

**MARE ISLAND NAVAL SHIPYARD
RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES
HELD THURSDAY, FEBRUARY 22, 2007**

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, February 22, 2007, at the Mare Island Conference Center, 375 G Street, Mare Island, Vallejo, California. The meeting started at 7:03 p.m. and adjourned at 9:08 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
- Wendell Quigley
- Paula Tygielski
- Gerald Karr
- Kenn Browne

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

- Michael Bloom (Navy Co-Chair)
- David Godsey (Navy Lead RPM)
- David Clark (Navy)
- Tony Megliola (Navy)
- Carolyn D’Almeida (USEPA)
- Gil Hollingsworth (City of Vallejo)
- Dwight Gemar (Weston)
- Chip Gribble (DTSC)
- Brian Thompson (RWQCB)
- John Kaiser (RWQCB)
- Neal Siler (Lennar)
- Steve Farley (CH2MHill/Lennar)
- Melissa Boronda (Tetra Tech)
- Michael Foster (Sullivan)
- Jamie Hamm (Sullivan)

Community Guests in attendance:

- Bob Bancroft
- Jim Davies
- Robert Parrish
- Diji Christian
- James Porterfield
- Christine Parrish

RAB Support from CDM:

- David Lange (CDM)
- Kathleen Soloaga (Stenographer)
- Wally Neville (audio visual support)

I. WELCOME AND INTRODUCTIONS

CO-CHAIR BLOOM: Welcome everybody to the Mare Island RAB meeting for February. We’ll go around with introductions to start. I’m Michael Bloom. I’m the BRAC Environmental Coordinator with the Navy.

Attendees introduce themselves as requested.

II. NAVY PRESENTATION: *Summary of Findings from IA F1 Sampling Event, Winter 2006.*

Presentation by Dr. Michael Foster, Sullivan Consulting Group and Mr. David Clark, Navy.

CO-CHAIR BLOOM: Okay. We'll get started with our first presentation tonight. It's going to begin by Dr. Michael Foster with Sullivan and David Clark with the Navy. We're going to talk about the Summary of Findings from Investigation Area F1, a sampling event that we did this past winter.

DR. FOSTER: Thank you, Michael. Do we use the microphone? Thank you everybody and good evening. Is it working? Hold it closer.

CO-CHAIR BLOOM: You've got to flip—

DR. FOSTER: Always need retraining every time I come. All right. Can people hear me now? This is a follow-up presentation from the September RAB meeting when I presented the planned field investigations for Investigation Area F1, and we completed that fieldwork now so I wanted to give you an update on the outcome of that. I hope people have—there are copies of both handouts of the presentation, and you can also listen to me as well and look on the wall.

CO-CHAIR HAYES: Move the microphone a little bit—rest it on your chin.

DR. FOSTER: The investigations that were performed included site inspection confirmation sampling, underground storage tank soil and groundwater sampling, and PCB characterization and verification sampling, so that there were three phases to the work that was performed. I'm going to describe the SI sampling, site inspection sampling, which was performed first. Just as some background and to remind people the purpose and the scope of that work, this sampling was performed to validate and confirm findings of the 1995 Preliminary Assessment Site Inspection Report. The outcome of that led to the scoping of the Investigation Area F1 RI identifying buildings to be included in that study. And following the submission of the Draft RI, there was a desire to go back and investigate in a little bit more detail some of the sites that were not brought into the RI, the Remedial Investigation, itself. And so in coordination between the Navy and the regulatory agencies, 15 additional building or areas were selected for additional SI sampling to confirm the results of that 1995 survey.

The fieldwork that was conducted entailed sampling using the appropriate direct-push methods at two locations at each of the 15 buildings or building vicinities and taking two samples from each location that—a surface sample in 2 to 4 feet and any groundwater encountered, groundwater samples taken, as well. And the list of analytes that samples were analyzed for at the lab included volatile organic compounds, or solvents; semivolatile organic compounds, SVOCs; total petroleum hydrocarbons; metals; explosives; and PCBs. Those analytes were agreed upon by the Navy and the regulatory agencies and are representative for contaminants potential concern in Investigation Area F1, and that is the analytes are consistent with the range of analytes sampled for in the F1 RI. This map shows the location of those 15 buildings at which the samples were taken, and the site work was performed with the field staff, Navy, and regulatory agencies selecting the specific locations in each of the buildings that were deemed to be the areas most likely to be contaminated if there was any contamination at the site; that's called biased sampling.

The results are based upon validated data that we have received and that are going to be reported in an upcoming Summary Data Report that will be included in the RI. There were no detections in

soils above ambient or residential preliminary remediation goals, or PRGs, for SVOCs, VOCs, PCBs, or explosives. Groundwater was encountered at only one location, at Building A288, and that location was very, very close to the shoreline, and there were no detections above comparison criteria for SVOCs or VOCs. There were elevated metals, but that is because the sample has a high salinity because of influence with the water from Mare Island Strait. This table summarizes the key findings or the key results. Each of the results identified here represent the individual samples where either ambient or residential preliminary remediation goals were exceeded. You can see that out of the 15 locations, we have a total of seven locations where there was at least one sampling where a remediation goal was exceeded. But in general, you can see that lead was typical in—as a shallow sample at 0 to 2 feet at A31; A15 is 2 to 4 feet. The only sample that showed a detected concentration that exceeded both residential and industrial PRG was the single detection of chromium at A062. But overall, we had 15 buildings. There were 4 samples taken at each building. So a total of -- 4 times 15 is 60, I believe, so out of a total of 60, this is the total number that exceeded the comparison criteria for the sampling performed. Here are the results from that previous table shown on the map to depict the geographic distribution. Most of the high levels are in the shallow samples, 0 to 2 feet. And where you see those, the deeper samples, 2 to 4 feet, did not exceed, and that indicates that there is some vertical attenuation of contamination or the elevated concentrations of the chemical. The deviations from that would be these two samples here with a higher value at 2 to 4 feet. I would point out that Investigation Area F1's planned reuse. It's obviously mixed or industrial, and so the industrial PRG is considered to be the most relevant of the preliminary remediation involved at the site, but we have screened the data against the lower level to demonstrate or to illustrate the extent of the slightly elevated concentrations.

Moving to the second type of sampling that was performed—so the first was site-inspection sampling. We conducted additional fieldwork at two UST sites. These are the two underground storage tank sites in F1 that still require formal closure with the Water Board. And in order to address Water Board concerns about the characterization of the site, one monitoring well was installed at each of the former tank locations, and soil samples and groundwater samples were taken. We're still waiting for validated data to be finalized from those sites, and the need for any additional sampling or additional work to achieve closure of these USTs will be assessed based upon the outcome of the new data that we collect when combined with the previous data of the site. Just to show you where those two tanks are, it's A-225 and A-267, and all that fieldwork is completed and we are awaiting the validated data. And this is just a shot of the limited-access rig that was used to install the wells and take samples. The third type of sampling performed was the PCB sampling. Compliance with the Toxic Substances Control Act, or TSCA, requires that PCB concentrations at sites where there has been PCB equipment, such as transformers or switch racks, the concentrations shall not exceed 1 milligram per kilogram in high-occupancy areas. Now, Investigation Area F1, the Navy retains its responsibility for complying with TSCA for the PCB Program. And in 2003 and 2004, a Data Gap Summary of the PCB program was done, which included sites in F1, and the extent of the need for additional sampling or verification of previous abatement was made. And as a result of that, the sampling performed in late last year was identified, and these buildings here were identified for additional sampling, and all of that was performed in the first week of November. The outcome of that is that about half of the sites, we confirmed that the abatement that was previously performed is complete and meets the one-milligram-per-kilogram requirement and/or that the characterization was required to demonstrate the abatement has now been completed. A lot of these sites were not considered ready for closure because they are—TSCA has very specific requirements for the amount of the samples you need to

demonstrate that you have met the one-milligram-per-kilogram goal, and so part of the role was to make sure we had the required number of samples taken at each site. So the outcome was that about half of them had demonstrated that we—that these sites are in compliance with TSCA, and the list on the left indicates sites of which there are still some locations of which concentrations of PCBs exceed 1 milligram per kilogram and additional abatement will be required and then subsequent verification of that. So that's the summary of the three types of sampling that was performed. It was all completed in November, and we are close to completing our internal draft of the Data Summary Report for the site inspection sampling, and the PCB report has already been submitted, and the UST report is forthcoming soon. Are there any questions or comments?

