



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

**HELD THURSDAY, June 24, 2010**

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, June 24th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:09 p.m. and adjourned at 8:55 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 R. Coffey
- Chris Rasmussen
- Paula Tygielski
- Wendell Quigley

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

- Heather Wochnick (Acting Navy Co-Chair)
- Janet Lear (Navy)
- Carolyn D'Almeida (U.S. EPA)
- Steve Farley (CH2MHill)
- Neal Siler (Lennar)
- Chris Jespersen (Weston)
- Erich Simon (Water Board)
- Tammy Pickens (DTSC)
- Veronica Villaseñor (DTSC)
- Gil Hollingsworth (City of Vallejo)

### **Community Guests in attendance:**

- Amanda Cundiff (U.S. Forest Service)
- Miguel Buchwald
- Diji Christian
- Wendy Plank
- Cindy Spears
- Jim Porterfield

### **RAB Support from CDM:**

- Shelley Samaritoni (CDM)
- Kathleen Soloaga (Stenographer)
- Wally Neville

## **I. WELCOME AND INTRODUCTIONS**

ACTING CO-CHAIR WOCHNICK: Welcome everyone. We're about to get started. So, we have two presentations tonight. One is on the Installation Restoration 17 Fieldwork Update, and that will be presented by Janet Lear from the Navy. The second presentation is on the Petroleum Corrective Action Plan in the Historic Independence Wharf Area, and that will be presented by Neal Siler from Lennar Mare Island. After that, we will have our Public Comment Period and take a little break and then do some updates. So with that, Janet?

(Stenographer interruption; technical difficulties.)

ACTING CO-CHAIR WOCHNICK: There is one thing I forget, to go around and do introductions, so let's go ahead and do that. I'm Heather Wochnick. I'm the acting BEC [BRAC Environmental Coordinator] for the Navy.

CO-CHAIR HAYES: And I'm Myrna Hayes, the community co-chair, and I live in Vallejo.

MS. TYGIELSKI: My name is Paula Tygielski, and I am from Benicia.

MR. RASMUSSEN: My name is Chris Rasmussen. I am a resident of Mare Island.

MR. QUIGLEY: I am Wendell Quigley. I am also a...resident.

MR. RASMUSSEN: One of those.

MR. QUIGLEY: One of those, on Mare Island.

MR. COFFEY: I am Mike Coffey. I am a resident of American Canyon.

MR. FARLEY: Steve Farley with CH2M Hill.

MR. SIMON: Hi, I'm Erich Simon with the Water Board. I'm the Water Board Project Manager on the Early Transfer Site of the Base. And Elizabeth Wells is not here today, so I'm --

(Stenographer interrupts for clarification.)

MR. SIMON: Elizabeth Wells is not here today, so --

CO-CHAIR HAYES: Which early transfer?

MR. SIMON: The early transfer, the whole -- all of the parcels --

MR. COFFEY: EETP [Eastern Early Transfer Parcel].

MR. SIMON: -- that are transferred, the non-Navy side.

CO-CHAIR HAYES: We have two early transfers on the Island.

MR. COFFEY: It's eastern.

MR. SIMON: Eastern, sorry.

MR. JESPERSEN: And I'm Chris Jespersen with Weston Solutions.

MS. VILLASEÑOR: I'm Veronica Villaseñor with DTSC.

MS. PICKENS: I'm Tammy Pickens from DTSC.

MR. HOLLINGSWORTH: Gill Hollingsworth representing the City of Vallejo.

MS. D'ALMEIDA: Carolyn D'Almeida with the EPA.

MS. SAMARITONI: Shelley Samaritoni with CDM.

MR. SILER: Neal Siler, Lennar Mare Island.

MR. BUCHWALD: Miguel Buchwald, a resident of Mare Island.

MS. CUNDIFF: I'm Amanda Cundiff with the U.S. Forest Service on Mare Island.

MS. SPEARS: Cindy Spears, interested citizen.

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

ACTING CO-CHAIR WOCHNICK: Okay. With that, Janet Lear can now begin her presentation on IR-17.

**II. PRESENTATION: *Installation Restoration (IR) 17 Fieldwork Update***  
**Presentation by Ms. Janet Lear (Navy)**

MS. LEAR: Hello, everyone. As Heather mentioned, my name is Janet Lear. I am with the Navy, and tonight I will be giving an update on the Non-Time Critical Removal Action (NTCRA) for Installation Restoration (IR) Site 17, Building 503 Area. IR-17 is in the northern portion the Island. It consists of about 26 acres and includes four buildings. It was a paint manufacturing area in the -- from the 1940's to the mid 1950's, and there were two tank farms on site containing products to support that manufacturing.

