn D'Almeida (U.S. EPA)
- Steve Farley (Weston Solutions, Inc.)
- Glenn Christensen (Weston Solutions, Inc.)
- Alonzo Granados (Sullivan International Group, Inc.)
- Mark O'Brien (City of Vallejo)
- Reginald Paulding (Navy)
- Neal Siler (Lennar Mare Island)
- Janet Naito (Department of Toxic Substances Control)
- Elizabeth Wells (Regional Water Quality Control Board)

#### **Community Guests in Attendance:**

- Mike Chamberlain
- Jim Durkin
- 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, everybody. Hope you all had a great Thanksgiving. We'll go ahead and get started and start with introductions.

This is the Mare Island Restoration Advisory Board meeting, and I'm the Navy co-chair, Janet Lear.

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

MS. TYGIELSKI: My name is Paula Tygielski, and I'm a resident of Benicia, and I am a community member of this Restoration Advisory Board.

MR. COFFEY: And I'm Mike Coffey and I'm the RAB member from American Canyon, one of the two.

MR. SILER: Neal Siler with Lennar Mare Island.

MS. WELLS: Elizabeth Wells with the Water Board.

MS. NAITO: Janet Naito with the Department of Toxic Substances Control.

MS. COOPER: Jessica Cooper with Sullivan International Group.

MR. O'BRIEN: Mark O'Brien with the City of Vallejo.

MR. PAULDING: Reginald Paulding, contract project manager for the Navy.

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

MR. GRANADOS: Alonzo Granados, Sullivan International Group.

MR. CHRISTENSEN: Glenn Christensen with Weston Solutions.

MR. DURKIN: Jim Durkin, member of the community.

MR. CHAMBERLAIN: Mike Chamberlain, Tihydro.

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

CO-CHAIR HAYES: And for the record, Steve Farley from Weston is out front directing traffic, but he's actually present right now.

MR. FARLEY: I'm the gatekeeper.

CO-CHAIR LEAR: Okay. We have two presentations tonight. Our first presentation is going to be given by Reginald Paulding with the Navy. And he'll be talking about Installation Restoration Site 17 and Building 503 Area Feasibility Study Addendum. He'll give us a status update.

## II. PRESENTATION: *Status Update, Installation Restoration Site 17 and Building 503 Area*

### **Presentation by Mr. Reginald Paulding (Navy)**

MR. PAULDING: All right. Does everyone have their handout? And can we see the [presentation] – okay, we can go.

So I'll be talking about IR Site 17 and Building 503 Area, which is a parcel on the north end of the island. I'll be giving a presentation on the Feasibility Study Addendum and some of the work that we've done since the last presentation, which was in May 2011.

So here we go on slide two. Just a brief outline of the site location, the reuse, and history of the site.

We'll go to investigations and removal actions. Talk about one of those removal actions, the NTCRA, that we did out at the site in 2010. Talk about risk evaluations, human health risk and eco risk. We'll talk about some Remedial Action Objectives for the site, remedial goals, remedial action Alternatives. And then project documents and schedule.

So this slide, first picture you have, the figure we have shows where the site is in relation to Mare Island. Again, it's on the north end of the island, in the midst of – most of the other property in that area has been transferred to the city.

We have Building 503, I'm sure you're all familiar with that. The building is three stories with a large tower, one of the bigger towers. The property is 26 acres on the north end of Mare Island. It includes four unoccupied buildings; we have Buildings 499, 503, 517, and 601 existing today. Previously back in the forties and fifties when this area was, you know, when it was active, there were a few more buildings that have since been demolished.

Let's see. Like I said, we transferred most of the property in this area to the City of Vallejo. And the reuse plan for this area is industrial uses, commercial, office research and development, and warehouse uses.

Here you have a picture of Building 499. So back in the forties and fifties, buildings like 503, 519, 499, and so on were used for production and storage of paint and varnishes or raw materials. Those materials were then moved around the property using railroad cars.

And we also had two aboveground storage tank farms; a 21-tank farm in the north, and a six-tank farm in the south.

CO-CHAIR HAYES: How large were those? See right there?

MR. PAULDING: We have a picture, a historical photo from 1989. And you have a blowup of those pictures – or, I'm sorry – figures in the back of your handout for today.

And what you see here is...you've got the north-tank farm, and the buildings have been identified by their number and what the activity was in those buildings, whether it was for storage, like 499 here; or manufacturing, for example, in 503; or more storage up in Building 601.

So here we have the investigations and removal actions, historical investigations starting around 1985 and continuing to approximately 2003. That information was used to support various remedial investigations.

And in the period between 1998 and 1999 there were removal actions to remove surface soil, AST product distribution lines, and the oil/water separator north of Building 519, and associated contaminated soil.

2006 time frame we finalized a Remedial Investigation report and a feasibility study. However, those documents – in review of those documents, the BCT or the BRAC cleanup team, consisting of the Navy, DTSC, the Water Board, and EPA, identified a data gap, the lack of soil gas data in the area. So we went back and did some additional work, which we'll get to.

But as part of the 2008 investigations here, we did some excavation work to remove coal tar distillates. What we found in the area were these free-phase coal tar distillates which were stored

in those large tanks that we saw those in previous aerial photographs. Those had leaked from the tanks and from the distribution lines. So we went out and we excavated in 2008.

And then in 2010 we did some more excavation work, specifically in that south AST tank farm area.

And what you have here on the right-hand side are pictures. Excavation B was the work that was done in that south tank farm area. Excavation C is the chlorinated solvents area which I'll be talking about later. But that work being, A, B, and C excavations were done in 2010.

And the next slide shows that excavation work and the timing. And, again, you have an eleven by seventeen of this figure in the back of your packet. But it's color coded so the pink or purple excavations, that work was done in 2008 or so. And then the tan excavations, A, B, and C, that work was done in 2010. So after the 2010 excavation or non-time critical removal action work, we performed three additional investigations.

The first one was this post-removal groundwater well installation and monitoring work, where we sampled ten groundwater monitoring wells in the IR-17 area for four quarters. We sampled those wells for volatile organic compounds, mainly looking for the constituents from the free-phase coal tar distillates, including benzene, ethylbenzene, xylenes, those types of compounds.

And then also we were investigating or looking for chlorinated compounds, TCE and vinyl chloride mainly, especially in the excavation C area.

We also performed an investigation in the non-tidal wetland area which is down in the southeast corner or west –

CO-CHAIR HAYES: Southwest.

MR. PAULDING: Southwest corner – thank you – which is in purple. The result of that investigation was that the constituents in the wetlands were essentially background levels, and there [were] no impacts from upland production activities in the greater IR-17 area.

We also performed a chlorinated solvents investigation in 2012 where we installed soil gas wells or soil gas points and groundwater monitoring wells, temporary groundwater monitoring wells, and looked for chlorinated solvents. Unfortunately, we found them, so we had again TCE and vinyl chloride in that area.

Here on the right-hand side you have pictures of the non-tidal wetland. These pictures are from 2010, what it looked like at the time that we did the work.

So, moving forward to the Feasibility Study, we broke the site up into four subareas, mainly based on historical use and the contamination that we have in each of those areas.

So Subarea one was the paint manufacturing area and the northern tank farm. Subarea two is the southern tank farm and chlorinated solvents area, and Building 503. Subarea three is basically the parking lot of Building 759. And Subarea four was the non-tidal wetland area.

So the reason for doing this Feasibility Study Addendum is because in 2006 we already had a final Feasibility Study, but since then there was a substantial amount of work that was done. Things like human health risk assessment methodology has been updated. Toxicity criteria for different compounds have been updated. So we included all of the new data, post-2006, in this current Feasibility Study Addendum. And we've identified the current chemicals of concern that remain at the site post the 2010 NTCRA. And we did that for each of the three upland subareas.

Subarea four, the non-tidal wetland area, has been excluded from the Feasibility Study Addendum because of the work that we did in 2010. We found that the site was not impacted, and we received a no further action letter from DTSC on Subarea four.

