



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

HELD THURSDAY, JULY 30, 2009

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, July 30th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:06 p.m. and adjourned at 9:05 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)
- Kenn Browne
- Michael R. Coffey
- Wendell Quigley
- Paula Tygielski

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

- Michael Bloom (Navy Co-Chair)
- Marie Dreyer (Navy)
- Ryan Wensink (Battelle)
- Rex Long (CH2MHill)
- David Allard (CH2MHill)
- Ed Aromi (CH2MHill)
- Steve Farley (CH2MHill)
- Dan Mayfield (CH2MHill)
- Steve Watson (CH2MHill)
- Gil Hollingsworth (City of Vallejo)
- Paisha Jorgenson (Water Board)
- John Kaiser (Water Board)
- Carolyn D'Almeida (USEPA)
- Janet Naito (DTSC)
- Josh Bernardo (Solano County)
- Dwight Gemar (Weston)
- Neal Siler (Lennar)

Community Guests in attendance:

- Russ Farnell
- David Geist
- Wendy Plank
- Lester Rich
- Bill Stephens
- Jim Porterfield

RAB Support from CDM:

- Carolyn Moore (CDM)
- Doris Bailey (Stenographer)
- Wally Neville (audio visual support)

I. WELCOME AND INTRODUCTIONS

CO-CHAIR BLOOM: All right, everyone. We'll go ahead and get started. Welcome, everybody, to the July 2009 Mare Island RAB meeting. I am Michael Bloom, the BRAC Environmental Coordinator and Navy Co-Chair.

MS. D'ALMEIDA: I'd like to introduce myself, my name is Carolyn d'Almeida, I'm with the EPA, and I used to work on the site and I'm back.

MR. JORGENSEN: Paisha Jorgensen with the Water Board.

MS. TYGIELSKI: Paula Tygielski from Benicia.

MR. QUIGLEY: Wendell Quigley, Mare Island RAB.

MR. COFFEY: Mike Coffey from American Canyon.

MR. FARLEY: Steve Farley with CH2M Hill.

MR. BROWNE: Kenn Browne of Vallejo with the Solano Group of the Sierra Club.

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

MR. HOLLINGSWORTH: Gil Hollingsworth, City of Vallejo.

MR. AROMI: Ed Aromi with CH2M Hill.

MR. SILER: Neal Siler, Lennar Mare Island.

MR. GEMAR: Dwight Gemar with Weston Solutions.

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

MR. MAYFIELD: Dan Mayfield, CH2M Hill.

MR. LONG: Rex Long, CH2M Hill.

MR. ALLARD: Dave Allard, CH2M Hill.

MR. WATSON: Steve Watson, CH2M Hill.

MS. MOORE: Carolyn Moore with CDM.

MS. DREYER: Marie Dreyer with the Navy.

MR. WENSINK: Ryan Wensink with Battelle.

MR. FARNELL: Russ Farnell with HSMPS Iowa Group.

MR. RICH: Lester Rich, Historic Ships Memorial, Pacific Square, Battleship Iowa Project.

MS. PLANK: Wendy Plank with USS Iowa Preservation Project.

CO-CHAIR BLOOM: Okay. Thanks, everybody. We'll go ahead and get started on our first presentation. It is on the Defense Reutilization and Marketing Office, the DRMO area. It's an update on both the CERCLA program and the Petroleum Program from the Navy. And it will be given by Marie Dreyer with the Navy.

II. NAVY PRESENTATION: *Defense Reutilization and Marketing Office (DRMO) Update*
Presentation by Ms. Marie Dreyer, Navy
Mr. Dwight Gemar, Weston Solutions and
Mr. Ryan Wensink, Battelle

MS. DREYER: Let me just start this up really quickly. Good evening, everyone. As Michael mentioned, tonight I'll be giving you an update of the different projects going on at the Defense Reutilization and Marketing Office or DRMO for short.

Before I get started I just would like to pinpoint some folks that have helped contribute significantly to this project. First is Ryan Wensink with Battelle, he's sitting over there on the couch. And you all know, of course, Dwight Gemar sitting in the back there, he's with Weston. The Navy simultaneously runs two programs at the DRMO. The first is a Petroleum Program in which we target the cleanup of Total Petroleum Hydrocarbons or TPH. Specifically in our case for this site we're targeting a heavier fuel oil, what we have later described as Bunker C oil.

The second program that we work with is the CERCLA program. This program targets all the other Constituents of Concern, namely metals, PCBs, SVOCs, and pesticides. So I will begin with the CERCLA program. In 2005, a Non-Time Critical Removal Action was initiated to address CERCLA constituents and MEC in surface soil. The target cleanup goals that were established were based on industrial preliminary remediation goals. And the reason we chose this was because this site, as you might know, has been designated by the City of Vallejo's reuse plan to be reused as light Industrial/ Commercial reuse.

As you can see from the figure here, there's been an extensive amount of excavation done. Most recently, our last one was completed by Weston in 2008. After we performed our excavations we then performed confirmation sampling. What we found after reviewing our sampling was that all our target cleanup goals were achieved with the exception of BAP or benzo(a)pyrene. What you can see from this figure here, and this is a figure of all the spots that we sampled for. What you can see is, obviously, we did sample quite extensively for this chemical. Of the 228 dots that you see, only four of them exceeded the target cleanup goals. And those four are the ones in red. As you see detected, above the Industrial PRG. Three here, and one over there to your right.

So with this in mind, what does this mean? Well, the properties of benzo(a)pyrene are such that it adsorbs strongly in soil, has a low aqueous solubility, and is relatively non-volatile. Based on these properties, benzo(a)pyrene in soil at the DRMO is considered to be relatively immobile.

So, knowing these properties of benzo(a)pyrene, what does this mean to the overall risk at this site based on this one chemical? Well, we know that, as I mentioned earlier, that the planned future use of this site is for Commercial/ Industrial reuse purposes. The likely receptors in this scenario is that of an industrial worker and a construction worker. But for comparison we also compared it to a residential adult/ child's individual receptor. The likely exposure routes for these individuals are that of incidental ingestion, dermal contact, and inhalation.

After we performed our risk assessment, we found that benzo(a)pyrene was the main -- the primary risk driver in this scenario, contributing to nearly 48 percent of the total cancer risk based on an industrial reuse scenario. This industrial reuse scenario is, can be seen on this figure as represented by this purple box and the yellow box. Now, despite this high percentage, we still

found that the industrial worker and the construction worker were still below the risk management range. The risk management range runs from one times ten to the minus four, to one times ten to the minus six. And both receptors in the industrial reuse scenario are below the point of departure, meaning that no more remediation or risk mitigation has to take place at this site. And again, as I mentioned earlier, just for comparative purposes, we also looked at the residential adult and child, and though they are within the risk management range, they still fall to the low end of that range.

To come up with our remedial alternatives, the objective we had to meet was to ensure that site conditions were protective of human health by managing the residual concentrations left by the benzo(a)pyrene in soil. The four remedial alternatives that -- I'm sorry -- the three remedial alternatives that we evaluated were as follows: First, the No Further Action alternative. Per the NCP, which is how we run through the CERCLA program, our guidelines for the CERCLA program, the No Further Action alternative must always be evaluated. So we use that as the baseline evaluation.

Next we established institutional controls or we looked at establishing institutional controls. And what we found here was -- or actually what you saw from the prior slide that based on an industrial reuse scenario, we know that site conditions are protective here for the industrial worker and the construction worker. The last alternative we looked at was the focused excavation in which we would focus on the four red hot spots that you saw from the prior figure. In this scenario we would excavate approximately 2,500 cubic yards of soil. What you see from the table below, and as indicated in the legend here, the highest performing alternative was that of institutional controls, as you can see, six totally filled blackened circles.

So what's next for the CERCLA program? In June of this year we released our draft RI/FS for review. We anticipate that within the next two weeks agencies will provide us with comments on that draft. We will then discuss their comments and reply to them, and hope to have the draft final RI/FS released by September 8th. We anticipate that agencies will provide us comments on that within the month, so hopefully by October 9th. And shortly thereafter we'll submit the final RI/FS.

Now, switching gears to the Petroleum Program. In June we released the Total Petroleum Hydrocarbon Technical Memorandum. The objective of that tech memo was to determine the presence and extent of free phase hydrocarbons. We did that by using a combination of soil borings and trenches. During that investigation we investigated an area we called DRMO and vicinity which encompassed Azuar Drive, Dump Road, where the sanitary sewer line runs, which is north of Dump Road, and the fenced scrapyards area. What we determined were that hydrocarbons generally consisted of a heavy fuel oil, and specifically what we are calling Bunker C, or what we found to be Bunker C fuel oil. We also found that significant pockets of debris underlain the roadway, particularly Azuar Drive, and to some extent Dump Road as well. And that these pockets of debris acted as a preferential pathway for the Bunker C oil.

Our estimated petroleum contamination footprint is as follows: As you can see in the two yellow blobs identified here, our cleanup approach for the two yellow areas is as follows: First, we will develop a Petroleum Corrective Action Plan or PCAP. In this instance, because this is under the Petroleum Program the Water Board acts as the lead agency versus like in the CERCLA program, DTSC, at least for Mare Island, is the lead agency. Once that PCAP is approved, we will continue on to start our field work. First, we'll isolate the utilities. Then we'll mobilize.

