

**MARE ISLAND NAVAL SHIPYARD
RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES
HELD THURSDAY, JANUARY 25, 2007**

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, January 25, 2007, at the Mare Island Conference Center, 375 G Street, Mare Island, Vallejo, California. The meeting started at 7:07 p.m. and adjourned at 9:06 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
- Kenn Browne
- Gerald Karr

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

- Michael Bloom (Navy Co-Chair)
- David Godsey (Navy Lead RPM)
- David Clark (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)
- Tessa Bemis (Tetra Tech)

Community Guests in attendance:

- Bob Bancroft
- Jim Davies
- Diji Christian
- James Porterfield

RAB Support from CDM:

- David Lange (CDM)
- Doris M. Bailey (Stenographer)
- Wally Neville (audio visual support)

I. WELCOME AND INTRODUCTIONS

CO-CHAIR BLOOM: Welcome, everyone, to the January, 2007, Mare Island RAB meeting. We'll go around with introductions. We'll start with the introductions. I'm Michael Bloom. I'm the BRAC Environmental Coordinator for the Navy.

Attendees introduce themselves as requested.

**II. NAVY PRESENTATION: *Review of Navy Environmental Program – Fiscal Year 2006 Accomplishments and Fiscal Year 2007*
Presentation by Michael Bloom, Navy.**

CO-CHAIR BLOOM: I'm going to get started with the first presentation which I'm going to give. I'm going to give a presentation tonight kind of reviewing what the Navy did in the environmental

program this past year, and we'll get to what we hope to be accomplishing this year in 2007. And again, that's the Federal Government's fiscal year which begins October 1st and ends September 30th. So if everybody picked up a handout—how I kind of organized it was by three different sections—actually two sections and three subsections. But we're going to talk about what we did this past year first. Then we'll go into what we're doing now. And what we'll accomplish through the rest of 2007 in the second part. And I've broken it up into three areas: basically the field work—hi, Myrna—the field work that's—the field work section; documents that are—were distributed and will be distributed; and then what we've done at the RAB and community outreach activities. So you can—and obviously this is just a laundry list of all the field work that we did. And at the end or even in the middle we can take questions—if anybody has any—on any of these projects. But the first one on there is the geophysical investigation at the production manufacturing area and south shore area. Most people probably know that by the acronym PMA and SSA. And so we performed that this past fiscal year. We also did our—we had a couple presentations on the non-time critical removal action at the DRMO area, specifically the former scrapyards section of that. And there's even a little bit more of that in our—in my monthly status report that I'll talk about a little later on. And specifically what we did is we—the action that we were working on was removing the oil sump box also that was adjacent to the DRMO. We did some PCB sampling in investigation area A2. In investigation area F1, you can see there are three areas that we worked and did additional soil and groundwater sampling, PCB sampling, and also additional tank sampling—underground storage tank sampling in the F1 area. As far as the MEC or munitions and explosives of concern, we did work in the offshore area. We did an intrusive investigation at the Marine Corps Firing Range. We did a removal action. And that was a big job, I should say, and I believe that was presented here at the RAB as well. And also with our MEC work we did an open burn open detonation operation to dispose of some MEC.

As far as the documents that went out. Some—the first one on here—I should say—was a draft final FOST, finding of suitability for transfer, for two areas, two separate FOSTs. One was the elementary school parcel, and the other one was the northern sliver parcel. And in addition to that, we worked on the RCRA, Resource Conservation and Recovery Act, corrective action determination. So once those are both—and, in fact, both of those just ended the public review comment period. And so we're on our way to finalizing those FOSTs and the RCRA part of it so both of those parcels will transfer. We have a Draft Final Remedial Investigation that went out for the F2 area. And we issued a Draft Final Summary Report for that removal action at the Marine Corps Firing Range. We had a Draft ESI or Expanded Site Inspection for the degreasing plant or building 742. We had a Draft ROD—RAP ROD for the site seventeen area. And we also issued a Draft Supplemental Site Investigation Report for the reserve pier—the fleet reserve pier and berth one and two. Here's a happy group up there. I think everybody was happy anyways. That was at our—just last month when we had our RAB tour. But as far as the community relations activities and outreach, there were eleven RAB meetings last year. We—the Navy participated in the last year's Flyway Festival—and we're going to do that again next week. And there were two RAB site tours, May and December.

Okay. So for this year. We're going to continue on at the DRMO area removal action on the remaining areas of the DRMO. We're going to complete the geophysical survey report at the PMA and SSA area. We're going to do a little bit more work at the Marine Corps Firing Range removal action. One of the bigger projects that we hope to accomplish this year is a time critical removal action at four areas; the horse stables, the paint waste site, and IR04 which is the F2 area, and part of the DRMO, and consolidate all of those soils into the H1 landfill before it's capped. And then

we're going to do some work in the—the last two bullets are the underground storage tank areas, 655 and then A225 and A267. And then I've got another laundry list of public documents that are coming out. And I don't necessarily need to read through all of them. I mean I think it's easier, I just wanted to provide a list, and it's varied. You'll see some RAP RODs, you'll see some RIs, you're going to see the final FOSTs for the two areas that I mentioned, and geophysical survey reports. You can click on the next slide. Let's see. And again, an action memo for once we get going on the time critical removal action. So there's a variety of reports that everybody will be reviewing and writing comments on. And again for the RAB. Of course, we're going to be holding our RAB meetings, have our RAB tours, and next week helping at the Flyway Festival. That was it. I just kind of wanted to provide it so you can take that home or back to the office and look at it. But I'd be more than happy to answer any questions. Are there any questions?

CO-CHAIR HAYES: Nobody has any questions but me? Can you tell us—would you be willing to tell us a little bit more about your time critical removal action plans at those four locations? For example, IR04. When we visited there on the RAB tour, I'm not quite sure that that was clear about what you were going to accomplish or how you were going to do that. Do you have anymore vision at this point, or can you tell us what you're cooking up there?

MR. GODSEY: Well, we sometimes call IR-04 the green sand area. It has a tremendous amount of green sand that was deposited there over the years from sandblasting operation. And right now we've characterized it and it appears to be a significant ecological risk. Now a lot of the sandblast debris has actually migrated out into the strait, but we don't intend to remove any of that because some of the issues associated with that require more long term study. So we're going to try to grab as much of that green sand as we can excavate between now and when we get our documents issued; say between June and July 2007. So we will capture as much material as we can and move it into the landfill. But it's only going to be in the open portion, and we'll probably take a depth of what we're going to excavate down to, probably at least four feet over as much as we can that won't significantly impact the beach area. Now, the other sites, the horse stables, that's also impacted by a little bit of green sand. It's also an ecological problem, and we want to excavate that material and also place it in the landfill. Then we have the paint waste site which is that area that's out there in the middle of that former dredge pond. It appears to be impacted by lead and also the debris, so we figure we'll just go ahead and excavate as much as we can there. We'll clean up these sites and won't leave them around for later problems to occur, and consolidate them at the landfill.

CO-CHAIR HAYES: Thanks, Dave. I think you did remind us of IR—what part of IR-04 you're talking about, the upland area. Then on the horse stables, are you going to be doing any lead in soil removal around them as well?

MR. GODSEY: Well, we're not—

CO-CHAIR HAYES: Or do you not have elevated levels there?

MR. GODSEY: Well, we went out there two years ago, I guess, and we cleaned up the area of the riding ring. There was—apparently they used a lot of that green sand as—to keep the dust control around the stables and the riding ring. Well went in and removed as much as we could. But then we found additional after the removal action was done. And a lot of it has kind of moved out behind the building down near the wetland area. So it is some lead, and there's some chromium and nickel that are above eco screening values, so those are values that normally would, you know, require

some attention. So we're just going to—rather than study it some more, we just want to get out there and remove it.

CO-CHAIR HAYES: So that is—but that will also include the—just what we expect will just be plain lead in the soil around the perimeter of the building from probably lead based paint?

MR. GODSEY: You know, those buildings don't look they've been painted much over the years so I'm not certain how much lead they contain.

CO-CHAIR HAYES: That's probably because it all washed off and it's into the ground.

MR. GODSEY: So if there's any lead—elevated lead, we'll certainly take care of that too.