So for Subarea one we've identified lead in the surface soil and lead – well, let me back up a minute.

So surface soil is the first six inches of the site. So zero to six inches is what we've defined as surface soil. And subsurface is everything to ten feet. So six inches to ten feet is what we've identified as subsurface.

So lead in the surface soil near Building 503 has elevated lead concentrations and has been identified as a risk to commercial and industrial workers.

And then lead in the surface and subsurface soil near Buildings 503 and 519 [has] been identified as a risk for a hypothetical resident. Now, the site has been identified for future industrial use, but we evaluate residential risk as a way to see what the risk would be, and if the site could be cleared for unrestricted use.

So the site, again, lead in the surface and subsurface soil were identified as risks for a hypothetical resident near Buildings 503 and 519. And these other contaminants – ethylbenzene, which is a volatile organic compound, and PCBs – in subsurface soil near Buildings 503 and 519 and along Azuar Drive were identified as risks.

And then we also have 1,2,4-trimethylbenzene, ethylbenzene, and xylenes in soil gas near Buildings 517 and 519. Again, these are constituents that we found in free-phase coal tar distillates. Those were identified in soil gas near Buildings 517 and 519. And the reason soil gas is a concern is because that can penetrate into a building and you could be exposed to it.

CO-CHAIR HAYES: Reggie, I have a question regarding lead. I guess maybe I missed something in the last almost twenty years, but I thought that – why does the Navy not acknowledge lead as a contaminant of concern or whatever when it's – like – around houses, the lead from paint, but then it does here? I'm confused.

CO-CHAIR LEAR: If it's in the soil and groundwater then it's considered a CERCLA release to the environment. If it's part of a building material, then it is not considered a CERCLA release.

CO-CHAIR HAYES: So why then doesn't the Navy clean up lead in soil around houses? Isn't that in the soil? I mean, that –

MS. TYGIELSKI: It was an issue, I remember it.

MR. COFFEY: I thought they did that way back when.

MS. TYGIELSKI: They said people in their own homes have that, and they're never asked to do that, why should we? That's what they said.

CO-CHAIR HAYES: Because one of the issues around readiness for transfer of the houses in the Naval Ammunition Depot, is my understanding, is the tech memo of 2009, January 2009 clears it for munition concerns; but I've been being told or was told in the past that lead in soil and asbestos were two contaminants that the Navy didn't acknowledge as being part of CERCLA, and that those two would have to be addressed separately in some type of a cleanup before DTSC would allow the property to be transferred, but that the Navy didn't acknowledge lead as being a CERCLA issue. So –

MS. NAITO: Well, lead-based paint is – when it's sitting on the building?

CO-CHAIR HAYES: No, not on the building, in the soil –

MS. NAITO: Okay.

CO-CHAIR HAYES: – ground, you know, in the step-outs and everything. They didn't clear it on Roosevelt Terrace, and a developer did their own, expedited it by doing their own cleanup so that the transfer could take – so that DTSC would approve the transfer.

MS. NAITO: That must not be what I'm thinking of then.

CO-CHAIR HAYES: And we were told at the 2009...that that's what we would have to gear up to do to make the property fully transferable. So I'm – I guess I'm confused. I mean, obviously I am. I'll admit to it.

CO-CHAIR LEAR: Yeah, I'm not sure what happened with Roosevelt Terrace, I'm not aware of the situation there.

But my understanding is lead-based paint and asbestos are not covered under CERCLA. Now, when there's [an] environmental release to the soil and there's lead in the soil, in this case, then it would be considered a CERCLA release and we would clean it up.

Now, there may be some nuance there, between maybe paint flaking off of buildings, that I may need to do some research and get back to you on, but I'm not aware of a case where there would be lead in soil that would not be covered under CERCLA.

MR. COFFEY: Didn't they – didn't the Navy remove paint chips from around the houses on Admirals Row in 2009? Remember then when they were doing all the painting?

CO-CHAIR HAYES: Lennar did, but a little bit earlier than 2009, but –

MR. COFFEY: So why did Lennar do it and not the Navy, besides the fact that it was your property?

MR. SILER: Because it's a CERCLA release. When it's on the soil like that it's a CERCLA release, and so we have to clear it up.

MR. O'LOUGHLIN: There's a Navy policy, and I don't remember what the guidance document was, this is a common problem at many of the naval bases.

CO-CHAIR HAYES: You've got to use your microphone, my rule.

MR. O'BRIEN: My understanding is, there was a Navy guidance document back a number of years ago that at many bases that we've dealt with, the Navy has not cleaned up the base paint in the soil around buildings, and I can get back and do a little research. But it's not uncommon –

CO-CHAIR HAYES: Right.

MR. O'BRIEN: – at the bases. In fact, we've had dollars associated with the cleanup of lead-based paint in soil. I don't know what's going on here, I'm still relatively new, but it's not uncommon at other bases.

CO-CHAIR HAYES: Well, yeah, so I mean I'm just curious, why waste your time here? I mean it's curious. It's an inconsistency, you know. This lead probably came from paint, the manufacturer paint because it was at a paint manufacturing place.

So, you know, I'll just – I'll just ask you to do research and prove to me why this – that you do clean up in soil, and if you do, let's get those houses on the list of things to do.

I mean, I know the city is apparently the driver, but the Restoration Advisory Board can also, I think, fairly request you to look into, you know, that – those are the steps that are necessary to transfer those properties, and those need to be transferred sooner than later.

So I was looking for you to, you know, give us some official guidance on why you could do it here and you can't address it there.

MR. PAULDING: So moving onto Subarea two, the contaminants of concern identified in Subarea two – well, it's actually one – trichloroethene, TCE, in soil gas.

Subarea three. The parking lot had no identified contaminants of concern.

And then groundwater, contaminants of concern were not identified in groundwater; however, we are in the process of getting a non-beneficial use exception for groundwater. So one of our conditions would be to not use groundwater for drinking purposes, for one of the reasons is high total dissolved solids.

MS. TYGIELSKI: That would make it taste salty, wouldn't it?

MR. PAULDING: Yes. Yes, salty. So here we have pictures again of –

CO-CHAIR HAYES: You know, could you just go back on that slide?

MR. PAULDING: Yes.

CO-CHAIR HAYES: Source of drinking water, okay. But that doesn't address the issue of, doesn't the groundwater move someplace, and won't these contaminants get into the river along the way somewhere which is drinking water for critters; right?

MR. PAULDING: We've – we've evaluated historically the transport, I guess, of water to or movement of water towards Mare Island Strait. And based on that evaluation, the water that's in this area here, like IR-17, it doesn't really impact Mare Island Strait, so that hasn't been identified as a concern.

CO-CHAIR HAYES: Okay.

MR. PAULDING: Here we have Building 601, Building 503, and Building 517, Subarea one and two, just showing kind of the condition of the property and the fact that there's not a viable ecological habitat. That's the purpose of these pictures. In 2002 a base-wide onshore ecological risk assessment was performed, and in part of that work it confirmed that Subareas one, two, and three did not have viable ecological habitat.

Okay. So Remedial Action Objectives, also known as RAOs, are site-specific qualitative or quantitative goals that define the extent of cleanup required. Now, this is one of the main parts of a feasibility study. You identify your RAOs based on your contaminants of concern.

The contaminants of concern, again, for us were identified in soil and soil gas in Subareas one and two. So the Subarea one Remedial Action Objectives basically are to prevent exposure to commercial industrial workers and this hypothetical resident to lead, to ethylbenzene, and to PCBs in soil, and essentially the VOCs in soil gas, which are trimethylbenzene, ethylbenzene, and xylenes.

Subarea two is to prevent exposure to TCE in soil gas for both the commercial/industrial worker and a hypothetical resident. And also to prohibit the use of groundwater as drinking water in Subareas one, two, and three.