CO-CHAIR BLOOM: Yes.

MR. SILER: I'm Neil Siler with Lennar. I have a question for you. Under the sixth slide, if you can go back to it, you talked about the SI sampling summary. I think you might want—go right past it. There you go. Go back one.

DR. FOSTER: Yes.

MR. SILER: Okay. You have no detections in soil above ambient or residential PRGs. I can understand the PCB, SVOCs and VOCs. Are you saying there are ambient levels in that area for explosives?

DR. FOSTER: No. The ambient levels only apply to metals, and I put that—put in ambient levels in PRGs for completeness, but it should not be taken to imply that there are ambient levels for anything other than the metals.

MR. SILER: Okay. Did you detect explosives?

DR. FOSTER: There were—I think there were low detections of some explosive compounds at three sampling locations. They are all estimated concentrations.

MR. SILER: And what was it? Was it HMX, RDX, TNT— (Reporter interruption; request speaker to speak up).

DR. FOSTER: Generally, we were looking at that before. I think there was—I think there were two or three different types. There wasn't anything consistent between those three samples. I think there was one picric acid, one—perhaps Jamie could answer that.

CO-CHAIR HAYES: Could you use the microphone, please.

MS. HAMM: Sorry. As I recall, there was one HMX, one RDX, and one—nitroglycerine?

DR. FOSTER: But the details of all of the detections and all the results will be part of the Data Summary Report; but, yes, there were three low-level detections of explosive compounds.

MR. SILER: And I guess by "low levels," I mean, I'm not aware that there are PRGs for those compounds.

DR. FOSTER: I think—for those—

MR. SILER: HMX and RDX.

DR. FOSTER: I'm not sure. You may be correct on that.

MR. SILER: Okay. Thank you.

MR. GRIBBLE: I had a question on the same slide, two questions on the same slide. PRGs, what kind of PRGs are you talking about there? You didn't specify that, on the first bullet there, residential or industrial?

DR. FOSTER: Above the Residential PRGs, SVOCs, and VOCs, and PCBs.

MR. GRIBBLE: Okay. And then comparison criteria, what was the comparison criteria that you are referring to?

DR. FOSTER: We used the standard groundwater comparison criteria that were used and that have been used at Mare Island. We used them in the F1 RI, and they are a combination of ambient water quality criteria and ambient groundwater—ambient metals values.

MR. GRIBBLE: And then I am not sure you've ever gotten into this, if it's ever come up in any conversations about the site yet, but I understand that the area is designated for an industrial use, according to the—according to the City, and so that I can understand where the Navy then is targeting cleanups toward industrial standards. However, because of the area being—some of that area being immediately adjacent to the strait, I'm not sure that that's necessarily the appropriate standard. I mean, if you have, you know, some of those constituents like the lead washing off into the—goes into the strait, you know, through run-off, surface run-off, I am not sure that that might not change some of those cleanup standards in a more stringent direction, but we've never really addressed that yet, that I know of, in our conversations. Have we, Carolyn?

MS. D'ALMEIDA: (Shaking head.) I wanted to ask—is this on? Same slide. What do you mean by elevated metals due to high salinity? What were the metals, and can you explain that?

DR. FOSTER: Well, pretty much all the metals were very high, but—including sodium and calcium. The water had very high TDS levels, and it is—my interpretation of that is that is because the water is in a mixing zone with the water from the strait.

MS. D'ALMEIDA: Not heavy metals.

DR. FOSTER: No, not heavy metals.

MR. KARR: Just a comment. The slide number six in the printed material doesn't correspond with the one in your presentation.

CO-CHAIR BLOOM: It's the one you just had on, Mike.

MR. KARR: The one we were looking at.

CO-CHAIR BLOOM: That one.

MR. KARR: That first dot is not the same in the printed copy.

DR. FOSTER: That's right. There were some adjustments to the text after printing.

MR. KARR: Sounds like Washington.

CO-CHAIR HAYES: I have a question on— actually, I believe it might be the next slide following that one. Yeah. Can you tell us what the residential PRGs are and whatever that other word was, ambient levels were? I mean, what you're comparing to? What you are shooting for?

DR. FOSTER: I think lead—.

CO-CHAIR HAYES: Residential—.

DR. FOSTER: Residential lead, I believe, is 120?

MR. SILER: It's 150.

MR. GODSEY: Well, we use—.

THE REPORTER: Could you state your name, please?

MR. GODSEY: David Godsey with the Navy. We use Lead Spread Seven, which is a DTSC program that has to calculate what your lead residential value should be, and it's approximately 200 for Mare Island.

CO-CHAIR HAYES: So you got lead. What about zinc, lead, lead, lead, lead, TPH, chromium.

DR. FOSTER: Myrna, like I say, I don't have those numbers offhand. I can get that to you at the end of this presentation, though, I think.

CO-CHAIR HAYES: Okay. It's just not very useful to have the concentration levels and telling us that you are comparing those against ambient or residential PRGs. I guess maybe—I'm not a scientist, but I could—can't figure out what that number means. Is that a good thing or a bad thing? And then I hear the giggling from the scientists back there, and that makes me a little confused. But, of course, they are from your potential land recipient there, so what types of PCB sites were you talking about when you were looking at the—when you had that list that you believe has no further assessment required versus the further assessment required? Like what types of equipment or facilities are these?

DR. FOSTER: These are typically transformers, switch racks. Let me think of other types. And in the presentation in September I gave a few more slides showing pictures of that, and so the tendency is to be very brief in this presentation and not go into much detail, but most of them are PCB transformers, and they sit on pads and they have leaks resulting in stained concrete around the bottom of the former location of the transformer. And the switch racks are—I'm not an electrical engineer, but where a panel comes in and the switching equipment and they are cooled with—some of the older equipment is cooled with oil which is PCB-laden.

CO-CHAIR HAYES: And is there any other type of industrial-use equipment that would have been—oils would have been used for any machining-type equipment that you have sampled for PCBs in any of those buildings?

DR. FOSTER: When we did the Data Gap Summary, or the data gap investigation in 2003, we went into each building—we took all of the building records and the history of where there was equipment, where there had been cleanup or abatement, and then we looked at where that confirmation sample's been taken. And we compared the documented state of the site against what the requirements of TSCA are for completing verification of cleanup, or if you didn't do cleanup, then it's called characterization sampling. You have to have sufficient samples to demonstrate that your characterization has taken enough samples with enough density. And so the sampling was to basically fill in where there was insufficient sampling to demonstrate that no abatement was needed or to fill in additional sampling where abatement had taken place, but it needed to confirm with sufficient samples that enough abatement had occurred.

CO-CHAIR HAYES: So you are not aware of any— on this gap sampling that you've done, or data gap work, you are not aware of anything other—any equipment being in place, remaining in place there, other than switch racks and transformers?

MR. GODSEY: Myrna, yeah, he's correct. Most of these sites, almost every single one of these sites were former transformer or electrical switching gear sites. Now, other parts of the yard, when we were doing the closure, we sampled every piece of hydraulic equipment, lathes, metal-works, like, example, Building 680, where there are literally hundreds of those machines, and we would sample all the fluids associated with that, PCBs. Here down in the PMA, production manufacturing area, it was mostly just electrical switching gear and transformer sites.

CO-CHAIR HAYES: All right. Because they did do a lot of machining down there at one time.

MR. GODSEY: Yes. And we would sample all the mach—those type of equipment. If they saw oil stains, they were also taking samples of those oil stains on the concrete. The residual of that, the remains of that is what we're dealing with now, where they went and cleaned up these PCB sites, and we are trying to determine whether or not they did an adequate cleanup.

CO-CHAIR HAYES: The transformer and switch rack areas, are those—existing equipment still there—

MR. GODSEY: In some cases—

MS. HAYES: — in some cases?

MR. GODSEY: — they are, but for the most part, a lot of this equipment, when they pulled out these transformers out of service, they literally removed the transformer and either brought in PCB-free equipment, or they—they just took them out of service, removed them.

CO-CHAIR HAYES: Okay. The reason that I'm asking about this is because my observation has been that there is a pretty aggressive scrapping program going on at Mare Island, whether it's above board or under the radar screen, and I'm concerned that there might be equipment being removed from some of these buildings that might have PCBs in them. And I'm also concerned about whether these transformers and switch racks are something that somebody like Island Energy or one of their subcontractors or somebody else might be taking out of service or removing and exposing either a remedy that you had in place, that you assumed would have no further assessment required, or might be exposing an area to PC—you know, that it would be then untreated, uncapped, whatever.