Then we'll excavate the contaminated soil itself. Then we'll separate out the soil, groundwater, free product, and debris. I'll talk about this a little more later. Then we'll perform confirmation soil sampling. And finally we'll backfill the site and restore it as it was.

Our cleanup criteria for this site was developed from Tier 2 environmental screening levels as prepared specifically for Mare Island Eastern Early Transfer Parcels and approved by the Water Board. For Bunker C specifically, from zero to three feet, our point of departure is 2,500 milligrams per kilogram; and from three to ten feet, 5,000 milligrams per kilogram.

Now, earlier I said we would talk about how we would separate out the various components we would excavate, and so basically what I meant by that was when we perform excavation there are four possible things we can pull out of the ground. They are excavated soil, of course, groundwater, free product, and debris. And each of these four things are treated differently. The soil will be sampled, and if it's approved for reuse as backfill by DTSC, then we will do so. Otherwise it will be consolidated under the engineering cap at the H1 Containment Area. Groundwater will be filtered to remove any excess sediment and petroleum product, then sampled and discharged for treatment. Free product will be first recovered by a vacuum truck then stored on-site pending off-site disposal. And then debris will most likely go into the containment area, if it is of an acceptable size and nature as defined by DTSC, otherwise it will be shipped off-site for disposal.

This figure represents our transportation route or how we're going to get the debris and soil to the H1 area. As you can see, here's the DRMO, and here's the H1 Containment Area, and this is specifically where -- this portion here is specifically where the contaminated soil and debris will go. And as you can see, it's very close, very easy and close for our site to access the H1 Containment Area. Now, because our project does take us out onto Azuar Drive we've had to come up with a traffic control plan. And the plan that we propose is to take the traffic from Azuar Drive, route it through A Street, Walnut Avenue, Kansas Street, and back to Azuar Drive. This plan has been sent to the Vallejo Department of Transportation for approval. And pending their recommendations -- we'll change it as necessary, but this is -- this is what we currently propose.

So what's next for the PCAP? This coming Monday we plan on submitting the final PCAP for approval. The draft went out in June, and we did receive comments back, and now we plan on submitting the final version next Monday. We anticipate agency approval of that PCAP shortly thereafter. And we plan on starting our excavation on August 17th first in the defense scrapyard area, and then the area north of Dump Road. Followed by, on September 7th, the Azuar Drive and Dump Road corridors. In November we will start and complete all backfilling and necessary site restoration. And then we'll issue our draft completion report in February of next year. So with that, that's the end of my presentation and I'd just ask for questions if you have any. Yes, Paula.

MS. TYGIELSKI: You said that you plan to move some --

CO-CHAIR HAYES: I guess you'd better use the microphone.

MS. TYGIELSKI: Is this on? Okay. You said you plan to move some of the Bunker C petroleum contamination into the landfill, and I was wondering how the timing of that meshes with the timing of finishing that landfill cap. You know, many of the things have said, oh, we're going to move 'em into the landfill, but if it's already capped before then that's not going to work.

MS. DREYER: Right. Right. No, absolutely, that's a very, very valid concern. We definitely -- we've worked very closely with Weston who is, you may recall, is the facility manager of the H1 landfill. And they just happen to also be our contractor for that portion of work. So we have designed a schedule, as you saw in the PCAP schedule, that will allow us to import all the soil, all of the contaminated soil into the landfill, and still have it buttoned up and ready to close by the end of the calendar year. Any others? Myrna.

CO-CHAIR HAYES: At what point do you decide that it's not feasible to button up everything and get it over to the H1 landfill area in time to close it? How do you -- what contingency do you have for that possibility? I mean, rain does appear in surprising form sometimes.

MS. DREYER: Absolutely, another good concern. Whatever contamination we have left that is not in the landfill by November will likely have to be shipped off for off-site disposal. You know, the Navy definitely, in conjunction with Weston, is going to try everything they can to make all of it go into the landfill prior to that time, but that's the absolute last drop dead date or month, I should say, before we can put in the last little bit and Weston can begin their completion of the cap. But like you said, if rain happens early this year or some other natural phenomenon, we will have to think of another alternative, and that alternative will be off-site disposal.

CO-CHAIR HAYES: And you have that planned into your budgets?

MS. DREYER: It's --

CO-CHAIR HAYES: Because that would be more costly, I assume.

MS. DREYER: You absolutely assume correctly. It is definitely a contingency that we have had to seriously consider.

CO-CHAIR HAYES: How will you filter the groundwater to remove sediment or -- I suppose that's and/or petroleum product?

MS. DREYER: Uh-huh. Good question. I'll turn it over to Dwight for that one as he's going to do the actual filtering of the groundwater.

MR. GEMAR: Yeah, hi, Myrna. Basically we'll pump groundwater into holding tanks, big steel tanks, you might have heard of them referred to as baker tanks. And we'll let a lot of the sedimentation occur in the tanks. And then we'll pump from those tanks through an organic filter, basically it is kind of a clay-ish material that takes out the organics. And we're also going to remove the free product, you know, before we even pump water out of the excavation. So other than a sheen, you know, I'm not anticipating much going into those tanks. That's -- it's pretty simple approach, but it will be effective.

CO-CHAIR HAYES: You might have the answer to this or maybe Janet does from DTSC. When Marie mentioned off-site disposal, disposal of debris that was considered unacceptable for placement, what makes an item unacceptable for placement in the landfill?

MS. NAITO: Size.

CO-CHAIR HAYES: Size?

MS. NAITO: Size. You can't have --

CO-CHAIR HAYES: You have to use the microphone because we do, because we have them.

MS. NAITO: And I'll use the one that's not on.

CO-CHAIR HAYES: You have to turn it on otherwise people would hear your whispering conversations.

MS. NAITO: There are a couple of criteria the soil that's placed in the landfill has to meet. The material can't be liquid, it can't be -- it has to be relatively immobile, and there was one more criteria, Dwight --

MR. GEMAR: Not excessively volatile.

MS. NAITO: Not excessively volatile. But on top of those criteria, we also don't want something that's going to stick out or potentially cause a void space to develop in the landfill, a hole, which can cause later settlement problems. So those are the basic criteria we've set up.

CO-CHAIR HAYES: So having done the characterization of the kind of debris you have, like your metal shelving cabinets and things, metal filings and things that are there now, that could go there?

MS. NAITO: Well, what I've told my bosses, if you can run a large piece of equipment on it and it will squish down to almost -- so that there isn't space there, it can go in. If it's going to stick up, though, through a twelve inch, like if you deposit soil in a twelve inch layer, like a one foot layer, and it sticks up above that, we want it to come out. Because we don't want stuff poking up through the cap either.

CO-CHAIR HAYES: All right.

CO-CHAIR BLOOM: Any other questions? Okay. Thank you, Marie.

MS. DREYER: Thanks, everyone.

CO-CHAIR HAYES: Well, I actually have one more question. Doesn't this project just go to the middle of the road? So what are you going to do about the other side of the road?

MR. COFFEY: Azuar Drive.

MS. DREYER: Right. I believe you're talking specifically about the divided Azuar Drive -- sorry, I'm finding it. You know, the eastern side of Azuar Drive as you know is part of the Eastern Early Transfer Parcel, and so Lennar Mare Island will be in charge of remediating that portion of the contamination. And so we're not left with some sort of void or strange, you know, situation in which we stop at the middle and then have to wait a few months or whatever before Lennar comes in or vice versa, we're working really closely together to ensure that it happens, excavation of the contamination on Azuar Drive happens in one smooth, fluid movement.

CO-CHAIR HAYES: Well, that's helpful to know. So I imagine we'll be hearing about that, your side of the fence or of the double yellow line or whatever in your report, Steve?

MR. FARLEY: You'll be hearing --

CO-CHAIR HAYES: I know we're just across the way here but --

MR. FARLEY: Yeah, there will be.

MR. COFFEY: Don't spit at each other.

CO-CHAIR HAYES: We're not singing either. Trust me, we're not going to do the duet.

MR. FARLEY: There will be a presentation on how it's being approached. There's detail still being worked out, so all those details I'm sure will be coming in the near future.

CO-CHAIR HAYES: Uh-huh. Okay. Thanks.

MR. HOLLINGSWORTH: The City, Navy, the insurance company, Lennar, 500 lawyers are all negotiating now the payment and cleanup of that. It's going to be sometime -- when I say sometime, it's a high priority, and it will be paid for by existing funds, and CH2M Hill is not necessarily the contractor who will be cleaning it up.

CO-CHAIR HAYES: Oh, all right.

MR. HOLLINGSWORTH: Not necessarily.

CO-CHAIR HAYES: So is this an unknown unknown then?

MR. HOLLINGSWORTH: It's a known unknown.

CO-CHAIR HAYES: It's a known unknown?

MR. HOLLINGSWORTH: In my mind it's a known unknown.