CO-CHAIR HAYES: Okay. Well, all right. That's it. I have another site I was thinking you might want to work on, but I don't think you want to put PCBs in the landfill. But it's that little transformer pad you have the dispute with the city on. Maybe you could just get that done real quick too. But—all right.

CO-CHAIR BLOOM: Any other questions? If not, Neal, I'm going to let you set up there.

CO-CHAIR HAYES: While Neal is setting up I'll give you something so you don't have to pay any attention to his presentation. No. I'll pass the Flyway Festival schedules around.

MR. GRIBBLE: Michael. Michael.

CO-CHAIR BLOOM: I heard something; I didn't know who said it.

MR. GRIBBLE: Myrna's comment about the PCB transformer building, the issue with the city, I think that's something that maybe we can talk about later.

CO-CHAIR BLOOM: Yeah, okay.

MR. GRIBBLE: We still haven't figured it out. I think we mentioned that once upon a time. At this point I guess we still don't have any idea what—how that's going to be resolved. So—

CO-CHAIR BLOOM: Okay.

CO-CHAIR HAYES: The gist of our conversation over here is that Jerry, you should know, is actually going to do two tours on Cullinen Ranch. He's always done two, and somehow or another he only got in for one slot in this schedule. So add a 9:00 to 11:00 on Sunday morning on this schedule for Cullinen Ranch. If you have to go to church and are going to miss the—well, you could do church either morning or afternoon, because he's going to be at his church at 12:00 o'clock. And the rest of what we're talking about is simply the fact that everybody who's got photos up on our website got credited, including Jerry Karr, and he's, like, pretty full of himself.

CO-CHAIR BLOOM: Okay, Neal.

III. LENNAR PRESENTATION: *Additional Proposed Investigations at Underground Storage Tanks 102 and 142 in Investigation Area C3 and Three Former Fuel-Oil Pipeline Segments in Investigation Area C1*
Presentation by Mr. Neal Siler, Lennar Mare Island.

MR. SILER: Okay. What I'm going to talk about—I've actually been told I can only use ten minutes up tonight, so I'm going to go as fast as I can here. But what I'm going to talk about

tonight is some additional investigations we've been doing at three sites on the eastern early transfer parcel. And what is kind of neat about this is that we're using—at least a new tool for us to be able to delineate the lateral and vertical extent of petroleum hydrocarbon contamination in the subsurface environment. And that tool that we've been using is called an ultraviolet optical screening tool. And it has a lot of advantages, because in the areas that we're working we really have some surface access problems because we've got some real tight spaces we have to get into. Or we have some actually ongoing businesses that are operating in those areas. And also some of the areas we have some real tight underground impediments that are really hard for us to get through. So this has worked out to be a very, very good tool for us, and allows us actually to gather data very quickly in the field, get a lot of data rapidly, and be able to look at the response we're getting in the field and interpret it fairly fast. And Brian actually was able to see a demonstration of it this afternoon. And what it actually comes out as, it comes out as a 3-D model. You can actually look at everything on a plan and rotate it on the computer screen and see a cross-section subsurface model of it. It's really, really a nice tool.

So the sites we're working at are—okay. Okay. Sorry about that—is underground storage tanks 102 and 142, and they're in investigation area C3 which is down where the dry docks are. And I'll show you a map of where these are. But they were actually installed in 1911. And the use, exact location, and size of these underground tanks has never actually been discerned. So we did a lot of investigations, the Navy did a lot of investigations to try to find the locations of those. We did a lot of geophysical work. But we were never able to actually find those tanks. Although we were able to find an indication of the general area where they were, and we were able to find some petroleum hydrocarbons in the subsurface that gave us some indication of exactly where those tanks were. As you can see, this is the location of those tanks. Again, it's in investigation area C3. They're down—one is actually right to the west of dry dock number two, and one is west of dry dock number three. And this now is probably not going to come out very well. But this is underground storage tank 102 area. And we actually have an operating business that's actually working in building 1326 which is the one that you see in the lower right-hand corner right there. And there's a real tight constraint for them to get their trucks in and out in the back. And with this tool we were able to actually, if we had to pull off a hole we could do it real quick—but it allowed us to move in and out of there real quickly. And we installed about twenty boreholes in this area. The next site, this is underground storage tank 142, and this is down by Cooper Crane. And they have real limited access as to where they can get in and out of the facility. You can see where the pickup truck's parked right there. The actual entrance is just a gate that's down to the lower left which is Nimitz Avenue right there. And that's the only access they have in and out of the site. So again, we were doing a lot of investigations to determine the lateral and vertical extent of the petroleum hydrocarbon contamination in this area, and be able to pull off a lot of the business that were working in the area to operate.

CO-CHAIR HAYES: Can't you move the truck?

MR. SILER: Well, we could move the truck. It's hard to move the building though. Now, the other site that we worked at, and it's kind of a more interesting site that we're looking at, because not only do we have surface physical constraints, but we have very, very difficult subsurface physical constraints. And this is down at three FOPL segments in investigation area C1 which is on the northeastern end of the island. It's the waterfront area down there. And the three FOPL segments transported fuel oil from four underground storage tanks to the other underground storage tanks, and conveyed it to berths three and four right along the waterfront right there. Now, the Navy

addressed these FOPL segments and they did things from removals, they flushed and cleaned some of the segments, but some of the segments they weren't able to actually find. And the problem we have here is we've got free product which is called LNAPL, and that's actually a light non-aqueous phase liquid. And what happens is it floats on top of the groundwater surface. And so because we have these tight physical constraints on the surface and the subsurface—usually when you have the LNAPL, if you try to do very small borings, sometimes you miss it and it's hard to see, you'd like to open it up. But the way this area is situated, without actually severely impacting both the above ground structures and the underground structures, that this allowed us a way to do that. So here's the location of that FOPL area of interest. That's right on the northeastern end of the island just south of building 509. And it's just right east of where the Bay Link Ferry has their maintenance area. Now, again, I mentioned that we have this floating product here. We've got some really high concentrations in the groundwater. You can see we've got 570,000 parts per billion diesel. We've got about 6,300 parts per billion motor oil. And also some polynuclear aromatic hydrocarbons. And they appear to be right up against the strait.

So we really had to go in there and really try to delineate the vertical and lateral extent. So here you can see the three FOPL segments right here. And the red, yellow, and blue tells you exactly which FOPL segment you're looking at if you line it up to the red yellow and blue lines. You can see where the underground storage tanks were located on the west. And then again, as I mentioned, there's a real lot of buildings, a lot of above ground structures. These above ground storage tanks—as you can see, they're marked ASTs up here—is that they've been removed but the pad is still there. And the FOPL segment you can see runs right—the fuel oil pipeline segment runs right through the middle of all that. And if you take a look at it in the cross section down below, you've got what appears as a subsurface wharf which was just built on in there. You've got a lot of electrical running through there. You've got the railroad, the quay wall, all the tie backs in the quay wall. So to open this thing up is going to be really difficult. So we had to find a tool that will allow us access on the surface and allow us not to disrupt any of the subsurface features. And this tool that we're using with the UVOST allows us to do that. So what does this tool do? It basically goes on a direct push drill rig, like a geoprobe. And it uses—the characteristics of some compounds is that when a beam of light hits them, they'll actually get excited, actually emit a wave length of light at a little higher wavelength, and if you have a detector you can actually see that. And so they emit light when you excite them, the photons are excited. So what happens is that this probe goes down into the hole, and it's just like, you know, about two inches in diameter. At the tip of the probe there's a window that's on the side of it. There's an optic fiber that goes down there, emits the light out of the side of the hole. And as they're going down it's hooked up to a computer. It reads the light signal as coming back, converts it to an electrical signal, and then puts it out on graph paper so you can see the response when you're going through there. You can tell—give you an idea if you're really good at interpreting this whether it's a weathered fuel, it's a new fuel, if it's heavier than light. You know, people that use these things to do it, but it's a very qualitative tool. And after we go back in there we're still going to have to go back and try to calibrate the response we're getting on the machine to actual—take physical samples and then analyze those samples in the laboratory and find out exactly what the concentrations are that we're seeing in the subsurface. So at underground storage tanks 102 and 142 we did about 40 borings. Here we did about 60 borings. We were able to get about—between 200 and 250 feet a day to actually do the boring, and actually be able to log that in the field, get their response back immediately, and be able to determine the lateral and vertical extent. And the tip actually—or the probe can actually discern a vertical distance of an inch. You can actually tell between an inch in

the probe. So it's really good, it gives you a lot of fine detail, it gives you a lot of fine detail really fast.