MR. GODSEY: Well, I can answer part of that, and that was, part of the shipyard's PCB program, they went through and they, you know, when PCB regulations changed to outlaw PCBs, we were mandated to go out and remove all PCB equipment, either drain the PCB fluid and flush it until it's PCB free, or take it out of service and just scrap the piece of equipment, and that includes all of the switch gear and everything else associated with it. So, when the shipyard actually closed, for the most part, there wasn't any remaining PCB-contaminated equipment that could make its way to the scrapyards, unless they were located someplace where they are getting ready for legal disposal. We're talking about here are historic spills, essentially, and it would be embedded in the concrete or the soil, and it's not really an issue with somebody that's taking it out and try to make some money from it.

CO-CHAIR HAYES: Well, okay. It would sure be nice if I had some way of being able to, like, confirm that, because there are people picking up quite amazing things and making a little money here and there on them. And that would be another reason why I, you know, think it's relevant to go back to, you know, whatever happened to the Guardian Trust? Whatever happened to the program that was supposed to be being put in place to monitor these properties and, you know, to make sure that these kinds of exposures weren't taking place underneath our nose and we didn't

know anything about it? But I have seen some unusual behavior inside the PMA gates, so I'm just making sure that, you know, this stuff isn't transferring. And I'm just curious about whether you did have equipment that, if it got removed, would then expose a PCB area. And, of course, there is the PCB that's still left in the little building on the property that was already transferred to the Navy and Island—from the Navy to Island Energy and the City of Vallejo, so there is that little piece of PCB still, I believe, in the concrete little building.

CO-CHAIR BLOOM: Yeah, Chip and I were talking about that piece, I believe. That's the one, right, Chip?

MR. GRIBBLE: Yeah.

CO-CHAIR BLOOM: The other day, so we're having a discussion on that one.

CO-CHAIR HAYES: Mm-hmm. But that—but that's not part of this.

CO-CHAIR BLOOM: No.

MR. GRIBBLE: No.

CO-CHAIR HAYES: Oh. That's another gap.

CO-CHAIR BLOOM: Correct.

MS. D'ALMEIDA: On this same topic of PCBs where you state "no further assessment required," under that, are you making a determination under TSCA? Is the Navy planning to make a determination under TSCA, and, if so, when?

DR. FOSTER: When—that label of "no further assessment required" is basically the conclusion of the report from the findings in order to recommend to the Navy what steps are needed to maintain or to be in compliance with the requirements of TSCA, and it's the Navy's obligation to meet TSCA requirements. And this is our recommendation, or the report's recommendation to the Navy, about whether any further assessment is required at some of the former PCB equipment locations. And based upon the results internally for the Navy, they don't have to—that is not something that they need to continue into their compliance program because they've met the requirements under TSCA.

MS. D'ALMEIDA: Well, I guess my question was, is the Navy going to seek determination of no further action under TSCA from EPA?

DR. FOSTER: I will let Dave answer that.

MR. GODSEY: Obviously, Carol, we will follow the TSCA regulations where it comes to closing out PCB sites. We will generally require—he's right. All he's doing is the contractor's recommending that these sites are closed out with no further assessment, a follow-through on TSCA requirements— (Reporter interrupts for clarification; speaker's microphone turned on.)

MR. GODSEY: So we would go through and do what the TSCA regulations require, 761, which says we have to prepare a report to the PCB coordinator of Region 9, submit our reports, and they then have 30 days to comment on our reports or give us their comments and then the site being closed down. So, we understand what the regulations require.

MS. D'ALMEIDA: Okay. I'm just wondering if you are going to be asking me for—to look at these, was my question.

MR. GODSEY: Well, we wouldn't stop you from looking at them, no.

MS. D'ALMEIDA: That wasn't quite my question, though.

MR. GODSEY: The regulations require us to submit it to the Region 9 PCB coordinator.

MS. D'ALMEIDA: Okay. All right.

MR. GRIBBLE: So I have a couple things to add. I could give you some of the background about the PCB program from my point of view, which may or may not help address Myrna's concern about PCB equipment. But when the shipyard was preparing to close, they had a lot of things going on, one of which was this PCB program, but the PCB program consisted of essentially two programs: One was to decontaminate all of the equipment that was on the shipyard, and we were not—we, as the regulators, were not involved in that. That was something that we really don't regulate or we didn't get into, and the Navy did that themselves. And the other program was sampling across the yard, or the shipyard at areas where there may have been a PCB spill, and we did get involved in that. Initially, some of us were not very concerned about that, as well, because we felt that was kind of excessive and it wasn't much to it. As it turned out, that was shown to be the wrong perspective, and that many sites with significant PCB contamination were discovered through this PCB sampling program, not the sampling of equipment but the sampling of the soil and the surfaces. And the first program that was about sampling the equipment really happened first. It was ahead of the other program, and the degree to which the Navy did that without, you know, without any limits was much more significant than the soil sampling. At some point in the course of the soil sampling part of the PCB program, the Navy, and I'm going to speak for my—with my—what I understood to be the case, the Navy got very anxious about that and the excess to which the Navy was sampling every oil spill or oil stain on the pavement across the shipyard. We weren't as concerned about that degree of sampling as the Navy was internally, but they—at some point they very quickly limited the amount of sampling of soil and pavement that was involved in that. But the point of that is, the brakes on that program happened after the equipment part of the sampling had already largely been done. And so from that, one might interpret or think that the excess that was a part of that whole PCB sampling program was really not—cut short on the—on the equipment part of the sampling. The documentation of all of that was a problem and still is a problem, and some of the sampling that's involved in this, what Mike was talking about today, is related to that in that the soil samples and the pavement samples that were taken everywhere in these PCB sites that were identified, hundreds of them, the problem, from our point of view at some point, is that we felt that the documentation was really not very well done to give us a sense of completeness. Those sites have been resampled, and the documentation has been redone to document the conditions of those sites. But the point of all that is, the equipment part of the sampling was preceded by in large by the soil sampling, and from the Navy's internal review of the excess of all of that PCB sampling wasn't stopped until after they had done the equipment part. That may give you some sense of confidence, or not.

CO-CHAIR HAYES: Well, I'm not so concerned totally exclusively about, you know, copper miners or equipment raiders getting PCBs on their hands or ending up at Alcoa that way, but I am just as concerned about them leaving a pad, deciding—Island Energy, itself, or someone related to them, or someone related to someone scrapping, who has the scrapping contract, or a scrapping—thinks they have the right to scrap, leaving an exposed pad, for example, that then is not a part of the gap sampling.

MR. GRIBBLE: And then also I wanted to go over, for the screening numbers that you were asking about, and my recall of numbers isn't what it used to be, but for lead, part of the—the issue with the

lead numbers is that cleanup numbers for lead have been all over the map for the last 20 years. And to make matters more complicated, EPA has standards that are less stringent than DTSC and the State of California standards. And even within—across Mare Island, from site to site, or from area to area, you will probably find a range of cleanup numbers that have been approved by the agencies. But to give you a sense of what those might be, from the high range, industrial numbers have been as much as a thousand parts per million, and that's—that was the EPA's number at one point. I'm not sure where they are at right now. I couldn't even tell you exactly where DTSC is at right now. But the industrial numbers have gone from 1,000 probably down to 750, and I think 750 is probably a good number for an industrial standard, typically.

MS. D'ALMEIDA: For what?

MR. GRIBBLE: For an industrial standard, for lead.

CO-CHAIR HAYES: For lead.

MS. D'ALMEIDA: Oh, for lead. That sounds vaguely familiar.

MR. GRIBBLE: Then for residential, the numbers have been as high as 400, which originally was the EPA's number many years ago, and have gone as low as 120 by DTSC Lead Spread. And Neil said something about, I think, 150. I'll take his word if that's what he says that the DTSC agreed to for the Lennar areas. And that's—you know, we've had a few different numbers for that, as well, but the Marine Corps Firing Range, which is a removal action, not a final—not a final remedy but a removal action, was intended to be consistent with it, and the number we have agreed upon for that was 200. So your residential numbers have probably ranged from 120 to 200 and sometimes perhaps bouncing up to 400 for an unrestricted residential scenario.