CO-CHAIR HAYES: Well, it's known now, but was it known when the ESCA was --

MR. HOLLINGSWORTH: Well no, that's what makes it is a known unknown, it wasn't known then, but it's known now. Okay.

MR. RICH: Is there an acronym for that?

CO-CHAIR BLOOM: A known unknown, K-U.

CO-CHAIR HAYES: K-U-K.

CO-CHAIR BLOOM: Thank you, Marie. The next presentation will be given by Neal Siler with Lennar. And he's going to present on the Investigation Area B-1 Feasibility Study/ RAP or Remedial Action Plan.

III. PRESENTATION: *Investigation Area (IA) B.1 Feasibility Study/ Remedial Action Plan (FS/RAP)*

Presentation by Mr. Neal Siler, Lennar Mare Island

MR. SILER: Okay. Before I get started there actually should be two handouts. There are actually two handouts you should have, there's the presentation, and there are also a series of 11 x 17 figures. If you didn't get those, you should get those before you go ahead and start.

Okay. So why don't we go ahead and get started. And as Michael said, the topic that I'm going to talk about tonight is the draft public review Feasibility Study/ Remedial Action Plan for the FS/ RAP for Investigation Area B.1, or as it is otherwise known, the Crane Test Area. And what I'm going to discuss tonight is the physical characteristics and history of the Crane Test Area, the purpose, scope, and results of the Feasibility Study/ Remedial Action Plan, the alternatives evaluated as part of the Feasibility Study/ Remedial Action Plan, I'm going to talk about the proposed remedy that we plan to implement, give you a schedule for that, and then I'm going to answer any questions or take any comments that you would have. Or if you feel you want to interrupt me during the presentation, please feel free.

Now, the six acre Crane Test Area is part of a much larger investigation area called Investigation Area IA-B. And that was split up because this was a much more difficult remedy than the rest of Investigation Area B which covered about ninety acres. So we split it into two parcels. You can

see B.2, which is the vast majority of the area which covers about 84 acres, and then you have Investigation Area B.1 of the Crane Test Area which covers the six acres. It's located in the Northwestern portion of the Eastern Early Transfer Parcel, and it's bounded by two streets, Azuar Drive to the northeast, Dump Road to the southeast, and then non-tidal wetlands to the northwest and southwest.

Now, what else can I say about the beautiful Crane Test Area. It's relatively flat. The majority of the site is covered with concrete, asphalt or gravel base, and there are minor areas that are either unpaved or covered by vegetation, and it's mostly scrub brush or, you know, grasses, things like that. Now, this area didn't exist before 1925. And by 1925, shipyard personnel began using this area immediately west, at the time it was called Cedar Avenue, not Nimitz Avenue, and they started using it for a fill area. And that fill activity continued until about 1942.

Shortly after they filled the area, they started using the north central portion of the Crane Test Area, which is the portion you can see in blue on the figure here, as a vehicle storage area. The southeastern portion of it they used for a classification yard for various types of equipment and materials they had on the island, and also for a lumber storage area. And then in addition, in that central former vehicle storage area, in the 1980s they used it for a former crane testing operation where it gets the name the Crane Test Area.

Now, the future use of the Crane Test Area, okay, what we're trying to do is develop a remedy that will accommodate the proposed redevelopment plan. And that redevelopment plan is essentially a commercial building with an on-site parking lot. But I ask you, there are two visions for that commercial building in the center with the parking lot around it. The one on the right is my vision of the site in the future, the one on the left is others' vision of it in the future. Both essentially a commercial building covered -- or surrounded by a parking lot.

MS. D'ALMEIDA: Is that a casino?

MR. SILER: Yeah, it's Luxor casino.

CO-CHAIR HAYES: Is it an industrial application or a commercial?

MR. SILER: I would say it's commercial.

CO-CHAIR HAYES: In the building of it will be industrial.

MR. SILER: That's for sure. That's for sure.

Now, moving along. What the draft public review Feasibility Study/ Remedial Action Plan includes is a summary of the nature and extent of the constituents. The results of the human health and ecological risk assessments. An evaluation of the potential alternatives. The rationale for the selection of the proposed cleanup remedy. And then the recommended remedy. Now, how did we get here to where we are today? This site has a long and varied history about investigations and remedial action starting as early as 1983 when the Navy did the initial assessment study for the island. In 1992 and 1993 the remedial investigation for the area took place. In 2002 there were a number of field sampling and delineation of hot spots and response actions for it. 2003 there was a removal action where we took out five lead hot spots and soil. There were a number of soil vapor surveys done, excuse me.

The first one done in 2003 that mainly looked into decomposition gases that we'd normally find in a landfill, carbon dioxide, methane, things like that. That actually went on into 2008 when we did another soil gas survey where we looked at a number of other constituents that were

consistent with what we were seeing in the Crane Test Area; mainly volatile organic compounds, naphthalene, petroleum hydrocarbons. So that's how we got to where we are today. Now, if you'll look at your 11 x 17 figures, the next slide has a rendition of the conceptual site model. And as you can see, if you look at the site, as far as the geology and hydrogeology from the shallow to the deep area, you see there's a shallow fill layer that generally runs from a depth of about, the ground surface down to about ten feet. Within that layer there's a one to three foot layer of debris that could include anything from metal scrap, wire, cable, brick, file cabinets, Aunt Sophie's washing machine, anything you can think of could possibly be in that area at any one time. That's underlain by dredge fills down to about six to eight feet in thickness. Below that there's the younger bay mud, that is silts, clays, sands. That generally goes down to a depth of between ten to fourteen feet below ground surface. And then 20 to 24 feet you find bedrock.

There are two water bearing zones that we normally see within the Crane Test Area. There's a shallow perch zone that has a very, very shallow hydraulic gradient, usually ranging about one to three feet decline in head or elevation per 1,000 feet. Usually goes off to the northwest. And it has a total dissolved solid concentrations in it of about 900 to about 1,600 milligrams per liter. And if you look at that, you can definitely see that it's quite distinct from this deeper layer that we normally see in the younger bay mud, which again has a slightly higher gradient, anywhere from two to five feet fall in elevation per 1,000 feet, and it has a much higher total dissolved solid, and it's much more like sea water. The total dissolved solid concentration ranges anywhere from about 14,000 milligrams per kilogram to about 32,000 milligrams per kilogram. So those two layers are quite distinct.

Now, the nature and extent of the constituents of concern. I'm going to describe them here, but if you take a look at the next three 11 x 17 figures, you're going to see figures that talk about petroleum hydrocarbons in soil and groundwater. You're going to see one that talks about -- presents lead concentrations in soil, and then you're going to see one that presents soil gas concentrations. But the primary constituents of concern in the soil are lead, arsenic, some metals. You have benzo(a)pyrene, which is a polynuclear aromatic hydrocarbon that's associated with petroleum hydrocarbon spills, and then you also have diesel and PCBs. And it's kind of a random distribution if you take a look at that, and you can look at that on the figures. The primary constituents in groundwater that would exceed the proposed reuse for the island are essentially petroleum hydrocarbons. So if you look at filtered samples, they're usually below the screening levels. But if you look at that one figure, and I'll take a look at that as we move along here, the main concentrations of concern that we see in the petroleum hydrocarbon are really in this southwestern corner, do you see it down here? There are a couple of red dots on there, and you can see there are very high concentrations, and that's very indicative of free product. And if you look back at the other figure that I showed you for the conceptual site model you'll see where, in that southwest corner, there is an area where we have free phase petroleum hydrocarbons that need to be dealt with. Now, the primary constituents in the soil vapor that exceed the industrial screening levels are, interestingly enough, petroleum hydrocarbons as gasoline, something we don't really see in the soil or the groundwater. We generally see diesel and motor oil in the soil and groundwater. And whether this volatile fraction that we're seeing in the soil gas is something that's off-gassing from that heavier fraction, we're not really sure. But it seems to be, if you take a look at that figure, it seems to be concentrated in the southwest corner, which is coincident with the area that we're seeing the free phase hydrocarbon. We see it in a couple other areas. There are a couple other random areas up in here, and that's thought to be primarily from potentially surface spills when it was used as a former vehicle storage area, and

it's something we're picking up now at this time. In addition, in this area down in the southwest we are seeing some chlorinated volatile organic compounds that include trichloroethylene and vinyl chloride.

So as we go forward to the proposed remedy, we're going to talk about how those are going to be dealt with also. Okay. As part of the Feasibility Study/ Remedial Action Plan we performed a Human Health Risk Assessment and Ecological Risk Assessment. And again, the drivers are the benzo(a)pyrene, the arsenic, and the lead. And that's what we found posed potential need for a remedy in this area. And the potential for exposure to benzo(a)pyrene and the metals will occur if the soil is exposed while you're working or digging in that area. So it would be more like for an industrial worker or construction worker or utility worker working in that area. The ecological assessment results of that study show that because the central area is going to be reused for a commercial site or industrial site that is basically going to be covered over by a building or parking lot, that there be no complete pathway for any kind of plant or habitat or invertebrates to actually be exposed to the concentrations of the constituents in the soil if we close that pathway off.