MR. GRIBBLE: Neal, two questions. Is that a continuous reading?

MR. SILER: It's a continuous reading. What they do is when the computer is hooked up to the probe, what it does is when they start driving, it automatically starts—or they can actually start and stop it. But when they stop to put on another segment of on the direct push machine, they stop—the computer stops reading, and when it starts pushing down again they can start reading again. That's how they have got it programmed.

MR. GRIBBLE: And can they correlate to concentration?

MR. SILER: What you have to do to correlate to concentration—it just gives you the response in a graph—you're going to have to go back and take some physical samples and calibrate those readings, and then try to calibrate that to the concentration. Steve, do you have something you want to add?

MR. FARLEY: Yeah, if I could add one thing?

MR. SILER: Sure.

MR. FARLEY: Everything Neal said is dead on. The only other thing I could add right now is that prior to using the tool at the site, the tool was calibrated to a standard type of fuel oil that is similar to what we expect to find out in the subsurface at these locations. So it's not—it's not a precise calibration or a direct correlation, but we did start with a calibration against a fuel FOPL similar to what we're going to find in the subsurface. And what we'll do now is go back, take those soil samples that we've collected, look at the analytical results, compare those to the readings from the UVOST tool to try and fine-tune that response versus concentration.

MR. SILER: Thank you.

MR. KARR: Is this a pre-borehole or is this a hydraulic ram or how does it penetrate the surface?

MR. SILER: What we do is we cut a core. A lot of these areas we're in have concrete or asphalt, so we cut that out. And then just from a health and safety standpoint, to make sure that we're not driving where there is any live electrical wire, we actually hand auger the boreholes down to about five feet to make sure there's nothing—an obstruction. The problem with Mare Island, though, is that you can drill in one place, go down five feet, ten feet, and hit concrete again, and you may have to pull back out and do it again at some point. So that's what we do. But what it actually does is it takes the probe and just drives it into the ground. So it's not like we're putting boreholes and then putting the probe down behind that. So right here this is a picture of actually the computer and graph that reads the signal, converts it so that the operator can see exactly what's going on. And what it does is it gives you a printout—and I'll show you that in the next slide. But as you can see, there's these three boreholes that are circled, right here they have the ellipse around them right here. This is the response that they got for those three boreholes. So you can see there's the one that's the upgradient borehole which is number 324, they didn't get any response at all. They started seeing some response, got a pretty good response at 320, and got a much better response at 316 which was further down gradient along the fuel oil pipeline. So here's what the environmental visualization software looks like. And it actually prints out right on the screen. After they take all the data and they put it in the database, GIS database, and they can actually put all the structures and the subsurface structures under there, and you can see the borings, and it actually gives you a

map of what you're seeing in 3-D on the computer screen. So what are we going to be doing next? We're going to be evaluating and comparing the data to the—at least the plots to the laboratory analytical data. We're going to plot everything on the three-dimensional visualization software. And then what we're going to do is use that data to help to support some sort of a remedy to address the LNAPL. So with that, that's the end of the presentation. Does anybody have any questions?

CO-CHAIR BLOOM: I have a question.

MR. SILER: Yeah.

CO-CHAIR BLOOM: The 3-D software, does it rotate?

MR. SILER: Yeah.

CO-CHAIR BLOOM: You can see totally—

MR. SILER: Yeah, they were actually taking it and putting it upside down.

CO-CHAIR BLOOM: Yeah. Yeah.

MR. SILER: Yeah, Jerry.

MR. KARR: What's the intent of the data, to measure and monitor migration?

MR. SILER: What it's to do is to give us a tool that we can see the lateral and vertical extent of the contamination. Because the way all the structures were on the surface you want to find the source, try to figure out, you know, where it's coming from. And then you want to find out how big of a problem you have. And that's what this allows you to do. It allows you to do a lot of characterization very rapidly. Gives you a qualitative idea of where you need to go next, and then you can go in and actually take the physical samples after that.

MR. KARR: And how will it be determined and who will determine whether removal is required or how long you monitor for migration, and at what point does it become an issue?

MR. SILER: Well, it already is an issue, I mean, otherwise we wouldn't be doing this obviously. And—but what's going to happen now is we're going to be taking that data and interpreting it, and coming up with some sort of ideas to see if there's—identify any data gaps, if there's anywhere we have to go back and take a look at the data. The three FOPL segments I saw today, I think we've got it characterized actually all the way around it. And what's interesting, and I can't show it to you here—if I had the software loaded in the machine and were able to show you—you can take a look at, you know, where you've got a hundred percent response on the software down to a 60, down to a 40, down to five percent, so you can see what the extent would be. Now, exactly what we have to clean up there, we're going to have to go back and take those physical samples, both the soil and the groundwater, and be able to correlate the response we're seeing in the software to an actual physical concentration. And at that point we can make a decision about, you know, what area do we have to actually remove or actually design or remedy to be able to remove that so that we can go ahead and clean it up. And what we'll be doing, we'll be working, obviously, with DTSC and the Water Board in determining, you know, exactly what the proper remedy is.

MR. KARR: And is there—are there other locations where this has been used? I mean, is this a proven technology?

MR. SILER: Yes, it is. Actually it's part of the EPA's—their rapid site characterization techniques. It's been used a lot, actually, in offshore sediments. There's a number of papers if you go on the Website. And the company's name is Dakota Technologies that actually markets this tool and the application, and they've got a lot of proven sites that have actually used this tool.

MR. KARR: Say again their name.

MR. SILER: Dakota Technologies.

CO-CHAIR HAYES: Is that north or south?

MR. SILER: I'm not sure.

MR. GEMAR: Got to be south.

CO-CHAIR HAYES: Yeah, it's got to be south. I have one question following up on Jerry's questions there. You said you have to go back then—I'm not quite sure what you said, but let me ask you this question. Do you—does this provide GPS—is there any linkage in the computer software to GPS coordinates on this so that you can go back and sort of have it—the extent flagged and know where to go grab it?

MR. FARLEY: It's not directly linked to the geoprobe ring that uses—that we use to drive the probe, but the locations where we installed the borings and did the UVOST readings were surveyed, so we have that survey information. So we know what everything is spatially. And let me just add, I saw the same visualization that Neal just described a minute ago, and it is really quite fascinating. And it really gives you quite a feel for the physical setting in the subsurface. It's—and as Neal mentioned, you can look at this thing in three dimensions and spin it just about every direction you want. And you can also look at—the response that you get from this tool is a percent of fluorescence. So you can change those—which is indirectly correlated to concentration. And you can change the percent reflectance that you want to look at, and it will change the—for lack of a better term—the size of the blob that is reflected in the UVOST information. So it's quite a useful visualization tool to understand more about the subsurface. And, as Neal mentioned, one of the really nice things about this is that it gives you a lot of data points with a certain kind of measuring unit, i.e., percent of fluorescence reflectance. It gives you a lot of data points over a study area very quickly.

CO-CHAIR HAYES: Sounds like you're doing some microsurgery kind of stuff where you don't have to do very invasive work to get some good data. And I guess I have a good girl question here, I think. Why do you want to spin that and look at it from all different angles and get all those different 3-D effects?

MR. SILER: Because we can.

CO-CHAIR HAYES: Uh-huh.

MR. KARR: Good question.

CO-CHAIR HAYES: All you guys are sitting around and going, "This is so cool," because you guys can spin it around.

MR. FARLEY: Right. Just to emphasize what Neal said, because we can. And if you had the mouse in your hand, you would do it too.

CO-CHAIR HAYES: Okay. Let's go do it, guys. I'm all ready for it, you have me anticipating. Don't let me down.

MR. FARLEY: If I could ask Dave Godsey real quick, didn't the Navy use this tool at the IR02 sumps?