CO-CHAIR HAYES: It says “without authorization”; what’s that mean?

MR. PAULDING: In theory you could get an approval from the Navy and the Water Board to use the water, say, if it was treated. There would have to be conditions on the use and how it was used. The conditions would be worked out and documented in the remedial documentation, the ROD, and those future documents.

Okay. So based on the Remedial Action Objectives we’ve identified four remedial Alternatives that were documented in this draft Feasibility Study Addendum.

Alternative one is this no-action Alternative which is a baseline Alternative that’s one of those things that’s, I guess, is a requirement of the regulations to evaluate. Alternative two is institutional controls.

Alternative three is excavation and off-site disposal of contaminated soil, monitored natural attenuation, and institutional controls.

Alternative four is additional excavation above and beyond what is identified for Alternative three; off-site disposal and monitored natural attenuation with the idea that at some point in the future the property would be available for unrestricted reuse.

What you have here is a figure showing what we need to do for Alternative three. And again you have a larger figure in the back of your packet. So we’ve identified two areas for excavation in Alternative three. This rectangle down around Subarea two, which would be in the vicinity of excavation C is targeting the chlorinated solvents that we’ve identified, and that excavation would go down to about 20 feet. Subarea one we have an excavation in the vicinity of Building 503, and that would be a much shallower excavation going down to half a foot. Remember I said the surface soil was defined as zero to half a foot. And that excavation would be targeting that surface soil for concerns about the risks to commercial industrial workers. And then there would be ICs on the property to restrict it to commercial industrial reuse.

And Alternative four here, you’ll see there’s much more excavation specifically in Subarea one. The excavations in Subarea one would be targeting ultimate reuse for a hypothetical resident, that’s why we have essentially twice as much excavation in Alternatives four compared to three.

So the area under Building 503, the area around Building 519, this area over here that’s along Azuar Drive, some PCB contamination was identified here around Azuar. Again, down here in Subarea two, this is the chlorinated solvents excavation. Again, that would go down to about 20 feet. These excavations here in subarea one would go down to approximately ten feet below ground surface. And this would target both surface and subsurface soil.

CO-CHAIR HAYES: In the Feasibility Study does it, do you have a – maybe this was going to be your next slide – a preferred Alternative?

MR. PAULDING: We have not identified a preferred Alternative at this time. That’s something that happens in the Proposed Plan.

MR. PAULDING: Which would then be presented in a public forum, kind of like this, and then it would go out for public comment. So that’s the next step.

CO-CHAIR HAYES: Are you expecting these – the difference between Alternative three and four with the amount of soil excavation, are you expecting natural attenuation to address everything that isn't – that's the difference between four and three and excavation; or are you expecting land use controls to do a heap of the work? I mean what's the difference; you haven't done any cost analysis yet and feasibility study; right?

MR. PAULDING: We have done some cost analysis, and I think that's the next slide or the slide after the next one. But to answer your question, the main difference is the restriction in the use of the property. So in Alternative three it would be limited to commercial/industrial uses. Under Alternative four it would be opened up at some later date for unrestricted use. And part of both of these alternatives is future monitoring, so specifically soil-gas monitoring, which is the main concern.

CO-CHAIR HAYES: So commercial doesn't include education facilities?

MR. PAULDING: No. No. Right, it does not. It doesn't include hospitals or educational facilities.

CO-CHAIR HAYES: Or residential?

MR. PAULDING: Or residential, right.

CO-CHAIR LEAR: But there's a limit there. There's a limit that it doesn't include daycare facilities and schools.

MR. PAULDING: Schools for people under 21.

MS. NAITO: Eighteen.

MS. WELLS: Eighteen.

MR. PAULDING: Or eighteen.

CO-CHAIR LEAR: So Touro University would be ok.

CO-CHAIR HAYES: Right, that's why I was asking that.

MS. TYGIELSKI: And in terms of...you said no hospitals, but the Mare Island clinic is okay; right? Because it's a clinic, not a hospital, and people aren't there overnight?

MR. PAULDING: Oh, I don't know that, I don't know those stipulations.

CO-CHAIR HAYES: Yeah, I think that, I think that that building is – I think that facility does fall under that guidance. There's something wrong with that.

MS. TYGIELSKI: So if it's just a clinic and patients can go in and see the doctor – but the doctors are there for a limited time, and the nurses are there for a limited time, and the patients are there for more limited time.

MR. PAULDING: So slide twenty here, as part of the Feasibility Study we did some comparison between the alternatives. And the comparison criteria is defined in the National Oil and Hazardous Substances Pollution Contingency Plan, also known as the NCP. That's that long list of titles on the back [of] one of your final slides, the abbreviations and acronyms slide.

But we looked at the no action alternative, the institutional controls alternative, and then Alternatives three and four, the varied amounts of excavation.

And what you'll see here, the first two criteria we look at is whether or not it meets basic criteria. If it doesn't meet the basic criteria, then it doesn't move forward in the process.

And what you'll see is the no-action alternative doesn't meet the protection of human health and the environment requirement. So ultimately, although it's – say – the least expensive alternative, for example, it's not a viable alternative. So it's not really evaluated any further.

CO-CHAIR HAYES: Not to get hung up on that one, but why does short-term effectiveness, why is it excellent?

MR. PAULDING: Well, in this case it's easy to not do anything, so that's why it's excellent.

CO-CHAIR LEAR: Short-term effectiveness has to do with the impacts during the remedy.

MR. PAULDING: Right.

CO-CHAIR LEAR: So, for instance, if you're doing an excavation –are you creating more exposure during that actual excavation? But since you're not doing anything in no action, there's no short-term impacts.

MS. TYGIELSKI: No impact because of action because they don't happen.

CO-CHAIR HAYES: It should be short-term impact not effectiveness; right?

MS. D'ALMEIDA: That's how it's written in CERCLA.

MR. PAULDING: Yeah, that's how it's written.

CO-CHAIR HAYES: Anyway, moving on.

CO-CHAIR LEAR: It's kind of misleading the way it's entitled, but that's what is intended.

CO-CHAIR HAYES: Short-term effectiveness.

MR. PAULDING: And since we're not proposing any active treatment options, the reduction in mobility, toxicity, or volume through treatment is poor for all four options.

What you do see is long-term effectiveness. It's poor for no-action. And it improves with more action, or in this case, you know, with greater excavation the long-term effectiveness improves.

And the implementability of the alternatives kind of goes from excellent to good. All of these alternatives are pretty well established and, you know, the industry knows how to do the work and it's something that's fairly standard.

Costs obviously go up as the amount of work goes up. And what you see here on this slide is the cost. So what we're looking at is no action, no cost.

Alternative two which is the ICs you have this \$800,000. Now, these are all what we call present-value costs over a thirty-year period. And the \$800,000 is cost for general administrative costs, doing annual reviews, and that sort of a thing over a thirty-year period.

Alternative three is excavation and we're looking at approximately 11,000 cubic yards of soil.

Alternative four, the reason that that's nearly double is because it's nearly double the excavation at 23,000 cubic yards.

MS. TYGIELSKI: I notice that every option, every alternative has "poor" under Reduction of Mobility. Why is that?

MR. PAULDING: Right, because we're not doing an active treatment. Excavation is not really considered a treatment, it's – we're just moving the material from one location to another location.

MR. COFFEY: You're not eradicating it?

MR. PAULDING: Right.

MS. TYGIELSKI: So you're moving the problem to another place, so it's "poor"?

MR. PAULDING: Yes.

CO-CHAIR HAYES: So the natural attenuation is factored into the three and four?

MR. PAULDING: Well, yes, it is because we have monitoring costs. So in Alternative three we have five years of monitoring, soil-gas monitoring, so collecting samples, analyzing the samples, and then reporting on those results.

And then Alternative four we have five years of annual sampling, plus sampling on five-year increments for thirty years under Alternative four.