CO-CHAIR HAYES: Neal, I'm confused, because you have here due to commercial redevelopment, you use that word, but then everything else that you -- on your slide before all of these fancy numbers, you refer to the constituents in the soil exceeding industrial.

MR. SILER: And the --

CO-CHAIR HAYES: What's the difference in your level there, and what are you trying -- what are you shooting for? I assume this building isn't an industrial building.

MR. SILER: No, the building will be a commercial building. But really the same scenario for an industrial worker or commercial worker, it's the same, it's 40 hours a week, fifty weeks a year, five days a week. So a commercial or industrial worker who was not exposed to soil, it's a little bit different. Now, people who are actually working in the soil, they're going to probably have dermal contact with the soil or they would have more contact, if anything was off-gassing, they would be right down there in the soil. So there's a slightly different set, more stringent criteria for somebody who was actually working in the soil. That's why it's a little bit different. So there's a little more stringent assessment we do for people who are actually working in the soil, but once they come out of that and don't have to work in it, it would be the same as walking around in this building right here as far as from a commercial or industrial scenario.

CO-CHAIR HAYES: Well, that's what I was looking for.

MR. SILER: So the Remedial Action Objectives, as we have stated numerous times, our main objective is to protect human health and the environment. We want to mitigate any odor or nuisance concerns associated with the petroleum hydrocarbon that we're seeing in especially the western/ southwestern portion of the Crane Test Area. We want to prevent any significant groundwater degradation due to the hydrocarbons we're seeing in the southwest portion of the area. And we want to prevent significant accumulation of the petroleum hydrocarbon gasoline vapors that we're seeing in the soil, and if that could potentially get into any kind of a building that we would put on the site.

Now, the next slide shows the maximum concentrations that were seen in the area, and we're looking at the cleanup goals and what the basis of that is. You can see we have very high concentrations of lead. You can see the concentrations of the diesel and motor oil. You can see

the high concentrations of the petroleum hydrocarbon gas. And then you can see the cleanup goals and why we need to go ahead and do some form of remediation at this site. Now, the alternatives that we looked at were, as always, the no action alternative. Just actually implementing institutional controls, and just basically fencing the site off and keeping anybody from coming on the site. But, of course, our goal is to redevelop this property, so that's something that we really don't want to have happen because we want to make this be a productive property that's part of the community on Mare Island and Vallejo. The other one we looked at was excavation and off-site disposal. We looked at excavation, on-site treatment, and off-site disposal. We looked at just encapsulation, and the institutional controls that we would have associated with that. And we looked at three different scenarios there; we looked at just an asphalt cap, a soil cap, and then an engineered cap. And then the last alternative that we looked at was partial excavation, the off-site disposal, and partial encapsulation/institutional controls.

So what you might want to do is look at the last figure that I gave you, the 11 x 17, because that kind of talks -- I'll go through this in descriptive terms, but that kind of goes through the proposed cleanup remedy for the site. So the preferred alternative is alternative number six which was partial excavation of the southwest corner or panhandle of the inverted Oklahoma, as I call it, down here, where we're seeing the very high petroleum hydrocarbons and the free phase product. And that's this green area that you're seeing here. The other portion of it is this area that would be capped. This would be a three foot thick soil cap. There are also a few other things that we're going to be doing in this area. There is petroleum hydrocarbons that are associated with these utilities. This is a sanitary sewer line and a industrial wastewater line. There's also an electrical line that runs out here. Those would all be removed, and any petroleum hydrocarbons that would be in those areas would be taken out also. There's electrical line that goes up here. That would have to be removed, and any associated petroleum hydrocarbon would come out of that.

Also there's some areas in here where we see some high soil gas for gasoline -- vapor for gasoline, and those areas would also be excavated. And then on top of that we would put the cap. Now, to be able to get utilities into this site, one thing that we're going to be doing is actually putting in utility corridors. There's a utility corridor right there that would be clean, would be lined, and there's another one right there. Then after we actually implement the remedy, there's going to be some post remedial groundwater and soil gas monitoring as necessary. And then there would be institutional controls on the site, there would be two actually. You would have the commercial/ industrial institutional control that would prohibit sensitive uses, which would be residences, hospitals, daycare centers, schools. And then as far as the capped area, you're going to have to do something about the management of this cap, so there will be a institutional control that will want to minimize any kind of disturbance of the cap, and also make sure that it's inspected, make sure it's intact, and anything that's built on top of it would enhance the cap and not detract from the cap.

Now, one of the things -- and let me go back here to this figure right here, and the fact that Marie alluded to it when we talked about it, is that, and I'll probably go back one more slide. But as far as the excavated soils and the debris disposal in the southwest corner of the site, this is the only place that would occur, is that that could go off-site or we are also working with the Navy and Weston to see if we can develop our own Petroleum Corrective Action Plan for that type of petroleum hydrocarbon contamination, and be able to take it to the Investigation Area H1 Containment Area that is on the western property -- on the Weston property. So we're looking at

that option, and we're working cooperatively with the Navy, Weston, and as Gil mentioned, a number of different entities --

CO-CHAIR HAYES: About a hundred lawyers.

MR. SILER: -- and their lawyers to go ahead and try to implement that remedy. What that would do -- and if you remember back to Marie's figure, and let me see if I can get that on the screen here. Okay. If you take a look here, if we can pull this off, this is the free phase petroleum hydrocarbon extent of what we're looking at, and we're actually projecting it out to the edge of the Crane Test Area and projecting out here if there's any contingency. But this material would be excavated if we can work with the Navy and Weston and actually be taken out into the H1 landfill and disposed of. Additionally, what we would do is we would implement the remedy under a Petroleum Corrective Action Program with the Water Board as the lead agency for this material on the eastern side of Azuar Drive. And the reason we really want to do this, and Marie had talked about it, is that we want to do this simultaneously to get this over with at one time. Instead of having to stop at the center line, you'd have to put up some sort of a containment barrier, because whatever is on one side or the other, if you put clean backfill in would leak back over to the other side. And if we can do this all at once, we would only have to shut down this road one time, instead of having to come back, have the Navy do their work, shut down the road, open the road back up again, come back again at some later date, probably sometime later next year, close the road down, and do the portion on the eastern side of the Eastern Early Transfer Parcel.

So we're really working hard to try to get this petroleum component, both in the western portion of the Crane Test Area and over here across from the DRMO on the eastern side of Azuar Drive, done right now.

So what's the schedule for this? The Draft Public Feasibility Study Remedial Action Plan is scheduled to be finalized in August and September. Right now we're trying to get it done by the middle of September -- I mean August, so we can actually start the public comment period right around the 13th of August. We plan on taking those public comments in that 30 day period. Finalizing the Feasibility Study/ Remedial Action Plan in October. Implementing the Remedial Action Plan in the winter of 2009 to the fall of 2010. Record the land use covenants, fall winter 2010. Start the post remediation monitoring, groundwater, soil, gas, whatever we need to do, in fall, 2010. And close the site sometime in early 2011. So that concludes my presentation.

But before I will actually take your questions or respond to your comments, I ask you all to endorse my vision for the Crane Test Area.

(LAUGHTER.)

MR. SILER: And with that, I would like to take any questions that you have.

CO-CHAIR HAYES: You're a twisted individual, Neal.

MR. COFFEY: You've got this fixation on pyramids.

MR. SILER: Especially ones that light up at the top.

CO-CHAIR HAYES: That's only once a year, isn't it?

MR. SILER: They do it all the time down there. That's the Luxor. Sorry, Carolyn.

MS. D'ALMEIDA: So Neal, did you look at vapor intrusion in your risk assessment?

MR. SILER: Steve, can you answer that question for me?

MR. FARLEY: Yes, we did.

MS. D'ALMEIDA: And what was the conclusion?

MR. FARLEY: Right now the levels would be, if there were a building right there -- it's primarily from gasoline if you look at the concentrations. Gasoline and some of the VOCs in soil gas would present an unacceptable risk to those who would be in the commercial building, and that's one of the reasons for the remedy.

MS. D'ALMEIDA: Okay. So you're putting -- your remedy is to put a cap on it? Why are you putting a cap and not excavating?

MR. SILER: Well, we are excavating in the areas where -- let's go back and take a look at that. Sorry about that. In the areas where you're seeing the high soil gas, and if you look at the figure closely there's a legend, these little -- again, they're, you know, deltas or pyramids, they are the areas where we're seeing the high soil gas. And all that area will be excavated, along with these areas up in here where we're seeing high soil gas, all of that will be excavated also.

MR. FARLEY: So Carolyn, if you compare the figures -- the three figures that Neal has, the one in particular that has -- if you compare the locations of the high hits on that figure to the areas that Neal has just pointed out as being excavation areas, there's a correlation between the two.

MR. SILER: Yeah.

MS. D'ALMEIDA: Okay. Oh, I see. Okay.

MR. FARLEY: So all the pathways that are considered to be potentially complete, soil gas, vapor intrusion into buildings, as Neal pointed out dermal contact, all of those pathways were considered in the risk assessment. And then depending on what the risks were, remedies were developed to address those pathways.