MR. GODSEY: Yeah. About eight years ago we employed this technology. It was our own vehicle, and we did about three or 400 borings out in IR02, the sumps, to characterize those. And that report is actually out and available if anyone cares to take a look at that.

MR. FARLEY: We actually looked at that report as part of the use of this tool as well. So I just wanted to make note of that because the Navy did use this tool, and we recognize that the Navy used this tool some number of years ago.

MR. FARLEY: So there you go, Jerry, it's proven technology, the Navy used it.

MR. GRIBBLE: Neal, I had some questions. On this one figure which kind of shows the area in a plot view, and it looks like you gridded off the area and maybe sampled in a grid fashion across the area—

MR. SILER: As I put that back on. There we go. You talking about this?

MR. GRIBBLE: Yeah, what's the spacing on those—the grid spacing?

MR. SILER: Do you remember what the grid spacing was?

MR. FARLEY: It's—

MR. SILER: It's about fifty.

MR. FARLEY: I was going to say, it's about fifty feet.

MR. SILER: Yeah, about fifty feet.

MR. GRIBBLE: And did they—did they have this also hooked up to a CPT?

MR. SILER: They're going to come back and actually do CPT's in a number of the borings that we—

CO-CHAIR HAYES: Acronyms?

MR. SILER: It's cone penetrometer technology. And what it does is it's a tool to actually tell you what type of sediment you're going through.

CO-CHAIR HAYES: Ahh.

MR. SILER: So they're going to come back, and they're also going to tie it up to a CPT and correlate the actual type of sediment they're going through, you know, and see where the response is at or the non-response is at.

MR. GRIBBLE: So by the way, when's the last time that you saw—the Navy used to have skimmers out there in the strait because they frequently had oil spillage—seepage out to the strait from this area. The question is, when's the last time that anybody saw oil sheens out there, or is anybody even paying attention?

MR. SILER: No, we're actually paying attention and we do go out and take a look. I've not seen—personally seen any oil. I've been out there numerous times. I don't know how many times CH2M Hill has been out there. But the wells that are actually right along the quay wall right there,

there is some free product in those wells. Steve, do you remember how—what the—I couldn't tell you what the thickness is, but they are seeing some free product in there. I don't think it's very much, but they are seeing some free product in there.

MR. GRIBBLE: Okay. So are you—it sounds like you're looking at some kind of large scale just to dig up the whole area and try to remove the hydrocarbon that way?

MR. SILER: I would say that we're probably going to have to do something to reduce that amounts of hydrocarbons. And I guess we would have to go back in there and dig up as much as we can, you know. I would say that would be a proven technology to do that.

MR. GRIBBLE: If the intent is to try to get a better understanding of the movement of the hydrocarbon in the subsurface, I would think you would probably need a lot more densely spaced data points, if that were the objective.

MR. FARLEY: The overall fundamental purpose of this UVOST work, particularly—at both locations, but particularly at this location—is to really try and get a handle on how much and how likely contiguous the product is. There's a number of other activities that are going on associated with characterizing both the distribution of the free product but also the physical characteristics of the free product. And one of the things that we're looking at is looking at the properties of the product relative to mobility. So, for example, one of the other things that we're doing is we'll be collecting some large diameter core samples, freezing those samples, and sending them off to a laboratory to do different types of tests on the actual free product to assess the mobility of the LNAPL. And simplistically what they do is put it in a big centrifuge and see how many G's—as in the force of gravity—it takes to get this material to move a certain distance. And that gives you a measure of the mobility of the product in the subsurface. So in addition—the point is that in addition to looking at the percent fluorescence, we're also looking at a number of other properties of the LNAPL to try and get some of the answers to the questions that you're asking me.

MR. GRIBBLE: I would think that's why I mentioned the CPT data because I would think that your soil density was probably a governing factor on where this stuff is moving, and if you had the CPT data you could—and if you were—if that's what your objective were, then a tighter grid spacing and a good CPT characterization would tell you—would give you a pretty sharp picture of where it's going. Right?

MR. THOMPSON: I can shed some light on this. I've been working with CH2M Hill and Lennar on trying to get some resolution on these sites. And starting with the USTs, what we had there, as Neal pointed out, we had there some suspect UST sites. There's investigation where they could not find the USTs, but based on some sampling, there was petroleum hydrocarbon impacts in soil and groundwater. And we were scratching our heads trying to figure out where it was coming from and trying to figure out what the best approach is to resolve where the source might be and what the extent of impacts are. And there are issues with putting big holes in the ground, and also with traditional sampling methods where you don't necessarily get continuous recovery and/or see what's in the subsurface. And they came up with this approach which I agreed to. It is—it has been a technology that's been around a long time in the petroleum industry, and is more recently, in the last couple of decades, being applied to the environmental industry. And it is—I had some concerns about the early use of this technology, inorganic matter will fluoresce. So if there's—being in this environment with bay deposits you can get fluorescence. But in revising the technology over time, they're able to pinpoint what is a petroleum fluorescence versus other fluorescence. And in this readout, what they did is—because they're heavier in hydrocarbons that have polynuclear aromatic

hydrocarbons in them, they chose wavelengths that are indicative of those compounds. And so that's the response that we're seeing. So for the UST sites, the advantage of this technology is that they can collect a lot of data spatially over a short period of time so we get more spatial coverage. And it also gives you a continuous reading through the subsurface, so we're able to get a good picture of what's going on in the subsurface. So they—I've been told, I haven't seen the results yet—that they bounded what the impacts were around those USTs. And I did see, as Neal pointed out—they showed me the data point FOPL. And just to partially address what your concerns are, Chip, is that the investigation produced really nice results. You can see laterally where you're getting reflectance and where you're not, which should be an indication of where the product is. Actually let me step back. The reason for doing this was we had product in wells right next to Mare Island Strait and we were concerned about impacts to water bodies. And so in talking with Lennar and CH2M Hill, what we wanted to do was find out how to address the problem, and we realized that we didn't really know enough about the problem. And so this technology has been utilized to define where the problem is. And they've done a really good job of getting results that have defined laterally and vertically where they're getting high reflectance values. And so now the job, since reflectance is a qualitative assessment of what's there, they need to refine what kind of response they're getting relative to what concentrations are actually in the ground, which is the next step.

MR. PORTERFIELD: I'll assume everybody knows there was a tug pier structure in the area pre-1954.

MR. SILER: I wouldn't doubt it for a minute. There's actually—in the subsurface when you go down, there appears to be a wharf that extends out. And one of the things that we noticed in the software is it looks like some of the LNAPL goes along the top of the wharf, and then all of the sudden there's an area where it drops down and you pick it up down below the wharf, and another area right by the spray. So that could be what we're seeing in that area.

MR. PORTERFIELD: On an old map you can probably find it or an old photograph. But it was an L shape, and maybe a hundred foot or so out into the channel, a couple hundred feet long, and that's where all of the tug boats tied up. And you'd practice on a boat, you'd never return to the pier without first topping off the tanks.

CO-CHAIR HAYES: Jim's an incredible source, isn't he? You ought to have him on your staff. I have a question about if it was a challenge for you, if this is the tight quarters for doing analysis and characterization, I thought I heard you say you were then going to go dig it up. So why wouldn't you be doing some of this very innovative feeding of the—if it's a hydrocarbon, won't it—wouldn't it be responsive to in-situ treatment? That's the Navy's given—they had some of their consultants giving us some really impressive information on that at our last two RAB co-chairs conferences.

MR. FARLEY: There are a lot of things that we're looking at and evaluating in terms of response action. It's premature to say what we're going to do and what we're not going to do right now. This, the whole purpose of this investigation plus—that Neal described—plus the other activities that are going on in terms of the chemical characterization or the soil samples, the mobility assessments, all of those kind of things hadn't even been completed yet. So to determine based on what we see so far that we should go out and do some in-situ, it's just premature. But those are things that we are looking at and we are thinking about. And as the data comes back and we have a

better picture of what's going on, clearly we'll be able to report based on these findings with recommendations that go along with it.

CO-CHAIR HAYES: Well I wasn't—you know, trying to say—cause you to make a statement that you would use in-situ. Sorry if it sounded like that. It really was—I thought I heard you say, and then we'll know where to go dig.

MR. SILER: That's right.