CO-CHAIR HAYES: So I guess maybe what I should have asked in addition, so excavation, this is basically a tooth that has to go. Natural attenuation wouldn't at any point bring your numbers down to a level that excavation – you know, just across the board natural attenuation wouldn't resolve the problem?

MR. PAULDING: Probably not. I mean, it would take an extended period of time. I mean, longer than what you would say might be reasonable –

CO-CHAIR HAYES: And then the other thing is, just for the record, because the City of Vallejo has industriously been clear-cutting everything on the north end of the island so that it looks more – like – apocalyptic than it did, I don't see how that's an improvement. I mean this is just my opinion on the record, okay.

But everything that we've been told by staff is that, oh, my God, we've got these buildings that are an absolute nightmare to take down, and we wrecked them with our fire department, starting with our fire department, so we can't keep the buildings. We have these outrageous costs. I mean, we were told that by the city representative here, Dan Marks, the last time we met, I think, or the time before.

So let's get on the record that this cleanup that you're proposing has nothing to do with any of the buildings sitting on the property; right?

MR. PAULDING: True. Yes.

CO-CHAIR HAYES: Just so that people know that, that the city has this magic idea that if we just totally Destroy and let [them] get wrecked, and we wreck them ourselves, these buildings, it will make it a lot more attractive to a developer to come.

So I don't know whose thinking that was or how it evolved, but I just want to be clear that all this work that you're talking about doing to get these properties to a CERCLA transfer still doesn't address something that is costing a ton of money when they go in to try to take these buildings down.

And they say, Mr. Marks said, that those were environmental issues for the buildings. And I assume that that must be non-CERCLA things like lead-based paint and asbestos and I don't know what else.

But let's get clear that, as far as I know, the Navy isn't in the business of taking these buildings down. So the city will still receive contaminated property that won't – that will be a continuing nightmare for it to manage. It will be an extreme cost for it to bear the burden of removing.

I'm not judging one way or the other, I'm just making sure that that's on the record; that people understand that this has just been as far as, in my opinion, just a total screw-up on the part of the city, and a big boondoggle.

I think Congressman Sam Farr, representing Fort Ord, told in a hearing once, he said before Congress, you think we in California with BRAC closing bases, are getting these tremendous resources of great value worth billions of dollars to California, and really what we're getting is a pig in a poke.

And I would say that the whole north end of the island is a good example of how a local government shouldn't be given property because it doesn't know how to manage it, and it disrespects it the minute that it gets it from the Navy. And that the Navy should have had a better plan of transferring property in a way that made it reusable, made it safe for use.

And so I blame both parties and I think it's – this is a perfect illustration that should be, you know, actually publicized far and wide about what the real challenges are of environmental cleanup and transfer of property for quote "productive reuse," bringing it back into the economic picture. I think it's a complete failure here.

So there. That's my statement on this project.

MR. PAULDING: Okay. So the document schedule moving forward. We have...the final Feasibility Study Addendum should be coming out in early 2014.

And then we would move on to the Proposed Plan, Draft Remedial Action Plan later in 2014, maybe a year from now or so, where we would present the preferred alternative, and we would have the public comment period. And the public comment period is typically thirty days.

Following that, we would move onto the Record of Decision, which documents the selected alternative, and that would be sometime in early 2015.

So, any questions?

MR. O'BRIEN: So you said that Alternative four you're removing the soil volume of 23,000 cubic yards?

MR. PAULDING: That was an approximate number but, yes, 23,700 more or less cubic yards.

MR. O'BRIEN: Then what's the volume of removal for Alternative three?

MR. PAULDING: In Alternative three we're looking at about 11,200 cubic yards.

MR. O'BRIEN: Thank you.

CO-CHAIR LEAR: I wanted to make just one comment. Just to clarify. The hypothetical resident, which is the target for Alternative four, that's also a scenario that we do as part of CERCLA. But the cleanup that the Navy does for a property is based on its reuse.

In this case, this property has been slated through the reuse plan to be used as commercial / industrial. So the hypothetical resident alternative is more of a comparison than really a viable alternative in terms of what the government dollars would be spent for.

MS. TYGIELSKI: But it is going to happen. If someone has a small business and so it's industrial, but the cost of an apartment in town is, I can't afford that, I can live here in my business.

MR. COFFEY: But they would be restricted from doing so. Wouldn't there be a deed restriction on it?

CO-CHAIR LEAR: Yes.

MR. COFFEY: So if they did so, it would be on his own head.

CO-CHAIR HAYES: That's part of what the land use controls are supposed to do. I mean Lennar goes around ferreting out people that might be living on their property, I know that, on a regular basis. That's just part of what their property agreements do.

MR. COFFEY: Myrna, you living in the property again?

CO-CHAIR HAYES: I've been finding places that there are so many raccoons living there, I guess that's the fervor of the neighborhood lately is the raccoons, they haven't been paying any attention to me.

MR. PAULDING: All right.

MS. TYGIELSKI: The raccoons must be –

CO-CHAIR HAYES: They have no predators.

MS. TYGIELSKI: They must be finding –

(Thereupon there was simultaneous discussion.)

MR. PAULDING: Okay. Thank you.

CO-CHAIR LEAR: We're going to take a moment, Neal, and see if we can adjust the table a little bit so that we can get a better screen view.

(Thereupon there was discussion off the record.)

CO-CHAIR LEAR: Okay. So with that minor adjustment, we have our second presentation, by Neal Siler with Lennar Mare Island. He's going to give us an update on remedial progress at Installation Restoration Site 15.

**III. PRESENTATION: Remedial Progress Update, Installation Restoration Program Site 15, Investigation Area C1**  
**Presentation by Mr. Neal Siler (Lennar Mare Island)**

MR. SILER: Okay. Well, when we last discussed this site, Installation Restoration Program Site 15, it was back in September of 2012. And at that time it was right coincident with when we were doing the third injection event at this site.

So since that time we've performed that injection event, we've done the monitoring that goes along with that, and I want to give you an update as to where we are in the remediation of this site up to right now.

So how I'm going to do that is...I'm going to give you the Gil Hollingsworth condensed version so I can move this thing along pretty well tonight, cause we're a little bit over on time.

So I'm going to go over really quickly a description of the site. Talk about the remedy that was approved for Installation Restoration Program Site 15. I'm going to kind of focus on the remediation progress and the conclusions and the path forward. And then if you have any questions, you can ask them while I'm doing my presentation or at the end of the presentation.

So the next two slides give you an idea, this one right here shows you plan view and ground level views of the facility. It covers an area of approximately four acres.

It's dominated by three buildings. Building 101 which is this building right here. This was constructed in 1899. It was used as a pipe cleaning facility. It had seven 1,500-gallon storage tanks in it, aboveground storage tanks in it, that were used for cleaning pipes.

The other building is Building 225, which is this building in the back right here. And this is believed to be the source of the contamination at this property. It was constructed in 1911. And it was used as a chrome plating facility for very many years.

There [were] two underground storage tanks associated with this facility; underground storage tank 225 which was a 3,500-gallon concrete chrome plating tank that was inside the facility.

There was also UST underground storage tank 225B which was an overflow tank, 3,000 gallon overflow tank, aboveground tank that was conducted through piping from UST 225. And that was considered to be the source of the contamination that we're seeing emanating from this area.

In addition, there is Building 273. This building was constructed in 1921, used as an optical electrical shop, subsequently used for warehousing and office purposes. So that's the facility right there.

As you can see, it was commercial/industrial use, and the proposed future use for the facility is commercial/industrial also.

Now, the constituents of concern at this facility are primarily metals; we have cadmium, lead in the soil, hexavalent chromium in the groundwater. And we also have chlorinated volatile organic compounds that emanated from the site.

Now, just to go on. You can look at this on the next slide, and that's the next slide right there. They started doing investigations at this facility in 1983. They started doing the plating back somewhere in the fifties. There's been a number of investigations that have gone on here, I'm not going to go through them all.