MS. D'ALMEIDA: Was it mostly a cost concern that you didn't excavate the whole site or --

MR. SILER: Well, that is one of the concerns we have. If you excavate the whole site and you -- as off-site disposal you're talking of the cost estimate that we have from the engineers is about \$30 million, okay. Now, the estimate for actually excavating this area and then having the cap over here brings that down to a much more manageable, somewhere in the \$13 to \$17 million range. And as we take this out we're not going to have anything that would basically be flowing or in these areas here having a soil gas issue. So as we cut off this dermal contact in this area, that would be an adequate remedy that would allow us to develop the site and to be protective of human health and the environment.

MS. D'ALMEIDA: So are you going to have two different grades on the property when you get done?

MR. SILER: You might have two different grades on the property, but you could easily do that where you could have a building here and a parking lot here, or a building here and a parking lot here, depending on how you do it.

MR. QUIGLEY: Question. On this eighty acres, they can't even plant a tree, correct?

MR. SILER: No, they can plant trees.

MR. COFFEY: Just not fruit bearing.

MR. QUIGLEY: Okay.

MR. SILER: The one thing in the commercial/industrial area that, for the risk assessment there was no consideration of actually planting any kind of a vegetable or fruit bearing tree that was for human consumption. So that's the one thing that you can't do in any of the commercial/industrial areas, you could not have, you know, fruit or vegetable bearing plants that would be suitable for human consumption.

MR. FARLEY: Just to go back to your question, Carolyn. One of the considerations in doing a Feasibility Study, and clearly there's a number of different criteria that are considered, cost is one, but also the nature and extent of the contamination, the conceptual site model, the types of contaminants that are there. And if you look at the alternative, this alternative addresses excavation for those constituents that are -- that tend to be mobile, either in groundwater or more likely in this case in the soil gas. The areas where -- and so we're excavating those areas. But the remaining areas are largely just areas where there's metals contamination. And to go back to a question that was asked in the previous public meeting, lead just doesn't go anywhere. The solubility of lead is extremely low in these types of groundwater, and so as long as we protect people from contact with that stuff, with the lead in the soil, then the remedy is protective of human health and the environment. Now, if we had constituents in there that might make the lead much more mobile, more soluble in groundwater, then we may have to evaluate a different remedy. But based on the type of lead that's out there it's not mobile, and putting a cap on it is the right remedy.

MR. SILER: Myrna.

CO-CHAIR HAYES: Can you tell us from your analysis here on that very first image why the dredge spoil fill was so thin? Do you have any speculation on why it was only six to eight feet thick?

MR. FARLEY: Where you at?

MR. SILER: She's talking about the conceptual site model.

CO-CHAIR HAYES: And I mean if it is -- and if it was a former -- do you have any aerial photos that show that it was a dredge pond at any time? Your very first image there. Yeah.

MR. FARLEY: Sorry.

CO-CHAIR HAYES: It's page nine of the presentation, it says that the dredge spoil fill was six to eight feet thick. And do you have aerial photos that show how that deposit got put in there, whether it was -- I assume it was by dredge material flowing in there. And then do you have knowledge of an outfall on that property?

MR. FARLEY: There weren't outfalls. What the Navy did was in -- the island was developed by accretion basically. The Navy did, they did two basic things. One is they would build dikes around certain areas. And I think I mentioned before, a lot of the roads that are out here are the old dikes where the Navy would then put a dredge pipe in there or move pipe around. But they would basically build up the ground surface out here by just pumping dredge materials in.

CO-CHAIR HAYES: Yeah, I did know that.

MR. FARLEY: In the case of the area west of Azuar Drive, there was a road there, Dump Road, but it wasn't the same type of disposition of the dredge materials. And we do have aerial photos

from the time in which this area was developed, and you can see how the area basically accreted. There were two basic phases. One is you can see where some of the muds were pumped out on top of the old wetlands. And then after that then you can see the actual physical movement of the fill material other than the dredge materials, the fill material, you can actually see some of the old bulldozers in the photographs, and you can see the material, it sort of went out in a fan pattern as the area developed from east to west. So the short answer is yes, we have air photos; yes, we can see the actual development over time. The air photos have dates on them, so we can see what periods were filled in what times.

CO-CHAIR HAYES: And no, there was no dredge material pumped out there and there was no outfall point or points?

MR. FARLEY: There was dredge material pumped out there, there was no outfall. It was just pumped out onto the ground surface. And I think -- I don't have any documentation on this, but I think the reason it was done this way is to get a ground surface. Even though it may have been a little bit muddy at first, but to get a ground surface on which the Navy could then start pushing material out from east to west.

CO-CHAIR HAYES: Well, that would be a very, very strange operation, totally different from what I understand all other operations of dredge depositing were on the island for it to not have an outfall on a pipe. So you're telling me that it was like brought in by trucks and plopped on?

MR. FARLEY: Oh, okay, I'm sorry. I thought you meant an outfall for the dredge water to --

CO-CHAIR HAYES: No. No.

MR. FARLEY: You're talking about a dredge pipeline outfall?

CO-CHAIR HAYES: Yeah. Right. Right.

MR. FARLEY: I've never seen any photographs, aerial photos, that show an actual pipe on the ground. What you see are the patterns, the patterns on the ground surface where you can see what appears to be the dredge materials pumping out in the ground, and then followed by, you know, basically bulldozers and tractors that were pushing this stuff to the north and to the south as the road accreted towards the west.

CO-CHAIR HAYES: Well, I think you might as well get ready for your public comment period to have some of those photos in your presentation, because this would be an anomaly if it didn't have, so to speak, if it didn't have dredge depositing that might have an outfall point where there was a collection of special treasures, like has been found in every other dredge pond or site where dredge material has drifted onto a site.

MR. COFFEY: Ordnance.

CO-CHAIR HAYES: I do have some other questions. On your big -- one of your big maps here that shows on the left-hand corner or western corner, Weston V-Trench, and then it has this green that makes me think that I -- that that must be pickleweed or trail of pickleweed, and then there's a white. And your fill area is this really clean little line, green line, but it doesn't -- but there's white all around it before it gets to green, and then there's this trench line that goes through. I guess I'm just curious whether your project fits within Eastern Early Transfer boundaries, or whether you -- what tests you did outside of these boundaries. I don't see any of your little marks that are outside of that magic green line.

MR. SILER: Well, that's because that's Navy property, that's not our property.

CO-CHAIR HAYES: Oh, could you use a microphone, please?

MR. SILER: That's Navy property. Yeah, that area out there is Navy property. That's not the Eastern Early Transfer. So any investigations that will be done out in that area would be with the Navy.

CO-CHAIR HAYES: And have those been done?

MR. SILER: You'd have to ask the Navy.

CO-CHAIR HAYES: Because if you're going to excavate you're going to excavate just up to your property boundary, it seems like you've got a similar kind of problem looming, potentially looming as you do on Azuar Drive. Are you just -- is everybody just going to wait and see or get surprised, or have you done any kind of testing of the area outside of that boundary?

MS. DREYER: So, the area there to the west closest to the Weston V-Trench there, as you know we are -- or that area will be part of the area we plan on excavating petroleum -- so that area there, maybe Neal can help me, exactly right there. So, above the Dump Road road up there to the north before we hit the green area, that will be part of our PCAP investigation.

CO-CHAIR HAYES: Okay. And that's good to know. And then what about in that area that's -- that one right there. Neal, yeah, Parcel XVI.

MR. SILER: Okay.

CO-CHAIR HAYES: What's the deal with that?

MR. SILER: Well that one and -- let me show you something.

CO-CHAIR HAYES: Okay.

MR. SILER: So we can go ahead and take a look at that. If you look at this area right in here where there are lines of soil samples, and there's one up here, now these areas do have lead, but as you can see this, this is right to the northwest of the area that's going to be excavated in here, we did not observe any of the free product in that area. So it looks like that free product, at least from this area in here -- and we'd have to go ahead and do some exploring down in this area -- but it does not appear to extend out all the way out beyond this line right here because we actually have been in that area. Now, we may have to go back and take a look at it just to make sure, and that's why there was a contingency, at least for our implementation, to go ahead and take this right to our property line. But as far as moving north, that would be the Navy's responsibility, and they would have to take a look at that.

CO-CHAIR HAYES: So Marie, I guess you're back to answer that question, what is the -- your plan to or have you already sampled in that area north, north of their boundaries?

MS. DREYER: Currently we have not extensively sampled that area, actually I can't recall any sampling and what the concentrations of the samples might be. I -- the best I could say right now is based on what Lennar Mare Island/ CH2M Hill finds, if they find some hot spots and say a hot edge to their excavation, then at that point we might take over and consider future excavation on Navy funding.

CO-CHAIR HAYES: Where is that property to the north on that boundary? Who is that slated to go to?

MS. DREYER: Right now it's still Navy property, that's Parcel XVI.

CO-CHAIR HAYES: Where is it -- who is it slated to go to in transfer?

MS. DREYER: I'll let Michael answer that one.

CO-CHAIR BLOOM: I believe it's the City.

MR. COFFEY: It's going to be another fire station.

(LAUGHTER.)