MR. DAVIES: Jim Davies. I just got a letter earlier this month from the DTSC Office of Military Facilities in Sacramento approving cleanup or putting an assessment of the residential area that had been regraded and—for residential use and the level was 150 parts per million, and that's what we've been using for the last three years at Hamilton. So, if that's any good to anybody, that's at least what Sacramento Office of Military Facilities is using.

MR. GRIBBLE: I'll take 150.

III. WESTON PRESENTATION: *IA H1 Wetland Mitigation Activities* Presentation by Mr. Dwight Gemar, Weston Solutions.

CO-CHAIR BLOOM: Dwight Gemar from Weston Solutions is going to do a presentation on the Investigative Area H1 wetland mitigation and the activities going on there.

MR. GEMAR: If I can figure out how to work his machine here. No, that wasn't it. How do I go down? I need some training. Oh, oh, never mind. Sorry about that. I was trying to use the mouse. Well, my talk this evening—

MR. NEVILLE: Both switches in the same direction.

MR. GEMAR: Oh, there we go. That's better. I will be talking about the wetland mitigation activities at Investigation Area H1. And for anyone who is not familiar with Investigation Area H1, it's the 230-acre area along the western part of the island, in the central part of the peninsula. And

for comparison purposes, you know, the famous landmark is Wendall's house right about here, just to the south (indicating).

MR. COFFEY: It's on the wetland.

MR. GEMAR: Again, for folks that may not be familiar with this project, the cleanup is—of Investigation Area H1 is being performed by Weston Solutions on behalf of the Navy and the City. The Navy actually provided the funds through a grant to the City, and Weston is implementing the work. The objective at H1 is to isolate the waste from groundwater and also to eliminate contact with potential human or ecological receptors, basically people and animals. We've been involved in this project since 2002. In 2004, we did an Interim Remedial Action to basically install a groundwater barrier around the perimeter of the site to basically eliminate the migration of the groundwater from the landfill area and some of the associated disposal areas. The slurry wall is 7,300 feet, so about a mile and a half encircling a 72-acre area. The final remedy for H1, or the final cleanup for H1, was approved in August of last year by the Navy and DTSC, and basically the primary cleanup remedy is containing the existing materials within the 72-acre area known as the H1 containment area. And we're also digging up soils that are outside of this area but within H1 that exceed our cleanup criteria, and we're bringing those soils within the contained area before the geomembrane cap goes over the landfill. And we'll also be putting a 2-foot layer of cleaner soil over the entire remaining upland portions of the site, both on top of the landfill and outside of the landfill. But the topic for this evening is to—which is hidden by the little bar there. Hopefully, you have your handouts. If not, there's some on the table.

But the topic for this evening is a wetland mitigation activity that Weston has been doing as part of the remedy. On this slide I show some wetlands that were present within this containment area. This green line here is the approximate location of our slurry wall and is also the limits of our containment cap. And within this area, there was about 7.2 acres of wetlands, and these wetlands were subdivided into about one-half acre of seasonal ponded areas and about two acres, shown in red, of pickleweed areas, which are a potential habitat for the salt marsh harvest mouse, which is an endangered species listed by both the federal and state governments. And the remaining wetland vegetation was degraded and somewhat less of value but nevertheless met the criteria for wetland. And, again, I've kind of summarized that on this slide, two acres of pickleweed, marsh; half an acre of seasonal ponds; and the balance being this degraded marginal vegetation. The wetlands within this containment area are going to be filled, and actually that work has already begun, in order to allow for the construction of our engineered cap over the containment area. And, again, that activity was authorized under a couple of documents, one was, which I had mentioned, the Remedial Action Plan and the Record of Decision that was approved in August of last year; and also the U.S. Fish & Wildlife Service signed a Biological Opinion for the Navy in June of 2006 providing certain mitigations were taken also approving of this activity. On this slide I just wanted to introduce, "What is mitigation?" And there's probably a lot of different definitions, but the one that I used here is, "Replacing lost or adversely impacted habitat with habitat having similar functions of equal or greater ecological value." And there's also other precedents that are involved on, you know, why you need to replace lost or adversely impacted habitat. One is both the United States and California policy is for no net loss of wetlands. So, if you destroy a wetland, you have to basically replace it with the agreed-upon amount of wetlands with similar functions and values. And also the Regional Water Quality Control Board regulates discharge into waters of the State and, of course, the wetlands would be considered a water of the State. And also U.S. Fish & Wildlife Service and— and Department of Fish & Game both regulate impacts to listed endangered species, as I

mentioned, the salt marsh harvest mouse, which is likely to have resided in pickleweed areas within H1. So in order to implement the remedy of containment, the agencies agreed to that with certain stipulations on mitigation requirements, basically things that we had to do to allow the cap to be installed. And one was to create 8.2 acres of higher value wetland to replace the 7.2 acres lost within the containment area. And out of this 8.2 acres, 6.7 acres or more is—was required to be pickleweed-dominated wetland, which is specifically habitat for the salt marsh harvest mouse, and that would replace the roughly 2 acres of pickleweed wetland habitat that was present within the containment area; and then the balance, or 1.5 acres, would be a seasonal-ponded area to replace the half acre that was, again, within the containment area. And as part of this new creation area for wetlands, we are required to do confirmation sampling after we excavate those areas in order to make sure that we comply with our non-tidal wetland cleanup goals. And once we do that, then we also have to plant and seed with native species for pickleweed wetland area; and then we also have to provide a minimum of five years of monitoring to verify compliance with certain performance criteria, which I will describe later in the talk. So, in order to mitigate or replace the wetlands, which are shown in red, that are inside of our containment area, we chose an area just to the north, basically between some isolated wetlands within an area that we call Wetland D. And the reason that we chose that particular area was it was close to the impacted area, which typically the agencies prefer to do mitigation close to the area that's being impacted as opposed to hundreds of miles away. That area was already a relatively lower lying upland area, and so it didn't require a huge amount of excavation in order to lower the grade to what would be required to create wetlands.

Based on some pre-sampling that was done, it appeared that that particular area either was not impacted or was only marginally impacted by previous disposal activities, so it looked like it was a suitable place to create a new wetland. And also by choosing areas that were upland areas that were basically separating three isolated wetland areas by, you know, creating a new wetland there, it would allow for a larger contiguous connected wetland which, you know, the biologists prefer that because it makes it easier for the mice to move around and do their thing, whatever that thing is. So this is a grid map of the wetland confirmation sampling that was performed. You can see it's a—well, it's a 100-foot grid pattern, and so every dot location was where a sample was taken after the soil was excavated down to the level of the wetland that we were trying to create. We did have some exceedances. I believe this point here had an exceedance for manganese, and we had some exceedances. So in those cases, we had to actually dig down below the level of the wetland and then backfill it with material that met the cleanup criteria. And this is just a comparison of the wetland criteria, and I just, for comparison purposes, chose the Region 9 residential PRGs. Here is that 150 that we were talking about earlier for lead, but the criteria for the—the average criteria that we have to meet in the new wetlands is 59. For mercury, we have to meet 2 versus 23 for residential, et cetera. So I just wanted to illustrate that for the most part, the ecological—because of ecological risk drivers, the cleanup levels for the new wetlands have to be much lower than what would be acceptable for humans.

In order to both impact or fill the existing wetlands and to work near existing wetlands to create new wetlands, we had to comply with a number of mitigation measures to protect the salt marsh harvest mouse. For starters, we had an educational training session for all the workers that were on site. This was performed by Dr. Howard Shellhammer, who is really kind of the father of the salt marsh harvest mouse. Well, not really literally the father, but he was, you know, the professor that really got the—got the interest going, I think, in terms of listing the species to begin with. So he was hired by Weston as a consultant during this activity. And as part of our discussions with U.S.