There were some investigations that took place in 2006, 2008, that found evidence of residual, free-phase product in a few locations on the site. Those investigations also found volatile organic compounds in soil gas, which could pose a vapor-intrusion risk and a possible human health impact. Vapor intrusion refers to the potential for those volatile organic compounds to escape from the soil and go into an occupied building. As a result of those investigations, the Navy decided to do a removal action for the site. The objectives of the removal action included: to reduce residual, free-phase product in the soil and to reduce potential human health risk from vapor intrusion.

The product that was found at the site was mostly -- it's believed to be coal tar distillates, which was the primary product stored in the southern tank farm. Coal tar distillates are very similar to paint thinner and so it would have been appropriate for use at that manufacturing area. This figure shows the excavation areas that are part of the removal action. Both A and B of those two -- A and B excavation areas are -- in those areas, evidence of the residual, free-phase product was found, as well as elevated soil gas in those two areas associated with the coal tar distillates. The two excavations labeled C-1 and C-2 are centered around a soil gas sampling location where chlorinated volatile organic compounds were found, primarily trichloroethene. The southern tank farm was located in this area, and the northern tank farm was in this area. So the excavation of those three areas began on April 14th and was completed last week. Approximately 10,000 cubic yards of impacted soil was removed. The excavation reached about 8 feet below ground surface. Some of the sidewalls still exhibited indications of contamination extending beyond the planned areas of excavation, and I will talk about that a little bit more further in the presentation. All of the excavated soil to date has been sampled and characterized as nonhazardous waste for disposal purposes.

So, a few photos of the excavation activities: Excavation Area A and B, those were the two areas that there was evidence of residual, free-phase product. Those excavations, the extent of those excavations were guided primarily by visual observations, odor, and field readings. During

the excavation, no free product was encountered in those excavations. C, which is in the photo on your right, in that excavation we did take soil samples for volatile organic compounds. Those -- Excavation C, they were -- those excavations were more exploratory in nature, and so the soil samples were taken to give us more information in that area. A few more photos: Excavation Area B is this one here; and then this is also area B, which is the larger of the three excavation areas shown earlier. This shows the workers exposing a water line in that area that was within our excavation. We had to put a valve in that and reroute water temporarily. This photo shows some odor-suppressant foam being put down in the Excavation Area B.

MR. RASMUSSEN: Janet, is this aroma from this pretty strong? Is it really noticeable to people around these excavations?

MS. LEAR: It was initially. As soon as they started the digging --

CO-CHAIR HAYES: Could you repeat his question or have Chris repeat it with the microphone, because it's possible that people in the audience couldn't hear that question.

MS. LEAR: The question was, was the odor from the excavations really strong and noticeable to the people around. The excavations initially, when you first started digging, the odor was pretty apparent, pretty strong. It dissipated quite rapidly and -- but because Earthquake Protection Systems is right there and there were workers in the area, we did put the suppressant foam down to keep the odors down. We didn't have any complaints from any of the area -- any of the residents and the workers.

MR. COFFEY: Janet, can you explain to me why you would smell it apparent -- initially and then dissipate quickly? Would that mean that it's concentrated in a smaller area and then it -- as they dug it out, it was all gone, or was it just that it evaporated into the air that quickly.

MS. LEAR: It was probably just a -- evaporated in the air quickly. The odor wasn't super strong, but you could notice, initially, the odor.

CO-CHAIR HAYES: Well, I would maybe assume that the -- spraying the odor suppressant helped.

MS. LEAR: Yes, of course.

CO-CHAIR HAYES: I may be skipping ahead in your report, but you are talking about a strong odor and applying odor suppressant and blah, blah, blah, but I don't see anything in this part, on part B of your presentation that talks about whether you found free product in that location. You just say that you did not in Area A and C.

MS. LEAR: In Area A and B, which were the two --

CO-CHAIR HAYES: Oh, in A and B. Oh, okay. You have it on -- you have your bullet on A and C page, so I misread. So you have no free product anywhere in the worksite?

MS. LEAR: We did not encounter free product at all.