Some of the significant ones as far as remedial actions was, I mentioned that underground storage tank 225B, that was removed from service in 1987. Then in 1993 underground storage tank 225 and the building floor drain was removed.

Subsequent to that, there was a number of excavations of soil that were contaminated with hexavalent chromium and chlorinated volatile organic compounds within the building that were removed.

We did some pilot studies between 2008 and 2010. And then 2010 onward is when the remedy implementation began at this facility in earnest.

So after all the investigations, this was the initial remediation area that we were looking at from the chlorinated volatile organic compound plume, and I'm going to focus on that as we move forward here.

And this is the hot spot area. And the way that this was delineated was by total chlorinated ethenes. And that's kind of a really strange calculation. You actually sum all of the parent compounds and the progeny compounds up to come up with this number that is based on vinyl chloride. So you sum all of those compounds up. There's a nuance in there, you have to adjust for the molecular weight as you go through. But what we're looking at is total chlorinated ethenes at this site. So that's the hot spot in this area. And that had total chlorinated ethenes above 3,200 micrograms per liter at that area.

There's also this plume core which is just around that area right there, and that was between 320 and 3,200 micrograms per liter.

As we move forward, this was the near shore area, and this was, again, anything above 320 micrograms per liter. And this was delineated because it was really hard to do any kind of anything in here because of all the intersecting utilities that were in this area, plus the tiebacks – I'll show you this on a slide a little bit later on. This is where all the quay wall tiebacks were all located and it was very hard to work around and excavate around those tiebacks.

And then this dashed line right here, this is what's called the dilute plume area. And this was anything over 32 micrograms per liter up to the 320 micrograms per liter. So that's how this area was delineated.

Myrna.

CO-CHAIR HAYES: Just very quickly, for the future and into the past, I think that I pretty frequently requested, I wish I wouldn't have to, someplace where you actually put those numbers that you just told us on your –

MS. TYGIELSKI: In the table someplace.

CO-CHAIR HAYES: – in here someplace here.

MR. SILER: Okay.

CO-CHAIR HAYES: Because you report it, but if we go back to try and look at this or share it with someone it doesn't mean anything because we don't have the –

MR. SILER: If you looked back at the September 2012 presentation – I didn't put it in this one – it's in that presentation, it tells you how to calculate it –

CO-CHAIR HAYES: Well, there's a good chance that I'm not going to do that, so I'm going to have this in hand. So just for consistency, please.

MR. SILER: Okay. Now, you saw that this is in plan right here, and this shows you some of the things that were done in this area.

So this, one of the things that was done was this PRB wall, which is a permeable reactive barrier that was placed in here.

And you can see where the different zones are looked at where we did some ERD injections.

There's the permeable reactive barrier right there. This is the core and the hot spot area. This is the near shore area right here.

So one of the things that we did, as we were moving forward after we did excavation and installed the PRB wall, was we did some what are called enhanced reductive dechlorination injection events.

The first injection event incurred in the first quarter of 2011 in the January, February time frame. The second in the fourth quarter, it was in the October time frame of 2011. And the third was in the third quarter of 2012, and that was right between 19 and 21 September 2012.

The last presentation was on September 27, 2012. So we didn't have any idea of how it would react as we were doing that presentation before.

So what was injected? EHC. That's not an acronym, that's somebody's proprietary product. It consists of zero-valent iron and a carbon substrate. They injected this during the first injection event, about 3,700 pounds.

MS. TYGIELSKI: Okay. But what does carbon substrate mean?

MR. SILER: It just means it's something – it's a carbon, it's just a source of carbon. So it's something like cheese whey is a good source of carbon, and we do that later on.

MS. TYGIELSKI: So zero-valent iron, the iron filings are kind of mixed into charcoal?

MR. SILER: Yeah, something like that.

MS. TYGIELSKI: Something like that, okay.

MR. SILER: And then in the first, second, and third events we injected cheese whey which is an additional carbon source, and we injected nutrients, stimulants, stabilizer, and a tracer.

In the first event we injected about 15,000 pounds of cheese whey. The second event it was about 8,000 pounds. The third event was about 6,000 pounds.

As far as the gallons of, you know, these types of materials:

The first event was about 50,000 gallons. 29,000 gallons in the second event. 26,000 gallons in the third event.

And then – we've talked about these before, these are things that help stimulate the growth of the microorganisms so that they break down the chlorinated volatile organic compounds.

We have things like sodium carbonate, which is – uses a buffer to control the pH.

There's sodium hexametaphosphate. And for those of you who remember what the product name of sodium hexametaphosphate is, what is it? Calgon, take me away.

MR. COFFEY: Take me away.

MR. SILER: And we had a fluorescent tracer in there that we used.

MS. TYGIELSKI: Yeah, we were talking, these nutrients are for the bacteria?

MR. SILER: That's correct. One of the other things we did was a product called Accelerite. And Accelerite is activated yeast and B-12, vitamin B-12, in there. Every time I think of the activated yeast I think of Marmite or Vegemite that they're injecting, which makes me ill.

CO-CHAIR HAYES: Makes you drink, isn't that –

MR. SILER: Exactly.

CO-CHAIR HAYES: Want to drink.

MR. SILER: Okay. So this right here is a photograph of – our photographs of the third injection event that we performed. You can see all of the – it's hard to see here all of the tracer compounds or all the lines that trace on here.

This will give you a better idea here right quick. See everything laid out there. And then this next one right here, this is some – there's the cheese whey right there. There's the sodium hexametaphosphate in that right there. Soda ash. There's an Accelerite bag around here somewhere. Gives you an idea of what was injected.

And this is the mixing tank right here, 20,000-gallon mixing tank and it lets me do my favorite line – my second favorite line that I do in this thing, and that is soil and green is people. So there it is right there.

MS. TYGIELSKI: It looks yellow to me.

MR. COFFEY: It looks like the Grinch.

MS. TYGIELSKI: I was thinking it looks kind of like sulfur.

MR. SILER: So going back to these remediation areas, this is what it looked like before we actually did any remediation at this site.

Okay. Now, this was the remediation progress at the second injection event. And you can see – if you compare these, you can see that this plume is starting to actually contract, especially laterally, and also in width and in length you can see here. It's come up a little bit. You can see there's the margins of the plumes. Here's the near shore area right here. Here's the core area, it's not as wide. It seems to have a path that wants to go this way.

Now, that remediation in the third injection event, you can see here that again it's contracting quite a bit in the interior here. The near shore plume is contracting quite a bit, as you can see in this area right here.

And then now here is where we are today as of the third quarter of 2013.

CO-CHAIR HAYES: Wow, look at that.

MR. SILER: So we've gone from this plume that looks very corpulent, very, very happy, fat and happy. It's starting to lose weight as you move through in time.

MR. COFFEY: I need to lose some weight.

CO-CHAIR HAYES: The rubber band method.

MR. SILER: Now you can see there's dissolution right here. So you may want to ask –

MS. TYGIELSKI: It looks like a success.

MR. SILER: It's getting there. It's getting there.

MS. TYGIELSKI: Well, not a hundred total percent, but it's definitely improved.

MR. SILER: Yes. So you can see this is the two areas that are the hot spot areas now. There's one that's around well R77. And the reason I know this is cut off here is because these wells around here, 214B, 214D, and R75, they have total chlorinated ethene concentrations about 15 or 17.

This well right here, R77, as of August 2013 is about 19,500. Now, I have data from November, but it's not validated yet, and this has come down quite a bit.

In August this had about 21,000 micrograms per liter of cis-1,2-dichloroethene. In November it had about 120 micrograms per liter.

Same with vinyl chloride. It had about 5,900 micrograms per liter vinyl chloride in August. It has about 170 now micrograms per liter. So it's come down quite a bit. So if that holds, this is cleaning up back in this area right here.

One of the problem wells in the core is this well right here, which is IR-15MW0107. This is our hot spot in the entire core. It used to be that this well here, 244D, this was included in the hot spot, but this has come out now.