CO-CHAIR HAYES: Closer to home. Okay. Well, that's to be continued, I think. When you say that -- on page eighteen, in that conversation you mentioned that the cap for the building -- the cap -- the building could actually somehow enhance the cap, it couldn't degrade -- you know, weaken the cap or make the cap less comprehensive than it is. First of all, how would you envision the building enhancing the cap? And secondly, because this building is -- has a long ways to go before it would hit bedrock, and I don't know how many stories your pyramid is, but would you be planning to build this building on a floating pad or would you be building it on piers? And if you were building it on piers, wouldn't you not enhance the cap?

MR. SILER: One of the things that we're going to do with the institutional control is limit the type of building that can go on the property. So you could not have any subsurface structures or basements without actually consideration of an alteration of the remedy or additional remedy involved. So you could have a tilt-up structure that would be on a tension slab foundation that actually would fit in within the cap, and when you actually have a soil cap and you put concrete over it, you would actually have a more robust cap than you would have with just the soil on top of it.

CO-CHAIR HAYES: So you weren't thinking about building a building that needed piers?

MR. SILER: No.

CO-CHAIR HAYES: And that's going to be like part of your land use control?

MR. SILER: That would be part of the institutional control, that's right.

CO-CHAIR HAYES: Well, I guess enough questions for tonight.

MR. SILER: Okay. Thank you very much, everyone.

MR. QUIGLEY: No, no, don't go away.

MR. SILER: Oh, Wendell.

MR. QUIGLEY: I'm confused, which is really easy to do.

CO-CHAIR HAYES: At least you admit it.

MR. QUIGLEY: Are we or are we not here to clean this up? We're capping so much stuff. And another question in the same era is how much can H1 take? I mean, are we going to end up with Mt. Fuji up there?

MR. COFFEY: One day it's going to erupt.

MR. SILER: And probably Michael and Dwight want to talk to that. If we are going to use H1, what we're going to do, my understanding of the cut off-period for H1, that's why we're time critical to get this done, is they want to close out the H1 Containment Area probably in the fall of

this year, so we would have a very limited time that we could take material out there. So the whole idea is to get material out there that we can do before it needs to be closed off, which is somewhere late October, early November. Michael?

CO-CHAIR BLOOM: Yeah.

MR. SILER: Exactly. So that would be the extent of the material that would ever go into the H1 Containment Area. And, you know, we've looked at this, we've talked to the regulators about it, and this does not appear to be an issue as long as we comply with the requirements that Janet talked about earlier as far as the material that would go in there. Nothing liquid, nothing excessively volatile. So you would actually fit into the overall design of the H1 Containment Area, as long as we do that within this timeframe before it gets closed out.

CO-CHAIR HAYES: But you're -- I do have more questions, I forgot. But your proposed cleanup action is winter of 2009, that was -- that's passed.

MR. SILER: Uh-huh.

CO-CHAIR HAYES: And fall of 2010, that's a year from now.

MR. SILER: When I'm saying winter of 2009, I'm talking about December of 2009.

CO-CHAIR HAYES: Well December 21 begins winter.

MR. SILER: Yep, that's exactly right. That's exactly right.

CO-CHAIR HAYES: I thought it was going to be closed by December.

MR. SILER: No, the petroleum action would be done, if we can actually do this, get it done, we would do the petroleum action where we actually excavate the portion of the Crane Test Area and across Azuar Drive, that would be done before October/November of 2009. So that portion of it would be done.

CO-CHAIR HAYES: Well, it doesn't say that on your little schedule, so I was confused. Does it?

CO-CHAIR BLOOM: It doesn't.

CO-CHAIR HAYES: It doesn't, okay.

MR. SILER: No.

CO-CHAIR BLOOM: All right. Thank you, Neal. With that, we'll go into our first public comment period. Any public comment? Okay. We'll go ahead and take a short break.

(Thereupon there was a brief recess.)

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Michael Bloom)

CO-CHAIR BLOOM: Okay, folks, let's go ahead and get started on the second half. Those outside join the party. Okay, onto administrative business and announcements. If anybody has any comments on the minutes, please get them to myself or Myrna. Do you have any administrative business?

CO-CHAIR HAYES: (Shook head.)

V. FOCUS GROUP REPORTS

CO-CHAIR BLOOM: Okay. We will go ahead and get started on the focus group reports. The first is the community focus group, Wendell.

a) Community (Wendell Quigley)

MR. COFFEY: Do you even know where the community is?

CO-CHAIR HAYES: Do you know what town you live in?

MR. QUIGLEY: Too many things I'm just too confused on. This -- I mean they're filling me in, but at this time I have nothing to report.

b) Natural Resources (Jerry Karr)

CO-CHAIR BLOOM: Okay. Thank you. Natural resources, Jerry. How is he?

CO-CHAIR HAYES: Well, I can report that Jerry e-mailed me late last night that his father-in-law passed away in Arkansas, and they're on a plane right now down to be with the family. So he is continuing to improve physically, but he's not here with us, only in spirit.

c) Technical (Paula Tygielski)

CO-CHAIR BLOOM: Thanks, Myrna. Technical focus group, Paula.

MS. TYGIELSKI: I'm not sure I really have a report, but a couple things to say. I went on the little cruise out by the mothball fleet and saw the Iowa. Very enjoyable, very enjoyable. But they learned that the steps up to the little boat are not really handicap accessible. They watched me crawl onto that little boat. I mean literally. And another thing I have to say is I know of a group of young men who have cleared it through security on Mare Island that they use one of the abandoned buildings that's not -- not --

MR. COFFEY: Burned.

MS. TYGIELSKI: No, it's not closed off and not fenced off, and they use it for soft -- air soft pellet fights. So you will probably have a several million dollar sweep-up of little plastic pellets in the future.

d) City Report (Gil Hollingsworth)

CO-CHAIR BLOOM: All right. Thank you, Paula. Next is Gil, City report.

MR. HOLLINGSWORTH: The City has nothing to report. Do you know what building you're talking about?

MS. TYGIELSKI: No, I don't know building number. It's across from something called Alcan.

MR. QUIGLEY: Alcoa, that's down here. That's on the north end.

MR. HOLLINGSWORTH: There's a legal word for that, it's called trespassing.

MR. QUIGLEY: And the building sounds like the old barracks. With no roofs?

MR. HOLLINGSWORTH: No, you know what it is, it's that building right there as you come in the gate, 755. I'm sure.

e) Lennar Update (Steve Farley)

CO-CHAIR BLOOM: Okay. Next is the Lennar update, Steve.

MR. FARLEY: Thank you, Michael. I have a handout, our normal 11 x 17 handout. Let me address the two or three figures that are on here first. In the lower left corner is an excavation that we've been performing at UST 693. The view is to the north, and the building in the background is Building 461. So, just an example of some of the work we're doing out there around --

CO-CHAIR HAYES: It's huge.

MR. FARLEY: Yeah, it's a very large excavation. Around UST -- former UST 693. In the upper right is two views of the same building, hard to believe. UST -- or excuse me, Building 845 is in the upper photo. This is prior to its relocation. The reason it was relocated is because of its location relative to the excavation that you see in the lower left corner. The building was picked up, wrapped to protect against release of lead based paint during the movement of the building. It was put on a trailer and moved up. And it's now located, temporarily stored on the south side of Building 461. The building was moved because it's considered a historic structure.

MR. COFFEY: Do we know why? What's so historic about it?

MR. FARLEY: I don't know what the criteria used were, but it was determined to be a historic structure.

CO-CHAIR HAYES: They tear every other one down.

MR. FARLEY: So if you can then follow along, all the IA's are colored coded, A3, B, C1, 2, C3. I'm going to talk about some of the work that's going on. So if you just want to follow along with the map. IA-B1, also known as the Crane Test Area, Neal touched on the progress there. The draft for public comment was submitted to the agencies in July, and we anticipate the start of a public comment period in the middle of August. The IA-B2, which is the remaining portion of IA-B, the main accomplishment there in the last month or so is we submitted an addendum to a technical memorandum that addressed the question of what part of IA-B2 can proceed to closure. And if we think back to the presentation that Marie gave tonight, there are some petroleum hydrocarbons that appear to be on the east side of Azuar Drive that would affect the closure of the rest of IA-B.

So we prepared a technical memorandum addressing the contamination that's on that portion of IA-B, did some additional field work, and came up with a boundary for IA-B2 that agencies concurred would be okay for closing a portion of IA-B2, and then we would finish up the rest of IA-B2 once the petroleum is addressed. C-1 is the area to the upper right. It's the one with IR-03, IR-720, IR-15. These are some of the main sites that we're working on right now. IR-15 there's a label there, it's a site with some contaminated groundwater. And we have prepared a draft FS/RAP -- FS/RAP stands for Feasibility Study/Remedial Action Plan. We received agency comments on that. We're now preparing the version of that document that will go out for public comment, and we expect the public comment period to start sometime in September.

IR-720 is right up near G Street. The main issue there is some groundwater related issues. And we've recently submitted a report and received approval from the agencies on the closure of the groundwater issues there pending some additional discussions with the agencies on the need for some additional long term groundwater monitoring in that area.