Fish & Wildlife Service and Cal Fish & Game, it was determined that there was two different ways that we needed to ensure that the salt marsh harvest mouse within the containment area was not present when we started to backfill those areas. One was in one of our more isolated wetland areas, which we—which is known as Wetland X, it was determined that that should be trapped, or traps should be set, and that was done over a period of eight nights over two weeks. There were 200 traps set, and every day, every morning, a biologist or two—couple biologists would go out and check the traps and remove any mice that were present. And then also for the perimeter wetland areas, they preferred to do basically passive relocation, which basically meant to start on one end with weed whackers and start cutting the vegetation and kind of herding the mice toward the area that is outside of the work area. That work was done in July of 2006, and we recovered three salt marsh mice. Those are three very expensive mice. But once that was done, we—within areas next to pickleweed, existing pickleweed areas, we also installed silt fence, which is a solid plastic fencing that is typically used for controlling runoff of silt, but it also was used, in our case, to be a barrier for the mice, and we also had a biological monitor that would come out from time to time. So this is what—this is Howard's thumb holding the mouse before he relocated it to a safe area outside the work area, so we were able to get—he paused briefly for a paparazi to take this photograph before he was relocated to a safer place.

So once all that was done, then the next phase was to excavate the wet—the upland areas next to these existing pickleweed areas. And it's kind of hard to see on this photo, but if you have your handout, maybe you can see this kind of the dark boundary here is the silt fence along the edge of the existing pickleweed, which is out in this area (indicating). And what we're doing here is excavating the soil down to a lower elevation so that it would be able to transform into a wetland. And this shows that, you know, a really large area that's already been excavated, and the silt fence has now been removed, and this is the existing pickleweed, so now this elevation is roughly the same as that elevation. And what these folks are doing here is planting the native species plants, and the way they did it was they put it on a grid system. So they cut holes in a tarp and then they would put different colored flags for the different types of plants; and then once they inserted the flags into the holes on the tarp, they would lift up the one end and just rotate it and put it down next to it and repeat the process and basically just step their way across the area. And you can kind of see some of these flags out in this area that have already been set and a couple of folks back here actually doing the—doing the planting. So this is kind of the—well, this is a breakdown of the plants that were provided in the—in the new wetland areas: 14,701 plants of Alkali Heath, Salt Grass, and pickleweed. That's been done. We also have 600-plus pounds of seed with Fat Hen, Alkali Heath, and pickleweed, that will be broadcast in this area, as well, to supplement the plants that were planted. These plants were all grown from cuttings collected on Mare Island, actually back in 2004, so they were grown and cared for in a nursery for two years, and the seeds were also collected from Mare Island. These plants were all installed in the last couple of months, and we actually ended up with, based on the surveyed area of 7.1 acres of the pickleweed wetland area versus the requirement of 6.7, so we kind of comfortably overshot the requirement a little bit. And as I mentioned, we were on the hook to do at least five years of monitoring to make sure that the wetland is actually transformed into—or into a wetland. First year, I have listed the requirements, they are fairly modest. It takes awhile for all these things to take place. But as you can see, each progressive year, there's a higher standard for coverage of the—of not only the native species but also of the pickleweed itself. Again, the goal for the 7.1 acres is to create a pickleweed habitat suitable for the salt marsh harvest mouse. And then for the 1.5-acre ponded area, there just has to be a requirement that it is saturated so many days out of the year, 14 days consecutively out of the

year, which I don't think—will be no problem at all. So there is a motley looking crew there. It's kind of dark on this photo. There is Sanza Friese, Chip Gribble, Frank Gray, and Becky Stanton of Fish & Game. And our illustrious Chip here from DTSC came out to visit the area on a rather cold and rainy day, but—wanted to show them what we've been up to. I would be happy to entertain any questions.

MR. KARR: It looks like you had multiple mitigation ratios you were working with because it—the created 7.2 acres for—what slide am I looking for?

MR. GEMAR: Yeah, I think it's this one here, Jerry?

MR. KARR: Yeah, there you go.

MR. GEMAR: I mean, the overall ratio is about 1.15 to 1; but from a values, functions value standpoint, it was really a 3 to 1 in terms of what will create pickleweed versus what we took out pickleweed and ponded area versus non-ponded. So from a functions value standpoint, you know, I think you are getting a pretty good bang for the buck.

MR. KARR: And how many non-salt-marsh mice in your traps? Did you get a lot of other voles, other rodent species, shrews?

MR. GEMAR: Well, we only got one shrew, and I think we got 85 house mice, and we released them right behind Wendall's house, actually. No, we took them out to one of the wetlands to the north. So, yeah, there was one salt marsh mouse, who must have been lost, and there was 85 house mice, and one vole.

CO-CHAIR HAYES: Actually, I had the privilege, I guess, of being up like at 3:00 a.m. to go out and help a biologist on a study out at Tolay Creek, who was doing her master's thesis on these little critters and where they live and that the ratio was about the same there. And what her thesis concluded was that the better the habitat, the healthier the Fat Hen and the pickleweed, more water gets to it, the more habitat there is for salt marsh harvest mice. And if you've got a degraded habitat, which your argument was it wasn't really all that great of a habitat—

MR. GEMAR: Not unless you like oil.

CO-CHAIR HAYES: You are going to primarily have—her analysis showed that you primarily are going to have house mouse habitat.

MR. GEMAR: Mm-hmm.

CO-CHAIR HAYES: It looks like you are going in the right direction. But Jerry stole my question there because that's what we found, was hundreds of house mice.

MR. GEMAR: Mm-hmm.

CO-CHAIR HAYES: The other question that I had was—oh, I was just going to make one other statement, and I have done this a few times, that—because salt marsh harvest mice have come up a few times in our conversation over the years. And I just want to note that one of the reasons that I think salt marsh harvest mice are interesting for us to pay attention to is not just because they are a cute little mouse that's very docile and, you know, it's endangered, but because—they are endangered because of habitat loss. Ninety-five percent of the San Francisco Bay's tidal marsh is gone due to filling, and, therefore, their habitat is gone, which is why they are gone, or going. But the reason why we ought to pay attention to them is because they are the only land mammal that can drink saltwater and live. And sometime when we have some oceans rising or some shortages of

fresh water, we might want to be very interested in how they do that, how their body processes saltwater. So if endangered species can have a value besides being cute or costing you a lot of money, then that's the value that little guy has.

MR. KARR: One other—what is the total land area within the slurry wall?

MR. GEMAR: Seventy-two acres.

MR. KARR: Thank you.

MR. GRIBBLE: I had a comment on one of the early slides where you covered the regulatory process and the myriad of agencies that were involved in this effort and—yeah, that's the slide. On the third bullet, the Regional Water Control Board regulates discharge into waters of the State, actually, the—this is as close as you've ever been, Dwight, to completeness. The Army Corps of Engineers is also involved in that one, and in this case, for H1, they were.

MR. GEMAR: Thank you.

MR. GRIBBLE: Army Corps' participation was marginal because this whole project was done pursuant to the Federal CERCLA to a Federal Record of Decision, which meant that the permit requirement, the fiscal permit requirement, was exempt under CERCLA, and, therefore, the Navy did not have to solicit that from the Army Corps, which would have then triggered the formal participation in that permit process with the Water Board. And this is one of the things that would have been a problem if the wetlands part of this whole project had gone ahead prior to the RAB, like the Navy had tried several times to do, so we kept within all of those laws and regulations by having this all done pursuant to a RAP/ROD, as it turned out. Now, the one other side bar to that to keep in mind is in the context of IR 4 site down in the, you know, near the PMA where there is a wetlands, and it's considered contaminated and, in my opinion, is likely to have to be destroyed or impacted to do the remediation work down there some day in the future. To the extent that that's probably going to be part of another early transfer, if that's the case, that it no longer is Navy property, federal property in that—when we get to that remedy, then my understanding is that that would require going through Army Corps and Water Board in a formal sense to get a permit; because that permit, that federal permit exemption, is not—doesn't follow for a State Remedial Action Plan. And, in fact, the DTSC, under Remedial Action Plan, can't waive permitting requirements from other State agencies.

MR. GEMAR: I'm happy that I almost met your expectations, Chip.

MR. GRIBBLE: Well, you did. You did meet the expectations in the context of the RAP that we did for H1, and so that was all kosher, as they say.

MR. QUIGLEY: Outside of the 72 acres, what is the distance from this that will be safe for humans?

MR. GEMAR: Well, I think it's going to be entirely safe immediately outside the fence. The cleanup requirements outside are quite stringent, I think; and then on top of that, we're putting 2 feet of soil that's even cleaner as it will—as it were. So, in my humble opinion, the area outside the containment area—well, even within the containment area, except for issues related to the, you know, protecting the cover, but anyway, I would say that—Chip may disagree—but I think the areas outside will be safe for the intended purpose, which is open space or recreational.