Between the – at the time we did the second injection event we were concerned about this well because the primary product that we were looking at was tetrachloroethylene or PCE in this well, and it was actually increasing. It had gone from a few thousand micrograms per liter in May of 2012, went to 34,000 micrograms per liter, and then went up to 71,000 in August. And that's when we made the decision: we need to do something in this area to make sure we're breaking these things down.

And one of the things we did here, we used to – in the first two events we actually injected in these two wells, 15W015 and then MR15234D, and we extracted from this well, we actually reversed that. What we did is, we injected in this well right here, and we extracted from these wells that were outside of it.

Now, it doesn't look like this has come down quite a bit. In August of 2012 the concentration was 480,000 total chlorinated ethenes, and there's a table later on that I'll lay this out for you so you can see it on the table. And now it's about, in August 2013 it was 436. But the good news is there's no tetrachloroethylene in here. Mainly all that is is the cis-1,2-dichloroethylene and vinyl chloride. Cis-1,2-DCE is about 250,000 micrograms per liter, and the vinyl chloride is about 220. So it's coming down quite a bit as you go forward. And it's come down quite a bit in November also.

These wells over here, they're like below one microgram per liter total chlorinated ethenes.

These wells up in here, in this area, are around one or maybe in single digits, two, three. This one's three. This one's 4.4. This one's two right here. These are both around one. This is right here about 2.1 micrograms per liter. This one here is 102 total chlorinated ethenes. And it's gone up a little bit. You'll see that as we go forward and I show you the table.

This well right here, P51, this has come down quite a bit. It's about 4.1 micrograms per liter. This went up to about 422, and it's come down again, in August, it's come down again in November.

These wells here are now part of the near shore area also, it's getting smaller but they still have some dechlorination going on in this area.

So here is the table that I told you about. You can trace this between February 2011, August 2012, August 2013, and you can see some things are stabilizing.

Some things look like they're increasing but they're actually coming down and they're doing what we want it to do, we want it to break down as we move forward.

Some of these you can see we have quite a bit of success in, like R75 down from 102,000 to 2,200 down to just in the tens of micrograms per liter.

Again, we have some areas, P31 started off at 35,000, went down to six, came back up to about 422; but that's quite a bit better than 35,000. So things are moving along as we move forward at this site.

So now, the conclusions, the remedy is work –

MS. TYGIELSKI: I've got a question. What is that J doing sitting there?

MR. SILER: J just means it's an estimated. Because what it is, it's below the reporting limit so they're estimating the quantity there.

MS. TYGIELSKI: So that means approximately?

MR. SILER: Approximately is right. Does it say J down there somewhere, it does, estimated value. Okay?

MS. TYGIELSKI: Okay. Thank you.

MR. SILER: So the remedy is working in both the hot spot and the north shore areas. The plume is continuing to contract. You can see it's disassociating right now, we have small areas that we're trying to clean up as we move forward.

The total CVOC concentrations are decreasing. The CVOC species, instead of being the primary constituent of concern, the tetrachloroethylene we're seeing the breakdown products now, mainly cis-1,2-dichloroethylene and vinyl chloride, which is what we want it to do. And degradation is continuing to occur in this area.

So the path forward. We're probably going to be performing some future injections in the hot spot area. Looks like if it continues to break down we should be okay.

There's a problem there, though, in that the bacteria that break down the primary compounds, the tetrachloroethylene, trichloroethylene and cis-1,2-dichloroethylene, their anaerobic bacteria, as you get an accumulation of vinyl chloride, what will happen is the vinyl chloride is toxic to the anaerobic bacteria, but they can be broken down by aerobic bacteria.

So we're probably going to have to do something with a train in there or try to oxidize it to get rid of it at some point in the future. And we'll continue to monitor in that area.

For the near shore area right now we're not proposing any additional injections. We're going to continue to monitor. And one of the things that has shown up here, to go back to the slide, is where we are now.

There's only a handful of wells that we're seeing, you know, maybe five to seven wells where we're seeing any appreciable concentrations. So we want to really scale this back and look at those wells as we move forward, keep those on a regular schedule.

What we'd like to do, since we know what's going on in here and we know it's occurring, is go to a semiannual schedule instead of a quarterly schedule. Continue to monitor all the wells, probably the ones that we want to monitor on an annual basis, continue to monitor just these wells on a semiannual basis in addition to the ones that we look at on an annual basis.

Some of the constituents of concern we want to get rid of here, one of the things we were looking at was arsenic and hexavalent chromium. If you go back and look at all the tables, we don't have any hexavalent chromium in the wells at all right now, they're mainly all non-detects.

And the arsenic, we haven't seen any appreciable arsenic generation as we've been doing this since 2010, so it looks like we can get rid of those things. At least that's one of the things that we're going to propose as we move forward.

So that's the end of my presentation. I tried to do it in the Gil Hollingsworth time frame allotted.

CO-CHAIR HAYES: Did you pull it off?

MR. SILER: I think I did. So if anybody has any other questions, please let me know.

(No response.)

Okay. Thank you very much.

CO-CHAIR LEAR: Thank you, Neal.

We are at our first public comment period. Any comments?

(No response.)

CO-CHAIR LEAR: Okay.

MR. COFFEY: Very cool picture.

CO-CHAIR HAYES: Yeah, this was one of the Mare Island photos.

CO-CHAIR LEAR: And I think there's goodies courtesy of –

CO-CHAIR HAYES: Janet and –

MS. WELLS: No, not me, Janet.

CO-CHAIR LEAR: Thank you, Janet.

(Thereupon there was a brief recess.)

CO-CHAIR LEAR: Okay. Well, let's get started, folks.

#### **IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Janet Lear)**

CO-CHAIR LEAR: We're at administrative business. As always, if you have comments on the meeting minutes, please get those to Myrna or myself.

Did you have anything?

CO-CHAIR HAYES: (Shook head.)

## **V. FOCUS GROUP REPORTS**

CO-CHAIR LEAR: Okay. So we are at focus group reports, and I'm going to skip down to Technical.

MR. COFFEY: That's you.

CO-CHAIR LEAR: Sorry to get you with your biscotti.

### **a) Technical (Paula Tygielski)**

MS. TYGIELSKI: Well, I don't have anything technical to talk about, but I can brag, because on October 19th my son Timothy, my oldest son, got married.

(Thereupon there was simultaneous discussion.)

MS. TYGIELSKI: So that was a fun occasion, a very fun occasion.

CO-CHAIR HAYES: Congratulations to all.

MR. COFFEY: Did you have fun?

MS. TYGIELSKI: Yes.

CO-CHAIR LEAR: City report, Mark.

### **b) City Report**

MR. O'BRIEN: I'd like to say I think last time we met Dan Marks was leaving and Mark Zawicki was beginning, so Mark has now come in to replace Dan Marks.

One of the things the city is looking at right now is the H-1 transfer. We're starting to do some internal review, and I think we have a discussion with the Navy next week, so that's sort of the focus right now.

CO-CHAIR LEAR: Mark Zawicki was here at the last meeting; he was just sitting in the audience.

MR. O'BRIEN: Oh, he was.

CO-CHAIR HAYES: I would like to agenda-ize that transfer talk as a topic for an upcoming RAB meeting, please.

CO-CHAIR LEAR: Lennar update, Neal.

### **c) Lennar Update**

MR. SILER: Okay. What you should have for our update is the eleven by seventeen figure that we usually hand out.

And just going over the picture in the upper left-hand and upper right-hand corners that highlight, if you look down on the matrix, the field work implemented or under implementation.

In the upper left-hand corner we installed six new wells in the former Building 637 area, and we also monitored those wells just recently in the last few weeks.

In the upper right-hand corner we got the okay to perform the soil vapor sampling and analysis program in the underground storage tank 243 area. And what that is, is them installing one of the

soil vapor probes. And they were actually out there yesterday and today performing [the] soil vapor sampling at this facility.