CO-CHAIR HAYES: I wonder what happened to it, 'cause it used to have free product in it when we were given slideshows years ago by TetraTech.

MS. LEAR: There was a trace of free product --

CO-CHAIR HAYES: There were pictures of it, like --

MR. COFFEY: Oozing.

CO-CHAIR HAYES: Oozing, yeah.

MS. LEAR: From this site?

CO-CHAIR HAYES: Uh-huh, IR-17.

MS. LEAR: Perhaps that was in one of the earlier removal actions that took place further around the buildings. I know they removed some pipelines from that site --

CO-CHAIR HAYES: Well, I am just asking --

MS. LEAR: -- years and years ago, so maybe it was from that.

CO-CHAIR HAYES: -- 'cause I don't know, 'cause you didn't give any history of the overall site in your buildup to this --

MS. LEAR: Yeah.

CO-CHAIR HAYES: -- presentation, so I --

MS. LEAR: We were --

CO-CHAIR HAYES: Usually you do that.

MS. LEAR: Well, we didn't want to go back through all the investigations. This was primarily a field work status update, but we did have to put in some context. There were removal actions completed previously at the site in areas around the buildings and along pipelines; and then in 2006, 2008, we did some additional studies and determined to do this follow-on removal action. Yes, Gil?

MR. HOLLINGSWORTH: Yeah. Back when we were closing up the Base, they did enormous amounts of dig-out in what you called area -- north, it's the north field.

MS. LEAR: Uh-huh.

MR. HOLLINGSWORTH: They spent months and months up in there digging and hauling. That may have been where it was at. I don't know.

MS. LEAR: Could very well.

MS. D'ALMEIDA: Did you do any air monitoring while you were out there? I see you've got workers in respiratory protection, but did you do any actual air monitoring, too?

MS. LEAR: Yes, we did.

MS. D'ALMEIDA: And what did the data show?

MS. LEAR: There was no -- it showed no impact at the perimeter of the action area. Sorry. Excuse me. I don't have actual data with me tonight, and unfortunately Dwight is not here, but there were no impacts along the perimeter of the excavation, of the work area, excuse me, but there were no impacts to the workers or -- within the excavation and also within the surrounding areas. Did that answer your question?

MS. D'ALMEIDA: Yeah.

MS. LEAR: All the excavations were backfilled immediately after the excavations were completed using import soil that had already been approved by the regulators for this purpose. This figure shows backfill and compaction of Area A, and this is showing compaction testing for

the area under Azuar Drive. To date, more 10,000 -- more than 10,000 tons of soil classified as non-hazardous waste has been transported off-site and disposed at Hay Road and Keller Canyon Landfills. Each truckload was weighed to verify legal limits and tarped, and, of course, manifests were signed by the generator and the transporter. These two photos show the soil being loaded onto the trucks. Okay. As I mentioned earlier, some areas -- or some of the sidewalls of the excavation showed some evidence of contamination beyond those limits, and so we do plan on doing some additional work in the southwest portion of Excavation B. Let's see if I can go back to -- the green edges of the excavation indicate that there was no indication that anything went beyond those portions, but this little section right here, red line, that indicates that there were still some field readings in that area, and so we do plan to come back in and extend the excavation in this area. And as you recall, the southern tank farm was here, so it may be that this extends a little bit here. Possibly, there were some pipelines in that area for the tank farm.

CO-CHAIR HAYES: Do you have a photo, Janet, or -- I mean, an image of -- a map of where this area is that you have to go back to in the context of, you know, a place we would know? Is this on the other -- yeah, well ...

MS. LEAR: This is Azuar Drive right here. This here is Earthquake Protection -- 759? Yeah. It's right here. This little section here is the border of the wetlands along Azuar, and the southern tank farm was here. I think this is --

MR. HOLLINGSWORTH: G Street.

MS. LEAR: G, okay. Thank you.

MR. RASMUSSEN: Or J Street?

MS. LEAR: J?

MR. RASMUSSEN: Not G.

CO-CHAIR HAYES: Oh, yeah. No, not --

MR. RASMUSSEN: Not G, J.

MS. LEAR: J, yeah.

CO-CHAIR HAYES: No, G's way further down.

MS. LEAR: This is J, and K is -- up here? Yeah.

CO-CHAIR HAYES: So did you backfill that area, or is that left open?

MS. LEAR: Yeah, all these excavations have been backfilled. And then we will go back in, in this area to extend --

MS. TYGIELSKI: So you backfilled it, but you are going to have to dig it up again?