MR. GRIBBLE: There's no basis to disagree with that. The remedy does not include access restrictions for anything other than the containment area, but there will be plenty of restrictions on

the entire H1, or most of H1. Well, of all the entire H1, which will really relate to—there will be monitoring requirements, there will be soil-erosion requirements and soil-disturbance requirements, that type of thing. But public access will not be part of those restrictions for anything other than the containment area. Thank you.

CO-CHAIR BLOOM: Thanks, Dwight. Okay. We are on our first public comment period. Any public comment—

MR. GRIBBLE: Can I go back? That's for DTSC's requirements. But probably the Fish & Game and the Fish & Wildlife Service would have—would feel otherwise with respect to public access to some of that property because it is habitat for endangered species. So I can't speak for them and I don't know what the regulations are, but the idea of people, you know, running free across the wetlands, I don't think, would be—if not illegal, it certainly would cause serious problems with those agencies that have responsibility to protect the endangered species and habitat.

CO-CHAIR BLOOM: Okay. Is there any public comment?

CO-CHAIR BLOOM: Okay. Let's take a very short break.

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Michael Bloom)

CO-CHAIR BLOOM: All right. I think it's time to get back to your seats, please. First we have some administrative business which is really the meeting minutes. If you have any comments on the meeting minutes that were distributed from last month, please get them to myself and/or Myrna so we can incorporate them. I don't have any other announcements, Myrna, do you? No? Okay.

V. FOCUS GROUP REPORTS

CO-CHAIR BLOOM: Okay. Well, we'll go ahead and get into the focus group reports. Community is still vacant, I'm assuming.

a) Community

Vacant. So natural resources, Jerry.

b) Natural Resources (Jerry Karr)

MR. KARR: Well, I wanted to lead with a thank you from the community to Myrna for her efforts on the Flyway Festival. We just had a wonderful, wonderful turnout. I really want to thank her for scheduling the weather the way it was, gee-gobs of folks on Saturday, anyway; and competing with the Super Bowl on Sunday, numbers went down quite a bit. But this is an 11-year operation. Myrna did an outstanding job again herding cats to pull this thing off. But I personally want to thank Weston and—for the support, personal support to me by providing a little ATV that allowed me to run people out into the marsh. Some of the volunteers that I had manage stations, some of our bird-nerd folks, are getting up in years, and some of the folks would not have volunteered without that piece of equipment to run them back and forth; and so Weston and Lennar, City of Vallejo, everybody that really cooperated. You know, when—you come and we sit here and butt heads every once in a while over issues, but when it comes for the greater good, it seems like everybody can talk to each other in a much more civil manner. So thank you to all of the contractors, agencies, the Navy, and the City of Vallejo for all of the great cooperation and effort.

MR. FARLEY: Jerry, if I could add one thing. I attended the functions over in Petaluma, and it was well attended in Petaluma both Saturday and Sunday. So it's reaching out and getting attention from lots of folks in the area, so it was a great event in Petaluma.

CO-CHAIR HAYES: Yeah. We're very lucky that folks in Petaluma take the festival very seriously, and they've dedicated an outing a day at their Shellenberger Marsh, and the Petaluma Visitor's Center is very involved in promoting the festival in that area. That's not unlike many, many communities throughout the entire Bay. When it was first founded, we called it the Northern San Francisco Bay Flyway Festival, and we only called it that for the first year because, quite frankly, almost immediately it just caught on throughout the entire Bay. And we had 65 outings this year throughout San Francisco Bay, including about 30 on Mare Island. And it is just a tremendous labor of love by people who you will never meet unless you happen to hook up with them, like Steve did on an outing over there in Petaluma, and just all over this region, and it's just what's evolved. And we're very unique throughout the country in having as many historical outings related—connected to a birding festival. And that's also something that people will write and say, you know, we like birds, but, surprisingly, we actually like historical places even better, and please keep doing what you are doing. So, there again, that is a tremendous coordination effort on the part of a lot of organizations and agencies from the City of Vallejo, Gill's staff, to Lennar, the Mare Island Historic Park Foundation, and lots of other organizations, the Navy, getting us access to the south shore. We understand Ken Browne took over 60 people out along through the Western Magazine and out to the end of the mine loading pier, so just a—and over a hundred, maybe, thirty people, forty people on Saturday night to the naval ammunition depot birthday party, and Dwight had gotten a cake for 50 and somehow or another we made it work. It just shows you that the good side of reusing a military base, if you can get it cleaned up, is not just for homes or just for businesses, but it's when it all gets glued together in events like this. The Welcome Center for Lennar is thrilled with the number of people who came through their offices that weekend, too. So they wrote me an e-mail today and were very eager to get the photos and be able to promote it even more for themselves for next year, so okay. We're going to go overtime on that topic.

CO-CHAIR BLOOM: Paula, technical.

c) Technical (Paula Tygielski)

MS. TYGIELSKI: I just want to say that technical didn't actually meet, but I did go to the PMA on—to the birthday party, and it was quite impressive.

CO-CHAIR BLOOM: Gill, City.

d) City Report (Gil Hollingsworth)

MR. HOLLINGSWORTH: Next Tuesday night, the City Council is considering an agreement with Weston Corporation to work with the City or represent the City or—I think work with the City is a better way to put it, on negotiating an early transfer with the Navy. This is the agreement between the City and Weston, not—it has nothing really technically to do with early transfer, it's—other than the fact that it's the legal basis for us negotiating with the Navy, and that would be for the remaining property on Mare Island.

CO-CHAIR BLOOM: Excellent. Thanks, Gil. Steve, Lennar.

e) Lennar Update (Steve Farley)

MR. FARLEY: Thanks, Michael. A couple handouts, an 11 by 17 with a map of Mare Island and then two handouts showing some of the documents that are in the queue. Let me draw your attention, first of all, to the lower left corner. The Documents in Review and the other subcategories there, the only change there really is that we have some additional UST sites that closed since last time. Everything else is pretty much the same. I would point out one thing, if you look at the

documents that are either in document—Documents in Review, which includes the Draft RAP for C1 and the Draft Final RAP for C2, once we get those through agency review and approval, then all of Mare Island, all of the EETP, with the exception of a few small areas within D1 and the crane test area, which is the little sort of L-shaped portion to the west of IA B, will all have gone through and have a final RAP on the properties, so that's a major milestone. That means decision-making is moving forward and deciding what actions are necessary to finish the cleanup within the EETP. In the upper right corner, if you recall, last month we had a nice presentation from Neil Siler on the UVOST work, the ultraviolet optical screening tool. This is a couple photos of the tool, itself, and some of the instrumentation and the drill rig and such that was used to do that work. In the—on the left side, we have a photograph there of some work going on inside Building 637. I mentioned 637 last month. We're doing some PCB removals in there, ripping out concrete, collecting and doing some soil removals underneath the concrete and then collecting confirmation samples or verification samples after that, so that work is still going on. And then the other photographs, the two gentleman in the—in Tyvek that are scooping material into a small bucket, that's some work that's going on in Building 386. Building 386 is one of the—it's essentially one-third of a large building complex down in the southwest corner of the EETP. It's to the west of Building 680. It kind of gets lost in the—behind Building 680, but it's a relatively large building.

The work that is going on there in that building, there's really two things: One is, we have a number of PCB removals that we're doing, and they are relatively small excavations but—we're doing that. But this is focused on doing some additional exploratory investigations using a small backhoe to further investigate some total petroleum hydrocarbons, TPH, that were detected in previous borings. And sometimes borings are very effective in understanding the distribution of contaminants in subsurface, and sometimes things like TPH are—really get a better handle on how that petroleum hydrocarbon is distributed to subsurface if you have a good idea of what the walls of the excavation look like, so we're doing that. And Brian Thompson from the Regional Board came out today, and we gave him a little site tour of the inside of that building on a couple of the excavations that we're doing so he can get an idea of what the distribution of the hydrocarbons are in the subsurface. And then we're also done a number of PCB removals, the small blue circles. And I guess the only other thing is that we're, in the lower right corner where it says, "UST 742," we did a large removal action there some time ago, and the site's been buttoned up, and we're doing some following groundwater monitoring to determine if anything else needs to be done following the implementation of that removal action. And I think that's all I have for this month. Are there any questions?