So a couple of the things that I want to highlight as far as the documents submitted. One of the big ones that we're trying to get through right now – and I know that Janet has been instrumental, Janet Naito is instrumental in getting this done – is the closure of the crane test area investigation area B.1 on Lennar's property.

We've received concurrence on the implementation report for that, so right now what we're running through is the land use covenant and the operation and maintenance plan.

So we've been working hard to get that done. And we're trying, keeping our fingers crossed, trying to get that thing done by the end of the year hopefully. So maybe we can get that off our plate at that time.

We had a number of documents that we received concurrence on from the agency. We had a no further action request for Building 121 PCB Sites UL-01 and UL-02. We had a corrective action plan for Building 121, Rooms 101 and 103 for petroleum hydrocarbons. We received agency concurrence on that also. We also received agency concurrence on the Site Characterization and Cleanup Action Summary Report for the Building 866 PCB sump site. And we also, just in the last few days, received concurrence on the closure for FOPL segment E-2/VAR Building 688B.

We're working to get a number of different documents that are coming up in the future. Probably the most significant one is the Remedial Action Plan, get the draft in for Investigation Area C-1.

That's really the end of my update. If anybody has any questions, I'd be glad to answer any questions that you have at this time.

CO-CHAIR LEAR: Okay. Weston update, Steve.

**d) Weston Update**

MR. FARLEY: There's a handout, I think it was given out to everybody during the break. I'm going to focus on a couple of things here.

One is the document status. There are the top three documents, H-1 Post Closure Plan and the Draft FS, those are in agency review. Those were on our update last time. And then the IR-05 annual wetland monitoring, this is for year three, that's been submitted within the last month or so.

The next few documents here, the Proposed Plan and RAP for IR-05, which is Installation Restoration Site 05 and the dredge pond 7S, that document and the next document, the Record of Decision, those documents will be prepared after the Feasibility Study noted above is complete.

For the H-1 containment area, you can see here some numbers of gallons and such. There's 30 million and some change, 30 and a half million gallons of groundwater have been removed from the containment system around the landfill. That water's been discharged to the Vallejo San and Flood District System. During this time, also in the last month, about 880 gallons of oil and oily water have been collected, and a total of about 15,000 gallons have been recovered since the operation started in 2005.

Let's jump over to the photograph on – the upper one on the right. This is a photo that shows where the sumps drain – as I'm describing here in terms of the water and oily water and such. This is where it accumulates, and then we bring in a truck and pump that out and haul it offsite.

And there are fifteen sumps that are collected or that are connected to the system where this truck is now pumping out the water.

Now, if you drive down Dump Road out to the parking area for the trailhead, you'll see this building on the left-hand side, so that's where it all gets collected and hauled out.

For Installation Restoration Site 05, we've done the third annual quantitative survey of the vegetation. And there's some numbers here that are really exciting.

In the – for this particular update we achieved 60 percent of the restored areas with vegetation, in particular with pickleweed. And there are goals that have been established for rehabilitation of this area. The five year goal is a cover of 90 percent of native wetlands species, and we're already at 60 percent, and a goal of 60 percent of it to be pickleweed.

So the good news there is that we're well on the way to achieving the goals for the restoration of the habitats down at IR-05.

So that's the update. And there's a photo down here in the lower right, I should have mentioned that, of the IR-05 area.

CO-CHAIR HAYES: Steve, a couple of questions.

MR. FARLEY: Yes.

CO-CHAIR HAYES: On IR-05 that – does the site seem to be inundating sufficiently, I mean this photo looks like it, to support a good colonization?

MR. FARLEY: Yes, it does, and I think that's one of the reasons why the recovery has been so outstanding.

CO-CHAIR HAYES: And I know, having had the chance to go out on some salt marsh harvest mouse, you know, habitat analysis for a woman's master's thesis; her conclusions of her thesis were that the more, the more the pickleweed got watered, the less likely there were invasive species, upland species to take over. And that the salt marsh harvest mouse population was more dense in the more pickleweed habitat than where there was, you know, other non-native species and wetland species, where there was a lot of house mice.

So I guess what my question is from that background or the basis of that, of those conclusions of her study: do you have a problem with or do you expect to have a problem with invasive species that tend – and so her recommendations were to make sure that the pickleweed marsh was frequently inundated with water because that's what pickleweed love.

But this is a high marsh. In other areas on the band of pickleweed marsh from here to Sears Point, there's a serious problem with that pickleweed marsh being now too much accretion and too much sediment load, and the marsh cannot get a good flush.

So I was just curious, and maybe you don't know, but what your long-term projections are past this five years for keeping this – this area healthy, flushing, and pickleweed habitat?

MR. FARLEY: I don't have the projections, but what I do know is from talking with Dwight and others that the way this system is responding tells you that the way it's operating now is really quite healthy.

If you look at the – at the percent of coverage, and you look at the amount of that that is pickleweed, it's mostly pickleweed, it tells you it's a good habitat for the pickleweed. And I would extrapolate that it would be a good habitat also for the salt marsh harvest mouse.

So, but in terms of the flushing, long-term, Myrna, I don't know what those numbers are. But the way the system is responding, it should – it points to the whole thing working as a good system.

CO-CHAIR HAYES: Okay. Just a note that the City of Vallejo, I don't know what relationship they have with Weston, if any now, for management of the dredge ponds, the dredge ponds are considered by the Army Corps seasonal wetlands and significant, they were at one time significant salt marsh harvest mouse habitat; however, they don't get the flushing that they were getting as impoundment ponds from dredging. So they have – they have become populated with an invasive wetland species called Russian thistle.

And I would – I would just hate to see all this work end up like those ponds are, which are seriously denigrated right now in terms of habitat value.

The last thing that I want to note – and I love to do this whenever I can –and some of you might have heard it a time or two – but that of all these 30 million gallons or more that have gone off to the Vallejo San and Flood Control District, the district has really strict – well, it has a permit and, that it has to operate under concerning what it can accept. And it actually has a problem with accepting water from the water treatment plant because of the levels of metals in that water or the discharge from it.

But, quite amazingly, the landfill water actually falls within their permit guidelines. So I think that's somewhat comforting to people who live near there or people who have a perception that Mare Island is just one big, you know, toxic soup. These guys couldn't take this if it was a problem.

And then the last thing, I thought it was amazing that you've been able to get 15,000 gallons of oil and oily water out of the groundwater collection trench, given that a portion of that trench surrounds what was estimated to be from 2.5 to four million gallons of waste oils.

So be thankful that they're being contained in the – and that they're not all – and that not all of that is ending up in those tankers. Those are my thoughts on that.

MR. FARLEY: Since you brought this up, Myrna, you did say Russian thistle; right?

CO-CHAIR HAYES: Yeah.

MR. FARLEY: Interestingly enough, I just read an article about the Russian thistle, and it's obviously an invasive species. And whenever you see a southwestern John Wayne movie, the tumbleweeds that you see floating by are actually Russian thistle.

CO-CHAIR HAYES: I'll be damned.

CO-CHAIR LEAR: Learn something every day.

CO-CHAIR HAYES: Something new.

MR. COFFEY: Trivia.

MS. TYGIELSKI: I can see how Russian thistle could be a problem when it turns into tumbleweeds.

CO-CHAIR HAYES: Well, leave it to our city to not think about these things.

CO-CHAIR LEAR: Regulatory agency update.

**e) Regulatory Agency Update**

MS. WELLS: Okay. We're arguing about who gets to go first.

So in addition to reviewing documents, one of the things that the Water Board has done over the years at Mare Island is issue orders to the Navy telling them to do things, clean things up, stop doing things, that kind of thing. And one of the things that we have done over the last few months is go through and see what orders are still standing and have not been rescinded or closed out.