CO-CHAIR HAYES: And I didn't think that that made a lot of sense after you had the truck in the way and all those—and, you know, you were trying to do tight quarters why you would go—first thing off go dig it all up if there was another route that might be an alternative. I can see that you've got more work to do, but I was just commenting on that because I heard someone say that.

MR. SILER: And I think what I said was that, you know, actually digging it up was a way of doing it—an effective way of doing that.

CO-CHAIR HAYES: Oh, yeah. Yes.

MR. SILER: We'll also be looking at those in-situ things, you know, those treatment techniques to see if those can be applied also. We haven't decided on a definitive remedy, but we'll be looking at a number of remedies for these areas.

MR. FARLEY: If I can just wrap up with one thing? I think, A, Neal did a great job of getting to the point and highlighting the important elements of what we've done. And I thank you for taking the time to do that presentation tonight, I think you did a great job. Also I—it's a really good tool for the two sites—

MR. SILER: I want you to know that we pay CH2M Hill.

MR. FARLEY: Actually the Navy pays.

CO-CHAIR HAYES: Well actually the American public pays.

MR. SILER: I actually get to sign off.

MR. FARLEY: You approve it, they pay it.

CO-CHAIR HAYES: Through the city.

MR. FARLEY: Exactly.

CO-CHAIR HAYES: Thank you. Thank you.

MR. SILER: It's a convoluted path.

CO-CHAIR HAYES: We pay the taxes.

MR. FARLEY: The important thing is that this tool, at least where the three FOPL segments are located, this tool looks like it's worked very well in giving us a lot of data to help us understand the nature and distribution in an area where there are lots of constraints—physical constraints, both above ground and below ground. And I'm pretty excited, and I know the guys and gals that are working on the project are very excited about the preliminary results. And I just—I just do think it's so cool to be able to spin the thing and—

MR. SILER: And Myrna, if you want to come over and do that, we won't charge you very much.

CO-CHAIR HAYES: Well, my rates aren't too bad to have my presence there.

CO-CHAIR BLOOM: Thanks, Neal. We're at the public comment period. Is there any public comment? First go round. If not, we'll take our ten minute break.

(Thereupon there was a brief recess.)

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Michael Bloom)

CO-CHAIR BLOOM: We're on our administrative business and announcements. And first I'll ask if anybody has any comments or changes or questions to the November 30th minutes, please get them to myself and/or Myrna. We'd appreciate that. Any announcements, Myrna, in this area?

CO-CHAIR HAYES: No.

V. FOCUS GROUP REPORTS

CO-CHAIR BLOOM: Okay. We'll go ahead and move onto our focus group reports. Community is still vacant, I'm assuming.

a) Community

Vacant. So natural resources, Jerry.

b) Natural Resources (Jerry Karr)

MR. KARR: Thank you. Just working on Flyway Festival issues this month and staying out of Myrna's way. It's your best course of action.

CO-CHAIR HAYES: Thank you for that compliment.

c) Technical (Paula Tygielski)

CO-CHAIR BLOOM: Thank you. I believe Paula, technical.

MS. TYGIELSKI: Nothing.

CO-CHAIR BLOOM: Nothing. Gil.

d) City Report (Gil Hollingsworth)

MR. HOLLINGSWORTH: As indicated in the Navy's report—on the back page of the Navy's report, the city is in the process of—the city development team is in the process of early negotiations with Weston to be the prime contractor for the cleanup of the remaining acreage on the economic development conveyance acreage on Mare Island which would be somewhere in the range of about 306 acres that are remaining that have not—does not have a cleanup source associated with it. Should those negotiations play out, I would anticipate the city development team taking something to the city command—city council between now and our next meeting to proceed with the negotiations with the Navy for the early transfer.

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

e) Lennar Update (Steve Farley)

MR. FARLEY: Thanks, Michael. Okay. We've got our two regular handouts, an eleven by seventeen sheet with the Mare Island map and some photographs, and then a one page summary of some of the reports that are in progress. Grab one. If you can't find one, let me know and I can send you one. A couple of things to point out. We start with the photographs, start in the upper right corner. A couple of photographs for sewer line work that we're doing along dry dock number two—on the east side of dry dock number two. And basically we're removing a segment of the

sewer line that runs along the railroad tracks. It's plugged with sediment, and sediments in that stretch were contaminated with PCBs, and so we just have to remove the entire line. I might add that it's really quite fascinating, once the line was out, the subsurface structures out there must just be enormously conservatively built. The pipeline was set on piers about five feet apart that looked like they went down ten or fifteen, twenty feet down. Just amazing. It went right past the big blue crane. So I'm sure there's—there was a lot of concern at the time all that was built for stability and that sort of thing. So just another example of some of the fascinating things you find once you start digging holes out there. So that's the work that we're doing for the sewer line.

In the left side, these are photographs that I took inside building 637, and the location of 637 as shown at the end of the arrow. And in the lower right corner it's a saw that we used to cut the concrete. This is—the work that's being done in this building is because of PCB contamination in concrete. And so we go in and cut the concrete in whatever size area we need, five feet square, ten feet, something on that order. And then we use a hoe ram, which is a hydraulic device that's attached to the end of an excavator, and use that to break up the concrete into manageable chunks. And then that gets taken out and disposed of properly, and we'll come back and collect confirmation samples after that. And one of the really important things, if you'll look real closely—it's a little hard to tell where the excavator is working, both those guys are working in respirators, we've got dust control, there's a lot of concern for health and safety when working in buildings like that and with that kind of activity. So just some examples. Yes, Myrna.

CO-CHAIR HAYES: But why isn't the concrete sawing guy?

MR. FARLEY: Because the concrete sawing guy is working out of the limits of the contamination. That concrete in that area is not contaminated, and he's using spray—a water spray on the edge of that saw to keep the dust down.

CO-CHAIR HAYES: Okay.

MR. FARLEY: But you can see he's wearing hearing protection. And I can tell you, I was wearing hearing protection just for the few seconds I was in there taking photographs. So a couple of other highlights to point out. In the lower left corner, documents in review. The draft remedial action plan for IA-C1 is in agency review. The—in the lower right corner, milestones of—an important milestone, the IA-B2 RAP was signed by DTSC this month. Consequently, the area of IA-B2, if you look at the map, has now gone from the remedial investigation feasibility study phase, which is sort of the yellowish orangish pattern or color that we normally use, to the phase that we characterize as the remedial action cleanup phase. So that's a major leap forward to get the RAP signed and to continue on with the cleanup that we're doing in IA-B.2. In terms of environmental site closure status, two additional PCB sites were closed in the last—since the last RAB meeting. No changes to the number of USTs or FOPL segments closed. And then we're still working on USTs 742 and 839 which are shown on the figure, and a whole bunch of PCB sites that we're working on. So we're checking those off as we go, but there's still a lot of work remaining relative to the PCB sites. So that's all I had for tonight, I'd be happy to answer any questions.

MR. GRIBBLE: I do have a question. The floor of the building that you took out because of PCB contamination, that's building 637; is that correct?

MR. FARLEY: Yes. These photographs are of building 637. It's not the entire floor, it's portions of it.

MR. GRIBBLE: So the question is, why did you opt to remove the entire—cut out and remove the entire concrete floor as opposed to what the Navy had—the Navy’s approach in many other buildings which was the scabbling approach?

MR. FARLEY: First of all, we didn’t remove the entire floor, I’m sorry if I conveyed that. We’re removing portions of the floor. Sometimes scabbling works, sometimes it doesn’t work. We’ve made a decision in certain cases to remove the floor, in other cases we’re using other techniques. But in this building we’re removing portions of the floor.

MR. GRIBBLE: So let me rephrase the question. What’s different about this floor—what was different about this concrete section that you cut out that lead to a decision to take the whole thing out as opposed to scabbling? What was different about this particular section?

MR. FARLEY: The levels of contamination and our belief that, in this particular case for these particular locations, scabbling wasn’t the best method because you don’t—you can scabble—you can scabble your brains out, if you will, and still not be able to achieve cleanup levels in some areas. Sometimes the concrete itself is cracked so the PCB contamination goes down. In some places we want to go in and collect soil confirmation samples underneath the concrete to demonstrate that the soil is contaminated. So there’s a number of factors that play into this. In sort of a nutshell, in some places we are trying to be very, very conservative because of the levels of PCBs in the concrete, and we just decided to remove the concrete itself.