MS. LEAR: Well, not the same place we excavated, but next to, yes, we're going to. And in these two areas, we plan on extending the excavation to connect these two excavations, extend this one down a little bit further. As I mentioned earlier, some of the soil samples in the sidewall and bottom of those two excavations, the results came back with chlorinated volatile organic compounds in the soil samples. The concentrations didn't indicate a risk to human health. However, we are concerned about potential impacts to groundwater in that area, so we do want to extend the excavation a little bit here. Also, we're planning on installing monitoring wells in these areas to determine if there was an impact to groundwater from chlorinated compounds.

There are a few stockpiles, I think two stockpiles still there that we still need to transport off-site, and then, of course, the remaining stockpile from any further excavation -- I'm sorry, I went a little too far there -- will still need to be transported off-site. Hopefully, that will happen in July. Additional site restoration activities that still need to be performed are: replacement of the railroad section. There is a section of railroad that had to be removed for that larger excavation, so we plan on putting that back in; also, the replacement of the water line that was shown on one of the earlier photographs, as well as repaving Azuar and the parking lot areas. Azuar Drive at J Street is currently closed till the end of the removal action, and we plan on opening the streets back up at the end of July.

MR. COFFEY: Janet, can you explain to me how the whole reason that all of this soil was removed is because it was deemed hazardous, and now it's deemed not hazardous for transportation and site removal. How is it deemed non-hazardous?

MS. TYGIELSKI: If there's contaminated soil, why is it not hazardous?

MR. COFFEY: Yeah. How can it be deemed not hazardous when it's taken to a land site?

MS. LEAR: First of all, the reason the excavation was done, the reason the removal action was done was because there's an ARAR [applicable or relevant and appropriate requirements], or an applicable -- I shouldn't even have brought that up because I can't even say it. Anyway, there's a -- we are trying to get all residual phase product out of there. There was -- as far as the soil samples go at the site, there wasn't a health risk.

MR. COFFEY: Okay.

MS. LEAR: And so the primary purpose of this removal action is to remove any residual, free-phase hydrocarbons or product that might be there in the subsurface and also to eliminate vapor intrusion risk. Now, some of these compounds can exist in a vapor phase and not be in the actual soil at a level that would be considered hazardous for landfill disposal.

MR. COFFEY: Mm-hmm. And yet we had air monitoring going on --

MS. LEAR: Yes.

MR. COFFEY: -- they could smell material --

MS. LEAR: Sure.

MR. COFFEY: -- at the outset. Air monitoring didn't show there was anything hazardous or notable, yet they could still smell it. I think that that's -- that doesn't -- that doesn't sync to me. If you could smell it, there had to be something there, and now the soil is not contaminated at all; and the air monitoring didn't show that there was actually anything there, but you could smell it; and it was hazardous, and now it's not hazardous. That doesn't make sense to me.

MS. LEAR: Okay. The air monitoring we were talking about is actually for health purposes.

MR. COFFEY: Right.

MS. LEAR: So that air monitoring is usually done in the breathing zone of the workers and on the perimeter of the site area, and it's a way of protecting the health of the workers and anybody that would be in the vicinity outside of the zone, okay? And that doesn't mean that there wasn't any --

MR. COFFEY: Off-gassing.

MS. LEAR: -- air off-gassing at the surface of the soil. It just means there wasn't a health impact.

MR. COFFEY: Okay.

MS. D'ALMEIDA: Maybe I can shed a little bit of light on this. There are regulations for disposal of wastes in landfills --

MR. COFFEY: Mm-hmm.

MS. D'ALMEIDA: -- and there's different classifications for landfills. We have landfills that are for hazardous waste, and landfills that are solid waste, and nonhazardous waste. And the regulations for disposal aren't really looking at, like, human health risks, like, for example, if you were in a situation where you were in a residential neighborhood. In a landfill, it's a different situation. And the exposure in the landfill, once the landfill is capped and everything, the main concern that you have is groundwater impacts. And so the regulations -- there's Federal regulations and there's State regulations that have to do with specifically defining that, and so it's those regulations that determine where the wastes go, whether it has to be sent to a Class I hazardous waste landfill or if it can be disposed differently as in -- as non-hazardous.

MR. COFFEY: Okay.

MS. LEAR: Anything further?

MR. COFFEY: (Shaking head.)