Building 461 you can see that -- the gray box just below the IR-720 label. We prepared a draft final FS/RAW. RAW stands for Remedial Action Workplan. That's a document for public review, and it was submitted to the agencies today. And we expect that there will be some

additional activities performed in a combination of between the state and CH2M Hill, Lennar, filling out some of the CEQA initial studies and that sort of thing. And we expect to go to public review next month and -- which means tomorrow, or I guess, actually Saturday, huh? And anticipate the remediation for the Building 461 area to start sometime in November of this year.

IR-03, this is another area where we're doing a fair amount of work right now. There's an excavation that we're performing. So far we've removed some surface structures, pavement, and to date, we've removed a little over 2,000 tons of soil that were within the boundaries of the site. And as we go forward with that excavation we follow behind with collecting soil confirmation samples based on field screening data so that we know when we're done, or as we're finishing up the excavation we already know that we've achieved the cleanup levels before all of the work is done. IA-C2 is the large area to the south of the EETP. And there are two main activities that we're performing for the CERCLA side of the house. One is the preparation of a FS/RAW for an area called IR-21. You can see that in sort of the pink colored box and the label on top of it that says IR-21. And we've prepared a version of that FS/RAW that's going out to public review, it was submitted to the agencies on the 7th, and we're hoping to get approval on that from the agencies and begin the public comment period in August of this year. In addition, there's a document that we're preparing that's called the IA-C2 RAP. And the IA-C2 RAP covers all of the sites within C-2. And we're hoping that that document will also go to the agencies in August of this year.

IA-C3 is the area that includes the Triangle Area, you see the purple dashed line around the Triangle Area. And we have submitted the Draft FS/RAP for that area. The public review period ended in the middle of July, we're responding to the agency's and public comments -- actually public comments on that, and preparing the final version of that document. And then the follow-on document after that FS/RAP is finalized is a document called the Remedial Design Work Plan, and we're preparing that now. It's the document that will specify all of the details for the remedy that's going to be implemented there.

In IA-H2 the remaining work there is to finish up some post remedy monitoring for UST 231. And if anybody had driven down Azuar Drive over the last few months or so, you recall that a number of buildings were demolished and some soil excavation was completed, some fairly extensive soil excavation, a number of overlapping tank sites. And the final activity there is to do some soil gas monitoring to demonstrate there aren't any unacceptable levels in the soil gas, and then to complete some additional groundwater monitoring.

The next activity, there's nothing shown on the figure, there are these pipelines called FOPLs, FOPL stands for Fuel Oil Pipeline and they're part of the old fuel oil distribution system that -- there's something on the order of 47,000 feet of those pipelines out here, all different sizes. We've submitted requests for closures on 22 of those segments this year, and received closure on 21 of those segments. We have some additional field work coming up for some of the other ones.

USTs. We have some work going on at UST 693, which is actually the photo that I mentioned to you early. And then a couple of other sites that we are either doing some post remedy monitoring or requesting closure, preparing closure documentation, and there are something on the order of about eight or ten of the sites that are in that category.

And then lastly we're working on a number of PCB sites simultaneously. Probably the most significant is the Building 680 work. And you can see Building 680 down in the lower right

corner of IA-C2. If you'll recall back, we gave a presentation on the Building 680 work back in the June RAB meeting. And we anticipate approval from EPA sometime this week or probably next week, and to have DTSC comments. We've discussed it with them, we've sent them preliminary responses, and we think we have the approval from DTSC as well. So that will be good to get that project rolling. And then the last thing is that we've only got about eleven sites, eleven PCB sites remaining that require an action. There are other sites that need to be closed, but there are only about eleven sites that need to be -- yeah, it's really exciting to sort of get to the end of that. Of those -- and of those --

CO-CHAIR HAYES: Carolyn will be out of work.

MS. D'ALMEIDA: No, I won't.

MR. FARLEY: Nine of them are in IA-C2, the others are in other IA's. So I'd be happy to answer any questions.

MR. QUIGLEY: Mine's an easy one.

MR. COFFEY: You're still confused.

MR. QUIGLEY: How long -- yeah, I'm very confused. How long time-wise, I think you said 200,000 tons of dirt --

MR. FARLEY: 2,000.

MR. QUIGLEY: Oh, never mind.

MR. FARLEY: That was easy.

f) Weston Update (Dwight Gemar)

CO-CHAIR BLOOM: All right. Thank you, Steve. Next is the Weston update, and Dwight filling in for Cris.

MR. GEMAR: Yep. Thanks. Hopefully everyone has the one page Weston handout. In the upper left is a document status. And we had an updated characterization report submitted in July for the Sanitary Sewage Treatment Plant Outfall. And we're also working on responses and some document changes to a couple of draft documents regarding the munitions work that's been done out at IR-05, and the Western Magazine Area which are done at the south end of the island. And also have our Semiannual Groundwater Monitoring Report that's due out at the end of the month.

There are a couple of documents in the queue with the agencies right now as well. And then an update on the SSTP outfall which you've heard about several times. We actually went out once again and did some sampling in early July. And the good news is that this time it looks like we've kind of bounded the extent of the contamination in the vicinity of the outfall. The mercury results that we got were all well below one part per million, and seem to be pretty much in line with the ambient background concentrations out in that neck of the woods. So that's the good news. And so the agencies are mulling over that information, and we'll get back together again, I'm sure, in the near future to discuss what steps, if any, need to be done out there for closure. And in the lower left is a picture of one of our Weston folks extracting a core from a sampling tube out on the water.

And then on the right side of the update is some work that's been going on out at IR-05, which again is down at the very south end of the island along the Carquinez Strait. This is a site that was used for munitions demolition, burning of propellant, that kind of thing when the shipyard was active. We did finally get the biological opinion at the end of June from the Fish and Wildlife Service, and basically that allows us to take out the pickleweed, which is the habitat for the salt marsh harvest mouse which is an endangered critter on Mare Island. And the one complication though is that the Service said we couldn't use mechanical means to cut or remove the pickleweed. So on the lower right you see the folks doing the very fun job of removing pickleweed by hand.

CO-CHAIR HAYES: Is that even Charlie right there doing it?

MR. GEMAR: No. No. No. Charlie would only observe.

CO-CHAIR HAYES: Now he's an approved observer.

(LAUGHTER.)

MR. GEMAR: But no, we did have a separate biologist that was approved by the service that has to have a special permit to basically handle them or be qualified to deal with the salt marsh harvest mouse. So she was out there during this entire period. And you'll see the count of the mice and whatnot that were observed during this period. And as they say on the TV, no mice were harmed in the filming of this episode. But they all decided to leave for better environs upon seeing the guys starting to remove their habitat.

But the good news is once we excavate the contaminated soil that resides underneath the pickleweed, this area will be restored back to a tidal influenced pickleweed habitat type area. So we'll actually be increasing the amount of pickleweed habitat substantially after the soil removal is done.

One additional complication that came up though is in that last paragraph, the Navy's Ordnance Safety and Security Activity indicated that they want a new explosive safety submission be submitted, so that's going to hold us up a little bit. We've submitted that to them just the day before yesterday, and they're going to take a look at it. And hopefully within the next, you know, month or six weeks we'll get that approved, and we'll be able to go out there and do the actual excavation work. And that material would be also consolidated at H1, and then this area would be backfilled to a grade that would allow, again, the pickleweed habitat to reestablish.

CO-CHAIR HAYES: I just want to make one correction. Three each of mouse mice, that should be house mice.

MR. GEMAR: Oh. Point well taken.

MR. FARLEY: That's a different species.

MR. GEMAR: That is true, that is a house mice.

g) Regulatory Agency Update (Janet Naito, Paisha Jorgensen, Carolyn D'Almeida)

CO-CHAIR BLOOM: All right. Thank you, Dwight. Next is regulatory update, Janet with DTSC or Paisha with the Water Board since you have the mike.

MR. JORGENSEN: All right. On my desk is -- the Navy has recently submitted nine requests for closures for USTs. I've reviewed about half of them. I verbally told the Navy that I can close

two of them A-267 and A-195 which they're very happy about it. And I'll be reviewing the remaining and commenting on them as the weeks go on.

I've also been working with the Navy and Lennar on -- and working cooperatively to get the TPH of the CTA, Crane Test Area, and DRMO areas to be excavated concurrently rather than having to do it at two different times, which is a big concern of mine. So I'm happy to hear that things are moving forward on that front.

I've also been working and will continue working with Lennar and CH2M Hill on groundwater monitoring along the strait. There are areas where we have impacted groundwater, and we've been talking about different locations to place wells so that we can monitor the contaminants and make sure that none are going into the strait. And Steve and I have a meeting in a week to discuss the area up by IR-0720, as he mentioned earlier, about the long term groundwater monitoring in that area. And that's it for now.

MS. NAITO: Mine's going to be a lot shorter. I didn't prepare anything specifically. And I will promise to do a better job next month and have much more detail. I have nothing to report.

CO-CHAIR HAYES: You and Wendell both.

CO-CHAIR BLOOM: Carolyn.