MR. KARR: Steve, in these situations, in these locations, did you do the subsurface soil? Once you got the concrete out of the way, did you arbitrarily test or—

MR. FARLEY: Yeah, there’s a—we have a couple of work plans that we’ve prepared for PCBs. The final PCB work plan—there’s a few interim removal action work plans that we’ve written that lay out the procedures that we’re going to use for addressing PCB contamination in concrete. And in most cases, once we’re done with removal of the concrete, we’ll go back and collect soil confirmation samples on a specific grid size. And it depends on—whether it’s a five by five or ten by ten grid size changes depending on the size of the area you’re evaluating. And we will collect soil samples on some frequency on a grid pattern to characterize the soil underneath the concrete.

MR. KARR: I think, just to clarify, when you got the concrete removed, did you test the soil at that time? And has the concrete been replaced?

MR. FARLEY: We don’t always replace the concrete. In some cases it’s not necessary to replace the concrete. But we will go back and fill the area back with aggregate base or something like that. And for example, in a lot of places—like in building 637 and other places—where buildings are going to be torn down, there’s no point in going back and replacing the concrete with new concrete when the building is going to be demoed. Sometimes it’s a small area like an old transformer pad. For example, on the west side of building 87 it’s an area the size of that little table, and we’re going to remove the concrete. We’re going to test the soil. We’ll fill the excavation back up with aggregate base, but we’re not going to put the concrete back. So in some cases we’ll put the concrete back and in some cases we won’t. In terms of the soil sampling, I can’t say that in every case we’ve collected soil samples, but in the majority of the cases we’ve collected soil samples after the concrete has been removed to characterize if there’s anymore PCB contamination in the soil. I’d like to be able to say for certain that we did, but I just can’t remember every instance and whether or not there were some cases where it wasn’t necessary.

MR. KARR: Just thinking on it, if you had that much concern about the condition of the concrete, it would be automatic to test the soil. Just a concern.

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

f) Weston Update (Dwight Gemar)

MR. GEMAR: Yes, I'm going to fill in for Cris today. Cris is actually down in Southern California at the El Toro groundwater extraction plant down in El Toro that Weston did for the Navy. So he's enjoying that trip, I'm sure. Hopefully everyone has a handout. If not, I'm sure there's some left over on the table. In December, Weston and the Navy and the agencies got together to go over some final changes to the H1 remedial design plan. Also within the last month or so the agencies have been providing feedback to Weston on the ongoing wetland creation work, reviewing sample results, etcetera, and also looking at some of our soil removal in the area known as wetland B which is located on the eastern part of H1. In terms of field work. In December, we wrapped up for the season the engineered cap construction. We completed about one-half of our 72 acre containment area. And that, again, is the system where we have a multi-layer geosynthetic cover system, and then two feet of cover soil on top of that. And then there's some circles, a number of facilities that I've listed on the handout. And then in January most of the field work has been focused on creating some new wetlands. You may recall that as part of the cleanup work there are some former wetland areas that will be covered over as part of the capped area, so we're creating 8.2 acres of new wetlands in areas that were formerly upland areas. And that includes 6.7 acres of an area that will be created primarily of pickleweed dominated wetlands, and then another 1.5 acres will be seasonal climate areas for water fowl and other shore bird types. So the 6.7 acres has been completed, and soil has been sampled. And in some cases we did have to remove some additional soil in order to get down to the wetland cleanup criteria. And in those cases we actually over excavated three feet, and then tested the soil at that depth to verify that it met the criteria. And then we backfilled back to the target grade with acceptable fill material. And then the next step is installing potted plants. We actually collected cuttings from native plants on Mare Island a couple of years ago, and have been growing them in a nursery ever since. And there's a total of 14,500 plants. And so they'll be installed, about half of those to date. And then in addition to the potted plants, we also collected a number of seed, about 1,700 pounds of seed, pickleweed and native plants, and those will be sprinkled on the surface as well. We're kind of waiting on some impending rain to do that task. We're actually right now having to water our wetlands.

CO-CHAIR HAYES: Salt water?

MR. GEMAR: So that's moving along. The site is changing daily, it's kind of neat to watch. And then over in the Western Magazine area at the southern part of the island we have completed our investigation of anomalies selected from the geophysical survey that we did several months ago. As you can see on the handout, we dug up about 6,000 anomalies. We recovered 558 live MEC items along with 4,800 plus inert munitions debris items and twenty RAD buttons. So we're going to be summarizing these results and then sitting down with the various stakeholders—including the RAB, I'm sure—to get to a point to determine if the response action is complete or if further work needs to be done. In the meantime, we're moving on to investigation site five which was a former ordnance handling or storage and disposal area on the very south end of the island, as well as the former dredge pond seven south which is adjacent to IR05. So we have started digging anomalies there. So far we have not encountered any MEC items; however, we have run into some inert munitions debris—debris items located or shown in the photograph. So it's too early to tell how

IR05 and seven south will turn out, but we have begun work there and are finding some munitions trash, but so far no live stuff. Any questions?

MR. KARR: Yeah, Dwight. Could I get you guys to come out to Cullinen and water the wetlands so I have some ducks to show people at the Flyway Festival?

MR. GEMAR: The ducks and the geese have been a little sparse out there this year. I saw some hitchhiking down Highway 37.

CO-CHAIR HAYES: Yeah, there's some tremendous ducks and geese in along the highway, you know, in the Fish and Game ponds and the west end club along Skaggs Island's entrance. And we don't have any outings scheduled there this year. I just wanted to note that somebody's been getting the message out about this mouse on Mare Island. The Raley's checker told me that he knew there was this mouse on Mare Island in the marsh. So maybe his kids went to a school that had a Fish and Wildlife Service in the marsh on Mare Island program, but I was very impressed. So check out Raley's checker in the fifteen items or less lane.

MR. GEMAR: Right.

MR. KARR: It'll come off the press soon.

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 focused on trying to—still focused on trying to keep up with Weston on the H1 remediation. Dwight's pretty much covered it. We're only, I think, days or certainly no more than weeks away from getting the final remedial design plan and—getting that, you know, and responding with an approval on that, which is the real milestone. People may wonder why we don't have a final remedial design plan and yet they've done so much remediation. The parts of the remedial design plan that address the work that Weston has done as of last summer and this fall over the winter were sections that we'd already effectively approved. So that's our big milestone for us. The regulatory agencies have been very closely involved with Weston on data reviews, particularly in the development of the wetland creation area, and in reviewing data from potential fill soil material, which is really from ponds 2S and 4S, I think, are the areas. The level of involvement from the regulatory agencies thus far over the last few months has been fairly significant and intense. And we've been getting a tremendous quick response from Fish and Wildlife Service, Fish and Game, Water Board, EPA, as well as internally with the DTSC. So, at least in my opinion, I think we've been keeping up with Weston so that they've been able to move ahead as fast as they've been able to manage. We've also been very pleased with the quality control aspects of Weston's work thus far with the H1 remediation. And that's about it for now.

CO-CHAIR BLOOM: Thanks, Chip. Carolyn.