MS. LEAR: Any other questions? Okay. Thanks.

ACTING CO-CHAIR WOCHNICK: Thank you, Janet. Now we have Neal Siler, who will be going over the Petroleum Corrective Action Plan at the Historic Independence Wharf Area.

### **III. PRESENTATION: *Petroleum Corrective Action Plan – Historic Independence Wharf Area***

#### **Presentation by Mr. Neal Siler (Lennar Mare Island)**

MR. SILER: Okay. As Heather mentioned, my name is Neal Siler, and I work for Lennar Mare Island, and what I am going to talk about tonight is the -- present the Petroleum Corrective Action Plan for the Historic Independence Wharf Area. And how I'm going to do this, I'm going to talk about some of the historical background for the site, I'm going to go over some of the investigations and remedial actions that have been performed to date, and then I'm going to basically present the plan and take any of your questions that you may have after I am through with explaining what I am going to be talking about.

So the first question you probably have is: Why is it called the Historic Independence Wharf Area? And the reason it was, is because the USS Independence, which was commissioned in 1815, was used as a receiving ship in this area from 1857 to 1913. And a receiving ship is a ship that houses newly recruited sailors, who are assigned to a base but not necessarily assigned to a ship. So what they are is they go to this -- basically, this hotel until they are actually assigned to a ship crew and they can get on a ship at that point, and that's what the ship was used for. And this is usually older ships that aren't necessarily -- no longer seaworthy and cannot stand the rigors of the open ocean but can still float in still waters. That's what these are used for.

Now, the Independence was perfectly suited for this because between -- she was in service for almost 98 years, and between 1815 and 1857, she was in and out of commission 11 times, with

her last voyage coming between 1854 and 1857, when she came to Mare Island to be used as a receiving ship. In 1913, though, you know, all good things come to an end; she was actually sold by the Navy for \$3,500. The new owners took all of the salvageable wood off of the ship, towed it down to the southern San Francisco Bay and set it on fire so that they could recover all the salvageable metal.

MR. COFFEY: Jeez, 100-year-old ship.

MR. SILER: Now, this slide here shows you Historic Independence Wharf Area in the 1890's, and there's -- you can see the ship out here, right -- they were commissioned right after the War of 1812. This is the Historic Independence Wharf, this yellow line here, and some of the maps I will show you subsequently will have this on there so you can see where this is. And this little circular feature right here is really important, because how this all came to light, this Historic Independence Wharf Area was everybody was looking for an underground storage tank that was associated with Building 142 in this area, and this showed up as a circular feature on a number of maps between 1904 and 1919. So, the next few slides will show you some of those maps. So you can see here the Independence Wharf Area. There's Dry Dock Number 2. There's Dry Dock Number 1. This is the A C-3 Triangle. So here is the wharf right here, there is the Independence, and there is that little circular feature right there. Here is a map from 1907. Can you see they've added -- extended the wharf out this way, and there's that circular feature right there. This is a map from 1911, you can see this is Building 142 right here, and there is that circular feature again. Now, finally, this is an aerial photograph that just is -- was marked between -- sometime between 1911 and 1930. There is the Historic Independence Wharf Area right in here, but you can't really see it real well as it shows up here, but there's no building and that circular feature is gone if you look down here. So probably, this was probably before or just around -- between 1913, 1911, to 1920, because this is -- that building is gone now.

Now, after the Intrepid -- or excuse me, the Independence was taken out of service, various other ships were used as receiving ships at the Historic Independence Wharf Area, including the USS Intrepid, which was actually constructed and commissioned here at Mare Island in 1904. But other ships, however, with the changing needs of a modern Navy, going from wind, to steam, to coal, to fuel-oil power at this time, and the rumblings of war in the mid to late 1930's, they actually took out this area for -- to construct Dry Dock Number 3. So this is what we think is the wharf right here, this area right here, you can see the piles here, and this is them deconstructing it and digging out this area because they are starting to construct Dry Dock Number 3. So this is the present time right now. There's Dry Dock Number 2, there's Dry Dock Number 3, Dry Dock Number 4, and this is just putting this area of the Historic Independence Wharf overlain on the current configuration of the Island. And, again, that's that -- where we think that suspect underground storage tank, UST 142, is located right there. The next slide is an aerial photograph showing you how it looks today. This is Building 684, Dry Dock Number 3, Dry Dock Number 4, Berth 15, Historic Independence Wharf Area, and there is that suspect UST 142. And, again, the reason that's significant, that underground storage tank, is all the investigations that took place were trying to find that source area. Again, there you can see an oblique aerial view. This is from the top of Building 112, right here, looking over here in this area right here currently occupied by Cooper Crane.