And it looks like there are a whole bunch of orders from the 1980s that were sitting there, and the Navy did the work that was required in the order, or has since done other work, and these orders are no longer relevant. So one of the things that we're doing with the Navy is that we're trying to close them out. And I think we succeeded with one that we sent out to the RAB members a while ago.

We have another one that's going to be coming up in February. And this order is going to come out to you guys within the next month for review for public comment, and it is going to rescind two orders that have to do with IA-H1. So one that has to do with the impoundments, and one that has to do with the former sanitary landfill.

And the Navy did what it was asked to do back in the eighties or early nineties, and then nobody rescinded the order. So we're just trying to do some cleanup on those kind of things.

MS. NAITO: Well, my update is my office looks like crap. Everybody has been turning in lots and lots of documents, so I've got four piles now of things I need to review, and I've been told that my last two weeks are going to be spent filing. And, no, I don't get to retire yet, damn it.

CO-CHAIR HAYES: Can we help in any way?

MS. NAITO: No, you guys want them to turn documents in.

MS. D'ALMEIDA: We're looking at – I've got my toxicologist looking at the IR-17 risk assessment for the Feasibility Study that Reggie reported on. He's actually out of town, so our comments are going to be delayed. But, you know, it will have to be a catchup, probably won't be until January that we'll be able to get our comments in. But we are looking at that.

On the PCB sites, a couple of weeks ago I went out with Neal and we looked at Building 742, the pink palace, where they've done the cleanup of the floor. And our remaining comment was, well, okay, if you had some places in the building where there were spills on the floor, maybe you got some splatters on the wall too, so we asked them to take samples on the walls as well to make sure that that site is really clean. So we are waiting on the data for that.

And then I've got – Building 781 is sitting on my desk, I haven't gotten to it yet.

CO-CHAIR HAYES: The whole building is?

MS. D'ALMEIDA: The whole building.

CO-CHAIR LEAR: The weight of the world.

MS. D'ALMEIDA: Well, actually no, this is a building that had already been closed out and had a low occupancy LUC on it, but they've demolished the building and they want to remove the – yeah, so no, they didn't deliver the building to my house or to my office.

MR. COFFEY: Bits and pieces.

MS. NAITO: They ought to make it into a snow globe.

MS. TYGIELSKI: It ended up in your driveway; right?

MR. COFFEY: Firewood.

MS. D'ALMEIDA: The document is sitting on my desk.

MS. NAITO: Sorry, it's been a long week.

MR. COFFEY: Snow globe.

MS. NAITO: They did it with the Golden Gate bridge chips.

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

CO-CHAIR LEAR: Okay. So Navy report. You have the Navy monthly progress report.

And we actually did not have any field work going on the month of October, so I was a little short on photos to include. So I put in a map of the island to show the properties that the Navy still owns and still need to be transferred.

The pinkish areas are economic development conveyance to go to the city. And the blue areas are reversionary properties to the state.

CO-CHAIR HAYES: Lots of people ask me how much acreage the Navy still has. I say a thousand acres, is that true?

CO-CHAIR LEAR: That is very close, it's about 1,200. Yeah, very close.

We have submitted nine documents in the past month. And we've received comments or concurrence from DTSC on two, and four from the Water Board.

MS. NAITO: Water Board wins, yay.

MR. COFFEY: Get her a snow globe.

MS. NAITO: You guys are going to make me a Mare Island snow globe?

CO-CHAIR LEAR: And our next meeting –

MR. COFFEY: Yeah, except it will be made with green sand.

CO-CHAIR LEAR: Will be on January 30th.

Myrna?

CO-CHAIR HAYES: Well you can stop eating biscotti for her report, I have a peppermint candy cane in my mouth.

Thank you to the Navy for using a Mare Island photo. And I'd like to see you continue that tradition on your progress report.

MR. COFFEY: That's pretty nifty.

CO-CHAIR LEAR: Yeah, we've been – I don't know how long it's been. Well, since Jessica took over we've been putting historic photos up there instead of Navy ships.

CO-CHAIR HAYES: Okay. I am going to just quickly go through two or three things that we have coming up that you should be paying attention to.

Working backwards. The San Francisco Bay Flyway Festival, the 18th annual and the 19th event – the first one having been hosted by the U.S. Navy or co-hosted with us, it wasn't called the Flyway Festival, but that was 19 years ago this coming January – it's coming up February 7, 8, 9, Friday, Saturday, Sunday. So put that on your calendar, plan to attend, plan to participate as an exhibitor, sponsor, outing guide, purchaser, silent auction contributor, all those things that people do, and help us get the word out.

Second. At the Mare Island Shoreline Heritage Preserve, a property transferred in 2002 to the City of Vallejo, which we manage, we have upcoming the – a boat cruise on the 21st – see me if you want to attend – 4:45 to 6:45 on the river, and along the Mare Island shore, and going up the – upbound along the Vallejo shore. And that is on Saturday the 21st.

And on the 22nd we have a couple of holiday themed things; a tea and a reading of the Polar Express for kids, and Santa Claus will be there and all those good things.

And then the lighted trail every weekend 5:00 p.m. to 8:00 p.m. this weekend through New Year's Day night. So come out to the preserve.

I think that's all I had to report.

Yeah. I already commented on the city's work on the north end of the island. I'm curious if anybody can help me out with what – I saw city staffers dumping on city land at the north end of the island the other night – I took some photos – a very large pool of bright yellow, it was not soylent green but yellow substance, a very dense color of yellow off-loading their truck.

MS. TYGIELSKI: Was it powdery or –

CO-CHAIR HAYES: Well, it was liquid.

MR. COFFEY: Liquid.

MS. TYGIELSKI: It could have been sulfur.

CO-CHAIR HAYES: Well, or it could have been –

MR. COFFEY: Fryer shortening.

CO-CHAIR HAYES: Well, I don't know what it was, but it was late in the evening and it was being dumped quickly and driven off.

So I was just curious if you knew of anything, or anybody does, of anything that typically gets very, is either just naturally occurring extremely deep dark yellow or – and I have photos – or is – has a colorant added to it. So – because I saw that –

MR. COFFEY: Where was this?

CO-CHAIR HAYES: – on city property on the north end of the island.

Because I saw that, maybe other people are seeing things and we want to be able to answer, you know, oh, it's harmless, it's, you know extra Kool-Aid from school or something. But I didn't know what it was. It's the color of yellow that's on your jacket, very bright yellow.

MR. O'BRIEN: What building is it near?

CO-CHAIR HAYES: It's in our former dog park on one of the ball fields. And they just drove out into the field, and it looked like maybe 30 gallons or something.

MS. D'ALMEIDA: Was it a city truck?

CO-CHAIR HAYES: Yeah. Yeah, with a tank on the back.

MR. COFFEY: Interesting.

CO-CHAIR HAYES: And I just, even if it's Roundup, it shouldn't be being disposed of that way, I don't believe. But whatever it was, I'm just curious if anybody knows and can help me out. That's it.

MS. D'ALMEIDA: Did it say what department?

CO-CHAIR HAYES: Maintenance.

MR. FARLEY: Myrna, going back to the Flyway Festival. We'll be happy to help out again this year.

CO-CHAIR HAYES: Good. Good. Good.

CO-CHAIR LEAR: Thank you, everyone, for coming. Drive safe and have a great holiday.

(Thereupon the proceedings ended at 9:00 p.m.).

**LIST OF HANDOUTS:**

- Presentation Handout – Installation Restoration Site 17 and Building 503 Area Feasibility Study Addendum
- Presentation Handout – Remediation Progress Update, Installation Restoration Program Site 15, Investigation Area C1
- Weston Solutions Mare Island RAB Update
- Navy Monthly Progress Report, Former Mare Island Naval Shipyard, November 28, 2013

RAB Meeting Minutes Comment/Correction Form

Meeting Minutes: December 5, 2013

RAB Member: \_\_\_\_\_

- I would like a copy of the final minutes of the above noted meeting.
- No comments or corrections to these minutes.
- See comments or corrections listed below.

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