MS. D'ALMEIDA: It's been a while for me so I guess I better have a report and an explanation. In March I came back to work full-time and ended up picking up another project, a major site, Montrose is the world's largest DDT manufacturer down in L.A. And so it's been a bit chaotic for me in the past few months. But that's actually not the explanation for my absences. My kids' school functions and activities have just taken up my time. But last week I can officially report that my son got his driver's license, and tonight I don't have to pick him up.

So -- well, my report for this week for Mare Island, I've just been really trying to keep my desk from overflowing from the PCB reports that have been coming in this week. I got through ten cleanup plans for the Navy, and they're all in the signature chain. And Building 680 is, I think it's even out of the signature chain and signed, and I just have to get it sent to you.

MR. FARLEY: Thank you.

MS. D'ALMEIDA: So that's my report.

VI. CO-CHAIR REPORTS

CO-CHAIR BLOOM: Thanks, Carolyn. And we do thank you for the PCBs, which leads I guess into our reports, and I'll go first. We see on the bottom left is our upcoming field work that we have. The two biggest projects that will happen in August will be the DRMO PCAP, the petroleum removal that Marie presented tonight, and then also the Paint Waste Area site, we hope to get started on that in mid-August as well. We talked about that. That's in the Parcel XVI area. We talked about that last month, I believe, in the RAB.

We submitted a bunch of PCB reports to Carolyn this month. There were ten that we submitted just this month, not including the ones last month. And then two tank reports to Paisha along with the other tank reports we submitted last month that he reported on. We received various comments on different reports from DTSC on our Draft Site Management Plan which talks about the schedules, on the Action Memo/IRAP, to the Paint Waste Area. We also received comments on our investigation summary report for the Mare Island Strait and Carquinez Strait, and on the

DRMO Petroleum Corrective Action Plan. From Carolyn we received letters on the PCB reports and also on the Paint Waste Area. And from Paisha on the DRMO and three tank reports. We had our BCT meeting today. And that's my report. Take any questions if anybody has any. If not, I'll turn it over to Myrna.

CO-CHAIR HAYES: Well, I just have one correction, another spelling issue. On the Draft Final Investigation Summary Report on your back page for MEC at Mare Island Strait, you want to stick with the spelling of "strait" because some of my friends think there are enough "straits".

CO-CHAIR BLOOM: Thank you.

CO-CHAIR HAYES: But you can do it plural, but it's got to be spelled that other way.

CO-CHAIR BLOOM: Thank you very much.

MR. FARLEY: That's a different segment.

CO-CHAIR BLOOM: Turn it over to you, your report.

CO-CHAIR HAYES: Yep. My report has everything to do with the Mare Island Shoreline Heritage Preserve. And if you get weary of hearing about it, you could turn some other property into parkland and maybe I'd be interested in trying to help the public get to it. But for now we're lucky to have the 98 acres that the Navy and City and State Lands and everyone has worked really hard to get ready for public use. And so we have the second Saturdays where the park is open, and that includes -- Kenn just gave me his paperwork, Kenn Browne, that the Navy approved to escort walks to the south end of Mare Island on the second Saturday of every month through the rest of the year. That's between the Sierra Club and the Navy. So we want to really thank you for getting that processed through. People do really appreciate getting access to that south shoreline.

So what I have in the big version and the smaller versions is the poster for the upcoming Mare Faire. This is the second year that we've just done a two day celebration on the second Saturday and Sunday this year of August. The last two years have been the 150th of the Naval Ammunition Depot, the next year the 150th of the Naval Cemetery, and the 65th anniversary of the Port Chicago Mutiny which few people know, except for everybody in this room knows, took place here in Vallejo under the command of the Mare Island Naval Ammunition Depot, but actually took place where our sanitation district sits today, and at the Ryder Street Barracks. So this year is the 65th anniversary of that important date or action.

Whether you were ex-military or former military, whether you believe that that was the right or wrong thing for those men to do to choose to not go back to work under the conditions they were working under, the truth is history has shown that their action led the Navy to be the first of the military services to integrate African Americans, people of other races, mixed in with whites in their operations. And a couple of years later the President actually signed an Executive Order to integrate all of the military services. So the action that was taken by these men, 258 men August 9, 1944, 65 years ago, did change American history and certainly military history in America.

So we also are privileged to have a lady who grew up at Mare Island at the Naval Ammunition Depot, Lorene Seward from Sonoma, who will spend Saturday afternoon with us, and I'll be interviewing her. So there are guided outings, tours, silent auction, gourd painting, live music with Guy Arrostuto and his friends, a barbecue. And we could definitely use help in a couple of ways. And if you would like to sponsor either that event or throughout the rest of the year on

some of the overall improvements that are still needed, you can see me afterwards. And otherwise, if you'd like to help get the word out in the next week or so, I've got plenty of flyers. And otherwise we have a work party scheduled on Saturday for the day, and you're welcome anytime that weekend as well to help out. And that's August 8 and 9, 9:00 a.m. to 7:00 p.m. I want to thank the City of Vallejo and the Navy for the two permits that we'll have to use their properties for that event.

MR. FARLEY: Myrna, are any of those materials available electronically?

CO-CHAIR HAYES: Yeah, they are. Our website is up and corrected after much consternation after my computer was stolen and not enough backup was done, and so it is live, and in this -- this poster is right on the home page, you can just click right on it, and the same with the sponsor material, also a single click at the top of the Web page.

CO-CHAIR BLOOM: Thanks, Myrna. Next we'll go into our --

MR. FARNELL: And the address is?

CO-CHAIR HAYES: That's the southern end of Railroad Avenue beyond the Army Reserves. There is no address, I don't know if it will ever have an address for --

MR. FARNELL: The e-mail address?

CO-CHAIR HAYES: Oh, the email address.

MR. FARNELL: The Internet address, the website.

CO-CHAIR HAYES: Well, the Internet is easy. It's Mareislandpreserve.org. And I also wanted to note, I'm glad that you asked a question, because I wanted to note that the public comment period is currently open for the City's Mitigated Neg. Dec., Negative Declaration on their California Environmental Quality Act requirement for the dry dock -- the reuse of the dry docks at Mare Island, or at least a couple of them for ship scrapping operation. In a very strange decision, which I guess they can do, the City chose to have the public comment period close much more than a month before the public meeting. That seems like a pretty -- a move that I don't -- I don't find very acceptable, that's not the way that we've been -- you've been doing things here, but that wasn't our decision, so -- but be aware that that document is out there and that it's -- now is the time to comment on it.

MR. COFFEY: Negative declarations are trouble.

CO-CHAIR HAYES: It's a -- yeah, I think it's a mitigated neg dec, yeah. Yeah. It's -- but I think you should be able to go to the City's website to the planning department section, and then you should be able to find that document on-line there. I just don't -- am not familiar enough with how their system works to know that for sure.

CO-CHAIR BLOOM: Thanks, Myrna. Okay. We'll go into our final public comment period. Any public comment?

MR. FARNELL: Russ Farnell, HSMPS. And one of my favorite subjects, as I'm sure many are aware of, and that it was last month that I questioned how things are going as far as the soundings out in the bay here or along the river. Marie gave us a good presentation a few months back, and Mr. Bloom, Co-chairman Bloom said we have a consultant currently working on this a month ago. And, okay, I'm just curious if by chance we had both parties here, perhaps if there was any further news on when this would be coming through.

CO-CHAIR BLOOM: Not soundings, but working on the Remedial Investigation.

MR. FARNELL: The samplings.

CO-CHAIR BLOOM: Right. No, they're working on getting all the data put together, and it's still slated for October 15th to come out.

MR. FARNELL: Okay.

CO-CHAIR BLOOM: And so, like I said, if we get something sooner and we can get it out sooner, we will, but right now that's the current date. Any other public comment? Okay. Thank you, everybody. We'll adjourn and see you in August.

(Thereupon the foregoing was concluded at 9:05 p.m.)

LIST OF HANDOUTS:

- Presentation Handout – Defense Reutilization & Marketing Office (DRMO) Update – Navy
- Presentation Handout – Investigation Area B.1 (Crane Test Are) Feasibility Study/ Remedial Action Plan– CH2MHill/ Lennar Mare Island
- Presentation Handout – Figure 4.1-1, Conceptual Site Model – CH2MHill/ Lennar Mare Island
- Presentation Handout – Figure 3.1-4, Total Petroleum Hydrocarbon Concentrations in Soil and Groundwater within the Crane Test Area – CH2MHill/ Lennar Mare Island
- Presentation Handout – Figure 3.1-3, Lead Concentrations in Soil within the Crane Test Area – CH2MHill/ Lennar Mare Island
- Presentation Handout – Figure 3.3-1, Soil Vapor Concentrations at the Crane Test Area – CH2MHill/ Lennar Mare Island
- Presentation Handout – Figure 9.1-1, Alternative 6 – Partial Excavation/ Offsite Dsposal and Partial Encapsulation/ Institutional Controls – CH2MHill/ Lennar Mare Island
- Features within the EETP – CH2M Hill/ Lennar Mare Island
- Mare Island RAB Update July 2009 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard July 2009
- Mare Faire 2009 Flyer