MS. D'ALMEIDA: I brought copies of a letter that I sent out earlier this month. This is regarding the draft RAP and proposed plan for the IR17 building 503 old paint shop which is now being planned to go to Touro University. And the issue at hand has to do with the risk assessment for that site. We commented on the remedial investigation some years ago with regards to the risk assessment where the Navy had basically concluded that risks were within the acceptable range. And it seems counter intuitive with the fact that we've got some free product out there, and it's shallow groundwater conditions. And the main concern has to do with concentrations in soil gas and potential exposure. And right now, of course, there is no exposure because there's no—there's

nothing out there, the building—there's no building out there that's occupied, and the buildings that we have out there are actually elevated above the surface of the ground. And the concern would be for future construction on the site. If you put any buildings there, that soil gas could seep into the buildings and build up within the indoor air. But the problem with a risk assessment is there's no really good way to evaluate based on concentrations in the groundwater or in soil gas what concentrations you might have inside a building, we don't have a building out there right now. There's a model that's been put out, the Johnson Ettinger models, that's traditionally being used for this, but it was never intended to be used for this. But it's not—we just don't have a good way of assessing this. And this was a comment that we gave to the Navy a long time ago. And I actually had three different agency toxicologists take a look at it and they concluded, yeah, there really isn't anything more the Navy can do to evaluate the risk at this site. So we didn't really have a risk based cleanup goal for the cleanup plan that has been—that has been set forth for this site. The cleanup plan that the Navy has put forth for this site has to do with addressing the regional board requirement that anytime you have any free product, that has to be removed. And so their plan is based upon removing free product from the site rather than addressing the cleanup goal based upon risk at the site. And that's basically—we really haven't had any other better way to go about doing it. But it was also ambiguous for us, too, because we didn't know what the property was ever going to be used for. But now we have a plan. Touro University is coming in here, and they want to put in a school. And it seems with this type of a reuse you really need to clean it up to unrestricted use at the site, and use cleanup numbers that have been established, preliminary remedial goals for unrestricted land use. And so that's basically the gist of the letter that we're putting out tonight requesting that the Navy reevaluate the cleanup plan that they have out there for this site in regards—in taking a look at the new projected use for the property.

CO-CHAIR BLOOM: All I can say right now, Carolyn, is we will obviously respond to your letter and take that into consideration. Anything else?

MR. HOLLINGSWORTH: Just so I don't read in the newspaper tomorrow that we've approved some plan with Touro University, we have an ERN with Touro University, and an ERN is an exclusive right to negotiate. We've had the same ERN with—I won't say the same—but we've had an ERN with Legacy Partners, with Weston Solutions, and Lennar in the last fourteen years. The Touro University plan is in itself a very exciting plan, but I just want to make sure that everybody understands that we're a long way from where we're at today and classrooms tomorrow. I'd also point out that that property today—today is zoned for light industrial.

CO-CHAIR BLOOM: Thank you, Gil. Anything else, Carolyn?

MS. D'ALMEIDA: No, that's it.

CO-CHAIR BLOOM: Brian.

MR. THOMPSON: Let's see. Since our last RAB meeting we've been working on reports with the Navy that deal with the DRMO and the Marine Corps Firing Range area. And I should mention that in working with Chip, he did a really good job of reviewing large data tables associated with confirmation sampling that was done after removal actions in those areas. And so in addition to all his other work, he was reviewing those tables, and I think he did a good job. I didn't have a lot to add to it, so thanks, Chip. And I was also working with, as Carolyn mentioned, on the IR 17 area. I've met with the Navy to talk about some of the UST sites, and have commented on a couple of the sites, and met to discuss future actions and sample plans for some other sites. For Lennar Mare Island, working with Lennar and CH2M Hill, the work that was presented tonight, there's been a

lot of reports that we've been looking at trying to wrap up investigation areas B and H, and they're on path to Touro's redeveloping some of those areas. It looks like there's some other areas that may need some more work and it might be separated, so there might be multiple redevelopment paths out there. And a couple of future items that we're currently looking at that could potentially be discussed at a future RAB meeting is a new order for Lennar Mare Island—where the last order was about five years ago. And due to a lot of work that's been done, kind of changing our understanding of conditions that are out there and a need to update the schedule, I anticipate developing a revised order, and that would be presented for RAB—at the RAB meeting. And we're also finalizing screening levels for the petroleum sites, as I mentioned at previous RAB meetings. And I think we have some numbers that we'll be using, and then we can talk about that at a future RAB meeting also. Any questions?

CO-CHAIR BLOOM: Thanks, Brian.

VI. CO-CHAIR REPORTS

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

CO-CHAIR HAYES: You might be sorry.

CO-CHAIR BLOOM: Okay. I'll be first. All right. I'm going first. Pretty much mine will be quick because we've—on the monthly progress reports—either other folks have already mentioned things, or I mentioned them in my first discussion. But you can see we had the RAB tour on December 2nd. I thought it went really well. And thank you everybody for—those who showed up for coming, and then those that participated. Thank you very much. You can see on the top right the rapid sediment characterization tool field work that we did the middle of January for a week. We also did something similar—it is different than what Neal described—and we were looking at the sediments for metals and PCBs. And once we get all that—all the results, we can probably put together a little presentation for the RAB on that as well. I already mentioned the DRMO area. That's the bottom right picture of field work that had occurred there, the removal action. If you turn it over, the two documents that the Navy submitted since the last RAB meeting were our draft final FOST for both parcels, the elementary school parcel and the northern sliver parcel. We received comments—a bunch of different comments, both from the DTSC and the Water Board; two different sets from DTSC, and five sets from the Board. And Gil already mentioned the early transfer, the progress on that. Any questions?

CO-CHAIR HAYES: I just noticed that you mentioned that additional sediment samples were taken to confirm the presence of Asian clams and bottom dwelling fish for future tissue collection activities. That's kind of good to hear that the Asian clam has some useful purpose. But could you tell us a little bit more about what you would be doing with these tissue collection activities, what those are for? And I also want to thank Dave Godsey and Bob Palmer for getting our consultants and us out of a bind down there when you were doing that sampling for the Regional Park Task Force. But maybe you could answer that first question there?

MR. GODSEY: Well, part of our—ultimately the biological ecological risk assessment that we'll do out there, the question that came up from the agency's view was are there sufficient clams out there to be able to do risk assessment toxicity testing on there. So—and including some of the organisms and some of the fish, to see if there are sufficient fish that we can do that are native to Mare Island waters—their home range includes the area around Mare Island. The question was,

was there sufficient fish and clams out there to be able to do testing on. So we just went out there just to collect a few just to confirm their presence.

CO-CHAIR HAYES: Well, I just want to be sure that—I mean, you put Asian clams and native bottom dwelling fish in the same sentence, and I just want to be clear that Asian clams, if you're using them for tissue analysis, aren't a native clam; right?

MR. GODSEY: No, they're not native—

CO-CHAIR HAYES: They're a basic clam.

MR. GODSEY: Yeah, they predominate out there pretty much, and I think they've taken over from the native clams.

CO-CHAIR HAYES: Take it away, Myrna. Okay. I just wanted to note that one of the agenda topics that we discussed—because I don't want people bringing agenda topics to us to think we've forgotten about them. So in our last agenda setting meeting we—the topic came back up that Paula—you brought up at the—I think at the end of the land use controls, ECC's presentation that talked about the preferred remedy including long term public education about ordinance and the south shore offshore areas. And Paula brought up the point during that presentation that it appeared to her that virtually the entire island is going to become one big land use control. And we didn't forget about that comment. I think it's a very important comment to make, and we want to bring that topic back—not just as a presentation, this is what we're doing—but rather I'd like to bring it back, at least from the community co-chair's side of the issue, as a discussion presentation in the next month or two as we can fit it into the schedule. Because I think that's a message that I don't think the general public in this regional community is aware of is just how extensive those current land use controls are or the future land use controls, and what that will mean to this community. Next—so, if you have concerns, things you want to be sure are on that agenda, be sure and get those to either Michael or me before we set that meeting in the next couple of months. Question—I'm just going to shoot a couple of questions that I thought of after you gave your presentations. One. Chip, do you have any—I'm not going to try to put you on the spot here, you can say no, we don't know yet, but—

MR. GRIBBLE: I don't know.

CO-CHAIR HAYES: But to the point that you are in this analysis of the hot spot removal and the over excavations that Weston is doing, and the bringing in of clean soil to cover or, you know, refill those spots, do you have any sense of what the area outside the H1 containment area is going to look like? And whether—the reason I'm asking is because that land is slated to revert to the State of California and the State Lands Commission and then be granted back to the City of Vallejo, because it's west—at least the land that's west of the joint survey line. So I'm just curious to know from yours or Weston's angle what that—those hot spot removals are leaving the properties looking like. Whether they look like they'd be something you might advise State Lands that the property would be suitable for transfer?

MR. GRIBBLE: You're right, I don't know. I have no idea at this point how that would—how that would be viewed in the context of acceptability to the State Lands Commission.