CO-CHAIR HAYES: When you mentioned petroleum hydrocarbons, I'm always curious about when you, you know, you have these difficult pathways, or you are not quite sure if, you know, the walls, or whatever, why you don't use natural attenuation or some other bioremediation, you know, to get that jump-started instead of this complex excavation? Is it because you have mixes of products that wouldn't all—you don't have a uniform type of product, or what makes you go this—dig it and haul it?

MR. FARLEY: Well, this isn't the dig-and-haul. It looks like a dig-and-haul because it's relatively—it's much larger than an excavation—than a geoprobe or a soil probe, but what we're doing here is trying to understand the distribution of the petroleum hydrocarbons in the subsurface prior to determining whether or not a dig-and-haul or a—some kind of, you know, magic dust, one or more—permanganate, there's lots and lots of different in-situ types of treatment technologies.

CO-CHAIR HAYES: Right.

MR. FARLEY: But in order to propose one of those and have folks understand it and accept it, assuming it's technically correct, you really have to do a good job of explaining what the nature and extent of contamination is in the subsurface, including how does this—how does this petroleum hydrocarbon occur in the subsurface? Is it in the matrix? Is it above the water table? Is it below the water table? All of those factors affect whether or not you can do an in-situ type of remediation, so we're at the characterization phase.

CO-CHAIR HAYES: Okay.

MR. THOMPSON: I can add something to that. You have mentioned that at another RAB meeting, Myrna, so I will address that a little further. One of the things about in-situ remedies is to be a little careful about—there are lots of different types, and many of them target residuals and dissolve-phase constituents, and they don't necessarily do a good job where there's free product. And one of the best things to do at petroleum sites is to try to remove the product material, what would be a source for dissolve phase and then that will facilitate natural conditions to remediate the petroleum. So, for many petroleum sites, since it's a lighter, it floats on water, and if it's shallow, one of the— one of the good remedies is to go and remove as much of the source material as possible and then whatever is left over can degrade on its own.

CO-CHAIR HAYES: Besides degrading on its own, I think the other thing that these presentations that have been done at the last two RAB co-chairs conferences is—by an engineer that the Navy, you know—I mean, he's a great presenter, so that's one reason to have him, but the Navy has invested quite a bit in having him out. And part of his work has been to not just leave it in place and hope it attenuates over time, but to actually understand the pathways that it's taking some— depending on the soil type, it could be a whole different—all kinds of ways, but also to speed up with the magic powder, or molasses, which is his favorite, to actually speed up the organisms, cleaning it up rather than just leaving it behind. But I understand what you are saying about getting the actual source removed. It makes that go faster.

MR. GRIBBLE: I had a question about this, Steve, about the UST 742. Can you tell us what you found there?

MR. FARLEY: There were a couple things that we found in the excavation at UST 742. One, obviously, was the total petroleum hydrocarbons, diesel, motor oil, etc., but we also found chlorinated solvents in that excavation, as well. And we finished—what we did there was—the most recent thing we did was to do a removal action to remove contaminated soil and remove contaminated groundwater within the footprint of the—of the excavation, and we collected confirmation samples from the walls of that excavation. And in some places we found vinyl chloride, which is always, obviously, a problem. And so what we're doing now—in fact, we just had sort of a technical powwow, and some of the things, Myrna, that you just mentioned were some of the topics that we covered relative to UST 742. We're looking at various technologies to treat the remnant groundwater and also looking at whether or not there's some additional characterization that we want to do around the outside of that to determine whether or not there's residual contamination in the groundwater outside the excavation, and if there is, how far it extends. So, in a nutshell, we did a soil removal for TPH. We found—and primarily TCD, and in our confirmation samples and in the groundwater, in a single well installed inside the footprint of the excavation, we found low levels of TCD and we found vinyl chloride.

MR. GRIBBLE: Is that to say that you think that that tank may have had a history of usage other than TPH?

MR. FARLEY: No, but we found those constituents in the groundwater outside of the tank. We don't know that there's necessarily a direct connection, but it's one of the things that we're looking at right now. What is the nature and extent of that contamination? Is it coming from an upgradient source and just happening to move down underneath the footprint of that tank, of that former tank, or in some other migration scenario?

MR. GRIBBLE: And what were you analyzing for?

MR. FARLEY: We were analyzing—in the soil or the groundwater?

MR. GRIBBLE: Both.

MR. FARLEY: Chlorinated solvents, petroleum hydrocarbons, primarily.

MR. GRIBBLE: Were you doing the usual SVOC, VOC—

MR. FARLEY: Yes.

MR. GRIBBLE: -- metals?

MR. FARLEY: Yes.

MR. GRIBBLE: Okay. Thank you.

CO-CHAIR BLOOM: Thank you, Steve. Weston report, I guess that's Dwight tonight.

f) Weston Update (Dwight Gemar)

MR. GEMAR: I'm filling in for Cris tonight. He's down in Southern California. Hopefully everyone has handout. If not, there are some more extras. Regarding document status, we have just a few minor changes yet to finalize to wrap up the H1 remedial design plan, and the—I would like to thank the agencies for their very prompt review of all the analytical data during the confirmation sampling for the wetland creation area. That rapid turnaround helped us get all of the areas excavated during the dry January that we had and allow us to get the plants in the ground so that when the rains came, which they have now, that the plants are thriving because it's very wet out there, so thanks. And a couple other documents that are out for review include a Data Gap Sampling Plan for Installation Restoration Site 5 in the Western Magazine Area, and this is in order to address some comments on the Draft Remedial Investigation that was prepared way back in 2003, but we're attempting to respond to those comments now that most of the workload for H1 is behind us and get the Draft Final RI prepared. And another document that's out for review, although it's not on a real critical path, currently, is the post closure plan for the landfill, which would come into play after the containment cap is— construction is completed. And then regarding the containment area itself, I included a photo showing our western slope. It's turning nice and green. Photo really doesn't do it justice. It's a nice emerald green. It kind of looks like Ireland, you know. It's very nice. The geese like it. So it's—like the saying goes, it's like watching grass grow, but that's exactly what is going on in the containment area. The extraction system was restarted in late December, and that's pumping about 30 gallons a minute, and I already, of course, mentioned the wetland creation area work, so I won't go through that again. And as far as munitions-response activities, we've moved on from the WMA and now are working at Installation Restoration Site 5 in Dredge Pond 7 South at the south end of the island. And so far, as noted in the text, we have about 900 anomalies that we've excavated and haven't— recovered 43 live munitions items and 300-plus inert munitions debris items. No radiological buttons have been encountered. As I indicated, 41 out of the 43 recovered MEC items were found in one disposal pit. So far, we haven't

run into any MEC in Dredge Pond 7 South, although there still is an outfall that we need to excavate, so it wouldn't surprise me if we find something there. So we've already covered about 75 percent of the land mass there. We did run across a large item as shown in the photograph. This is an anti-submarine hedgehog that's about 3-feet long. And the UXO technicians inspected it, and it does appear to have an intact fuse, but we don't know if it's fully charged or not and we probably won't know until the item is destroyed and determined if it goes high order or not. So, if it is full, it has 30 pounds of explosives in it, so that's a rather interesting item.

CO-CHAIR BLOOM: Thanks, Dwight. The regulatory update is next, Chip.

g) Regulatory Agency Update (Chip Gribble/Carolyn D'Almeida/Brian Thompson)

MR. GRIBBLE: We've been working on reviewing data from the DRMO scrapyards site where the Navy is conducting a removal action, and it appears that the Navy has reached their cleanup goals for that, for that area, which is only the fenced portion of the DRMO. I think it's called FSA. I forget, what does FSA stand for again?

CO-CHAIR BLOOM: Former scrap yard.

MR. GRIBBLE: Former scrap yard area, FSA. And so that appears to be done or consistent with the Removal Action Plan, which is consistent with an industrial scenario. There's still considerable levels of contaminants there, but the—you know, presumably consistent with an industrial scenario. Outside of the fenced area, we believe there's likely to be additional excavation or cleanup needed still on the Navy property, and we're trying to have that—hopefully, we would have that integrated into this Removal Action that we're planning for the summer, the Consolidation Removal Action, so that we can deal with the remainder shallow portion of that site. And also looking at data from the Marine Corps Firing Range, and apparently there's a little bit more excavation needed out there, and I guess that's about it. That's all I have.

CO-CHAIR BLOOM: Thanks, Chip. Carolyn?