But trying to find this underground storage tank started in 1997, when the Navy conducted a geophysical survey using a magnetometer to see if they could find the tank; and they looked in this area that you saw on the maps and also on those aerial photographs. Now, they found an

anomaly, but they didn't take any soil samples or any groundwater samples at that time, and their conclusion was, was that the tank didn't exist. Now, in 2002, CH2M Hill came back and did take some soil samples and found some -- a significant contamination in that area. As you can see, they found total petroleum hydrocarbons as motor oil and diesel, up to 11,000 milligrams per kilogram motor oil. They also found some significant contamination in groundwater, up to 22,000 micrograms per liter total petroleum hydrocarbons as motor oil. They also did another geophysical survey using ground penetrating radar and electromagnetics, and they did not find any anomalies. But they knew they had this large con -- or significant concentrations of petroleum hydrocarbon contamination, so they did a removal action in 2003, where they removed about 260 tons of material, but they never found any underground storage tank. Now, they did do some work, took some confirmation samples, and still had some significant concentrations of motor oil. You can see 16,000 milligrams per kilogram, so they knew they had some additional work to do.

So, in 2007, and if you have been here at some of these subsequent RAB meetings that we have been to, we actually did what is called an ultraviolet optical screening tool to try to figure out the lateral and vertical distribution of petroleum hydrocarbons in the subsurface in this area. We found free-phase petroleum hydrocarbons, and we were able to characterize that lateral and vertical extent. These next few slides show some figures showing where these investigations took place. This was the extent of the Navy's magnetometer survey in 1997. This is the area that CH2M Hill concentrated on in 2002; and then this purple area right here, that was the excavation in 2003. Okay. This kind of shows you the distribution of concentrations from the ultraviolet optical screening tool: these purple shaded areas, what they show is that there was a mixture of diesel and motor oil in this area; the yellow and the green or blue show up here with much more of a signature of motor oil; and the orange had kind of a little bit different signature, but it had a remnant of motor oil. In these areas, where you saw red was where they found free-phase petroleum hydrocarbons, number of different areas right here. So, they went back and did some additional investigations in 2008.

2008, they advanced eight exploratory trenches, and they found two different types of free-phase petroleum hydrocarbon: One free-flowing that they found around some preferential pathways, some old underground utilities, and they also found a brittle type of petroleum hydrocarbon that was also associated with creosote and was associated with some wood structures that we think was that former pier of the Historic Independence Wharf Area. So, in 2009, to fill in some data gaps, we advanced another three exploratory trenches and advanced another nine soil borings, took samples, and we found that there was one main area of residual soil contamination and two smaller areas. So this slide right here shows you this is this free-flowing petroleum hydrocarbon, around this old corrugated metal sewer pipe, and see it coming out, oozing out right there, and the material is right there. And then this is this brittle, free-phase hydrocarbon that we saw associated with the wood debris that we think is part of the wharf, and it has creosote in it, also.

So, after all these investigations were said and done, this is the distribution of the petroleum hydrocarbons in the subsurface. You can see there is this one large area that I mentioned right here, the pinkish tinge that is above the screening level that we're going to remediate to. These red areas, those are areas where we have observed free-phase petroleum hydrocarbon. It's two smaller areas, and then this one main area. And this next slide shows you the distribution of groundwater. And this is kind of interesting because if you look at this right here, where you have the highest concentrations, you would swear there is something like a point source here.

But if you take all of the data together and you start looking at it, it looks like from the soil contamination standpoint, there is no point source. It's kind of just ubiquitous in this entire area, for seeing it. And the way this is, this contour right here is distributed, it looks like there's something that is actually out in this area, too, and we've got this one area we're gonna excavate out here. And if you saw that one large main area, it's something like this in here.