CO-CHAIR HAYES: Okay. Well, I'll go on record—and somebody can maybe help remind me if I forget about this, I might, might not—that it would really be nice if we got this topic on the table before the—I don't know if they're powers-to-be or I don't—I'm going to try to use nice words that won't come back to haunt me—whatever that force is at DTSC that steamrolls; before that

steamroller gets rolling too fast and making hard and fast decisions about our property that we're supposed to inherit back, the people of California, I'd really like to have the discussion early and have it candid and not hide behind bureaucratic stonewalls. Because you already stole 95 acres—or 75 acres from us and are going to put a chain link fence around it, barbed wire, and all that stuff, razor wire—and Gil is snickering—and I just think that we could have a productive conversation much earlier and much more candidly. We tried last year for ten months to get a conversation going with those powers, and they evaded us until their decision had already been made. But this is a different property. It's next door, but it's still property that is intended in every way to come to the people of California for public trust uses, and that includes public access. So I'd like to get it on the table that at least me, you know, one person in California, is interested in that property going to the public if it is deemed by all of us—not just the steamrollers at the top—that it's suitable for our use, and for ecological use. And I would think that if it's good enough for the birdies and the, you know, the tweeties and the mousies, that it would be good enough for the public to use, and shouldn't be fenced for us to not be able to get onto.

MR. GRIBBLE: Well let's be—I'll be clear about this much, that there is contamination at depth in the upland areas in H1. There's no question about that. And it does pose a risk. But based on the remedy that we selected for the upland areas, which essentially is a—principally is a two foot minimum soil cap over that area, that the area would not pose a significant or unacceptable risk to ecological receptors or human receptors, but there's still contamination below that depth. Whether or not it's—it would be acceptable to the State Lands Commission—and as far as I know, that has not been a subject of discussion yet in earnest at DTSC, and I guess I'm not sure when that would happen, but you're saying you want—you want to know about it when it does start. I don't know if the Navy has even proposed it. I think that's how it's initiated is by the Navy—oh, good, I shifted the camera to—

CO-CHAIR BLOOM: That's okay, Chip—is it on? Is it on? Okay. I said that's okay, Chip, because I don't know either. I'll look into it.

MR. GRIBBLE: At some point the Navy and the State Lands Commission have to have a—start into some discussion about transfer, but—and that doesn't mean that we can't be thinking about it. Quite frankly, we've been very busy with remediation and just getting to this point, and really haven't had the opportunity to even think about that step yet, much less discuss it with other parties.

CO-CHAIR HAYES: Well, I officially put it on the table.

CO-CHAIR BLOOM: And I've got it here.

CO-CHAIR HAYES: You know, because at depth is an issue. At depth is a very good point. You know, is there a pathway for the public to be exposed? Is there a pathway for ecoreceptors to be exposed? If the ecoreceptors can't be exposed, then I don't see how we can. So it's an important piece of property. It doesn't matter whether the city doesn't think it's an important piece of property or whether they do or don't, at least one person in the State of California does.

Okay. Next topic very quickly. I want to note that the San Francisco Bay Flyway Festival—as Jerry already commented on—is taking place February 2 through 4. And I want to thank the Navy, the City of Vallejo for allowing—and Lennar, I believe they have property involved too—for allowing public access on properties, and arranging for licenses and leases of properties that make it possible for the public to have access to Mare Island during that one weekend in the year. For

fourteen years—just like Gil said— you’ve had lots of different people coming forward with ideas on the north end of the island. Well, we had an idea one time, and it was to have an environmental education center at the north end of the island. So far, fourteen years later, that’s been successfully thwarted by a host of organizations, from the Navy to the city to the city police department to Lennar, all having a hand in making sure that the building we had selected isn’t going to be possible. So in the meantime the festival still takes place. It’s still a great gauge of the public interest in a permanent environmental education facility. We expect six, 7,000 people or more to come out for that weekend. And we’re excited about the opportunity to inform them about environmental cleanup, to get them into areas that are safe for them to get to, and to experience the historic, recreational, natural resource opportunities that Mare Island represents in—as it’s converted to public use.

And along those lines, I would like to thank Jerry Karr, Kenn Browne, Robin Leong—all people you know well—for personally actually guiding tours and outings that weekend. And then I want to make a special thank you to Weston Solutions and their staff for hosting a whole host of outings as well as putting money in the pot—a significant amount of money to assure that the festival continues to be free. And I want to thank Lennar Mare Island for a similar contribution at very—at that same level of commitment. And then NGO, for those of you who know, they’re a geotech firm on Mare Island that Lennar uses and—but sandwiched in between Weston and Lennar and NGO is CH2M Hill, our very own Steve Farley and team who have also made a major contribution in cash to the festival. And, of course, Jim Davies, representing Touro tonight, I’d certainly like to know whether your organization and subcontractors will be interested in considering sponsoring, it’s never too late, we still have ten days. And I’ll see you after the meeting. And the last thing, every one of you in this room could volunteer. The mayor asked me how we get this done. I told him two hours a year from more than a hundred people. And so you could be one of those hundred people, and you could do two hours, any of you can do that, and I have something for you to do. And the final thing that I want to say tonight—and I promise you it’s the final thing—I’m very proud to say that the Regional Park Task Force that was set up three years ago by the mayor and city council to propose—to gather data and make a proposal to the council, make a recommendation to council regarding the reuse potential as a regional park of the south end of Mare Island, about 210 acres, that task force chaired by Jerry Karr, Kenn Browne, and myself, Weston serves on it. Gil is our staffer from the city. And lots of other people. Diana Krevsky, our former RAB member has been highly involved. With that preface I want to let you know that the city, and with Gil’s tremendous assistance and walking us through all of this for the last several years, has hired a contractor—a consultant firm to help us finalize that report. Kind of take a look at it, ensure that it—make sure that it—if we run it up the flagpole, the flag waves, it doesn’t have too many big holes in it. And help us finalize it and end up with a nice executive summary and report that we can take to council within the next six months or so. So that’s good news.

And I want to remind you that we really do need to sit down with the early transfer proponent, the Navy, the regulators, and make sure that your plans for cleanup and cleanup levels and cleanup timeframes match—that our phasing of the park, bringing it on line, will as closely as possible match your plans for cleanup. So that it passes the straight face test when it gets to the council and decision-makers and the funders of that park. And that—we wanted to wrap that process up in about the next six months, correct, Jerry?

MR. KARR: Yeah.

CO-CHAIR HAYES: That's what we had talked about at the last meeting. So put that on your radar screen, if you will. Okay. That's it. Bye.

CO-CHAIR BLOOM: Thanks, Myrna. We're at the last public comment period. Any other public comment. Okay. With that—oh—

CO-CHAIR HAYES: Ha ha ha ha. I'm a liar. The naval ammunition depot was not associated with the shipyard, it just happened to be on the same piece of property, it didn't—it wasn't owned as property of the Navy shipyard until after 1975. From 1857 to 1975 it was an active naval ordnance manufacturing, storage, testing, transporting facility, at the southern end of the island, and it turns 150 in 2007. That's this very year. So we're holding a naval ammunition depot 150th celebration, kind of a kick-off. Weston Solutions is hosting that with the festival. And right in the very center of your program here, continuing the festival, it closes at the exhibit Hall at 4:00 o'clock, and then from 5:00 to 7:30 we've got a bunker party. And it's called, "Burials, Bunkers, Barn Owls, and Things that Go Bang." So there's—you'll see on that page a whole bunch of outings down that way, and we hope you'll join us because I think it's a really cool place.

CO-CHAIR BLOOM: Thanks, Myrna. All right. I guess it is time to adjourn. Thank you very much.

LIST OF HANDOUTS:

The following handouts were provided during the RAB meeting:

- Presentation Handout – Review of Navy Environmental Program Fiscal Year 2006 Accomplishments and Fiscal Year 2007 Plan– Navy
- Presentation Handout – Additional Investigations: Underground Storage Tanks 102 and 142 in Investigation Area C3 Three Fuel Oil Pipeline Segments in Investigation Area C1 Using Ultra-Violet Optical Screening Tool – Lennar Mare Island
- CH2MHill/Lennar Mare Island Deliverables Schedule January 2007
- Mare Island RAB Update January 2007 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard January 2007

(Thereupon the foregoing was concluded at 9:06 p.m.)