MS. D'ALMEIDA: Is this on? Okay. I brought a copy—copies of a letter that I sent off earlier this month regarding the degreaser plant outside of Building 742. And the main issue here is really a site-control issue that I'm particularly concerned about. This is not a site that's received a whole lot of attention in this forum, but this goes back to prior to the eastern early transfer. Some Vallejo City workers found, while cleaning out storm drains, found solvents and PCBs had been discharged to the storm drains, and that was a Navy-retained condition, Navy-retained responsibility, for cleaning up that problem. And after the storm drains were cleaned out, they are now in the process of investigating sources for where these discharges might have come from, and they have identified one source that's just up the line from that manhole. It was a former degreasing plant right outside of Building 742, and this is in regards to the expanded Site Inspection Report that was done on that building, and it was noted to be of concern that the risk assessment, preliminary risk numbers for that site were very high. And the concern that I wanted to raise was that we need to make sure that there is not a site-control issue, that any tenants are not being exposed here, because the numbers really are of concern and we haven't got any more information yet as far as the extent of it yet.

MR. GRIBBLE: On that point, there was a meeting last week with the—meet-and-confer meeting with the Navy and Lennar and CH2M Hill on some of the Navy-retained conditions. This was one of them. And Carolyn, unfortunately, was not at that meeting, but DTSC was also present, and the Water Board was present, and that was one of the sites that was discussed and that there are some complications between Lennar and the Navy, you know, in terms of timing of whatever. And one

of the things that we're doing as an outcome of that meeting is we're writing another letter to the Navy to provide them more feedback on what the characterization needs are that we think still need to be—to be gathered. And in preparing that letter, we're—letter, we're going to be coordinating with Water Board and EPA to try to make this as complete of a—of it, you know, a definition of additional data needs as we can at this time.

MS. D'ALMEIDA: Yes. My concern, particularly, had to do with any potential exposures in the meantime, while we're investigating it. I don't know if there are any tenants in that area or—the concern really has to do with soil gas, high concentrations of solvents and soil gas that might be migrating into buildings, which I don't know if they are occupied. I don't know who is down there.

MR. GRIBBLE: And those are levels at risks at industrial scenarios, industrial-use concentrations; so that if there are—potentially there may be occupants of those buildings, according to your analysis, that could be excessive for occupants, right, industrial occupants; is that correct?

MS. D'ALMEIDA: That's my concern. I don't know if there's anybody down there who could be exposed.

MR. SILER: Yes, Neil Siler with Lennar. Carolyn, there aren't any tenants down in that area. Building 742 is vacant, and that's one of the reasons why it is vacant. 680 is the one that's immediately up gradient. That's vacant. 678 is currently vacant, which is the one right across from there, but there's a potential to have somebody in that building and actually store some materials in there, and that's really about it in the area. Everybody else is—in that area is actually out in the open air, so there's no confined space inside the building so that somebody would be exposed to the indoor air.

MS. D'ALMEIDA: Okay. Thank you.

CO-CHAIR BLOOM: Thank you. Brian.

MR. THOMPSON: Let's see, this last month I've spent a little more time in meetings and on the phone than I typically do. Just seems to have been a lot of meetings or site visits, and some of the ones that I will mention are, as Steve mentioned, I was out today to see some test-pit excavations in IR 21. We've been talking with Lennar Mare Island about a lot of the petroleum sites and the screening that's done there, potential restrictions on land associated with residuals that could remain in the ground and also on updating the Water Board order for the area. Let's see, I'm currently looking at the fuel oil pipeline and reviewing investigation work that was done for that. With the Navy, we've had some recent meetings to kind of bring a resurgence. It sounds like there's a resurgence on their end of looking at the UST sites, and we've had some discussions about how to move those sites towards closure. Let's see here. As Chip mentioned, we've been in meetings where there's been discussions of boundary areas where there's responsibilities for environmental cleanup on one side by the Navy and on the other side by Lennar/CH2M Hill and how it's going to be taken care of. And Linda Rao of our office has been looking at Data Quality Objectives for offshore sediments.

VI. CO-CHAIR REPORTS

CO-CHAIR BLOOM: Next is our co-chair's report. You want to go first, Myrna?

CO-CHAIR HAYES: I don't have anything.

CO-CHAIR BLOOM: Don't have anything, okay, then I will go first. Everybody should have a copy of the handout. The Navy's actually installing a fence at the Production Manufacturing Area,

and currently we're clearing the site and locating utility lines. It's expected to be completed in—sometime in March. Chip mentioned a DRMO fence scrapyard area where we're going—we have concurrence to go ahead and start backfilling that area and then we'll produce a Fieldwork Summary Report for that removal action. We were at the Flyway Festival, couple pictures of our booths, and actually we brought our posters that actually I think are really nice. We'll probably keep bringing them and use them elsewhere for that. If you turn your report over, it tells you that the Navy did not submit any documents during this reporting period. I actually can't believe it, but it's true, but we will look forward to documents coming out next month and the following month. We did receive comments from the agencies on four different documents, on sediment, on the Data Quality Objectives, on the report that Carolyn was talking about, our Draft Site Investigation Report, and we received Response to Agency Comments on our Draft RAP/ROD for Site 17 and that Underground Storage Tank Summary Data Report. And Gill had already mentioned an early transfer update, and we're just looking forward to that all kicking back up and getting started on that.

CO-CHAIR HAYES: I have a couple of comments on this fencing that you are installing. Is that going to have a lock on it so that people like Ken Browne, when he does his walks to the south shore, will be able to access?

CO-CHAIR BLOOM: David is shaking his head “yes.”

CO-CHAIR HAYES: And is, like, everybody who is currently accessing that area going to be able to keep accessing it? I have seen some people who I don't think have any business being there. They didn't have a very good explanation for why they were there, um, at the gate. I'm only talking about this a lot because I happened to be down there a lot preparing for the festival, and people who I know don't work for the Navy or for any of the subcontractors were going through the gate, so—and they were kind of caught off guard that I was sitting there guarding the gate. So is there going to be a little bit more site control with this?

MR. GODSEY: Well, you share the same concern that we have with the controls at the current gate situation are not adequate. We also have that fence across there that is kind of denying access to the City to their own property.

CO-CHAIR HAYES: Right.

MR. GODSEY: So we'll run a fence alongside our property boundary. We'll have the—the gate that there is now, we'll kind of leave that up to the City as to whether or not that will be actually locked, but we'll have other access gates along our fence that will allow people, given the required permission, will be able to access; like Ken would be able to access with his tours and stuff like that, but hopefully we will be able to hold more control over the access to that area.

CO-CHAIR HAYES: Then under item 4, you say that the City of Vallejo selected Touro University to redevelop the north end of the island. “The remainder of the property that will be transferred to City of Vallejo will be redeveloped by Lennar....” That's not my understanding of the South Shore Regional Park Area unless that's some news that I haven't heard about. So far, we're still planning for it to be a regional park, so is this a typo?

CO-CHAIR BLOOM: Yeah, that part is.

CO-CHAIR HAYES: Is this a strategic stealth move?

CO-CHAIR BLOOM: No, that's a typo.

CO-CHAIR HAYES: That's a typo.

CO-CHAIR BLOOM: Yeah.

CO-CHAIR HAYES: Okay, good. So you will correct it for the record?

CO-CHAIR BLOOM: It's corrected.

CO-CHAIR HAYES: For now.

MR. HOLLINGSWORTH: Hey, Dave. Don't forget, when you put that gate up, let the fire department know about that new lock if you change that combination, because they have two ways of getting in: One of them is take down the fence with the truck.

MR. GODSEY: Right. We'll talk—we'll discuss with the City who is going to have access.

MR. HOLLINGSWORTH: Yeah. I just wanted no one to lock it up without the fire department knowing because they'll get excited. They do have a set of master keys, called a truck.

CO-CHAIR BLOOM: Okay. Is there any other public comment? We're on our second public comment period. (No response from the audience.)

CO-CHAIR BLOOM: If not, we'll adjourn. Thank you.

LIST OF HANDOUTS:

The following handouts were provided during the RAB meeting:

- Presentation Handout – Summary of Findings from IA F1 Sampling Event, Winter 2006–Navy
- Presentation Handout – IA H1 Wetland Mitigation Activities – Weston Solutions
- CH2MHill/Lennar Mare Island Deliverables Schedule February 2007
- Mare Island RAB Update February 2007 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard February 2007

(Thereupon the foregoing was concluded at 9:08 p.m.)