So the plan that we've put forth, our objectives are obviously to protect human health and the environment. We're going to rehabilitate any groundwater contamination that we have. And we're doing that, again, by beheading the plume, basically, removing the source, removing the source material, the free-phase petroleum hydrocarbon and any contaminated debris or soil that is impacted by petroleum hydrocarbon, and then we're gonna prepare the site for continuing industrial marine operations. There's an industrial marine operation down there right now, Cooper Crane, and that is the current land use and that is the future land use for this area. So the cleanup area, the soil, we're using our Tier 2 Screening Levels, which have been approved by the regulatory agencies. Total petroleum hydrocarbons as diesel, 2,100 milligrams per kilogram; total petroleum hydrocarbons as motor oil, 5,000 milligrams per kilogram. And then Groundwater, the Tier 2 Environmental Screening Level, 210 micrograms per liter, that's the Tier 1 Environmental Screening Level. The Tier 2 Screening Level, 640 micrograms per liter.

So, the first thing we're going to do, we're going to go in and excavate all these free-phase petroleum hydrocarbon and any material that is impacted with petroleum hydrocarbons over our screening level. That ends up being an area of about – surface area of about 11,000 square feet down to a depth of 12 feet, about 5,000 cubic yards, around 8,000 tons of material is the plan to take out right now, and that will be disposed of at an appropriate off-site disposal facility. In addition, we're going to take soil verification samples in both the sidewalls and the base of the excavations. The larger excavation that you saw, we're taking a sample every 50 feet along the sidewalls and in the base. The two smaller excavations, and I will show you this in a later slide, we'll take at least five soil confirmation samples in those, one in each of the four sidewalls and one in the base of the excavation.

As far as groundwater remediation is concerned, again, we're trying to remove the source of material that's affecting groundwater, and that's the excavation, also. We're going to go ahead and evacuate any liquids that we've -- are freestanding in the excavation to remove any residual, free-phase hydrocarbons and any dissolved petroleum hydrocarbons. Then what we're going to do is we're going to place about 8,000 pounds of oxygen-release compound or equivalent in the base of the excavation as a slurry to hope that it breaks down over time and continues to break down any residual petroleum hydrocarbons that are left in the groundwater. And then, of course, after we do this and we backfill the excavation, restore the site, we're going to install six groundwater monitoring wells. We're going to monitor for at least one year on a consecutive quarterly basis, analyze the samples, evaluate the data; and then after one year, we're going to go ahead and evaluate all that data and come back and propose any enhancements to that plan for anything else that we would have to at that time. Hopefully, after we do all of this, we will be able to discontinue groundwater monitoring at that time and close these wells. But this next slide shows you the areas that are going to be excavated.

Here is that one large area right here. Here is the two small areas. The green dots that you can see in here, those are the soil verification samples. You can see them in the large excavation and at least five of these small excavations right here. And then the groundwater monitoring wells: This is an up gradient well right here. There's one that is going to be placed right in the center of

the plume, one right immediately down gradient, and then we want to look at these wells right here, three wells right here, right along the Straight, to make sure nothing can continue to get to the Straight. So, that concludes my presentation. If anybody has any questions, I would be happy to answer them for you.

MR. COFFEY: So, Neal, nobody really knew for sure what caused the contamination. Never found a UST.

MR. SILER: Never found a tank, yeah. And what was really interesting was that we never found any evidence for an underground storage tank, whether it be in a --

MR. COFFEY: In the picture --

MR. SILER: -- indirect or direct --

MR. COFFEY: -- it looks like it's a water fountain.

(Simultaneous discussion; Stenographer interruption.)

MR. COFFEY: I thought it was a water fountain.

MR. SILER: That thing -- and that circular depression ended up being a water fountain.

MR. COFFEY: Oh.

MR. SILER: And, you know, everything we did, indirect or direct evidence, you know, we couldn't -- we saw some anomalies, we would look in there, excavate it. Although we could find soil and groundwater contamination, we couldn't find a tank or anything that looked like it was a source of contamination, no piping, no rust-colored soil, no concrete cradle for a tank. You know, we couldn't find anything like that, but we knew we had contamination there. So, exactly what the source is, we're just really not sure, but we definitely have to take care of the residual contamination that is in the subsurface at this time. Yes, Paula?

MS. TYGIELSKI: The chemist in me has a question. What specifically is this oxygen-release compound?

MR. SILER: It's magnesium hydroxide, and what it does -- it's a time -- it's like a time-release capsule. And what it does is they spray it in the bottom of the excavation, and it has like a release over time. And the type of bacteria that breaks down petroleum hydrocarbons are aerobic, so they need a lot of oxygen, and usually when you come into one of these plumes, that gets depleted real quick. So, what you are trying to do is stimulate that microbial activity by putting the oxygen in there so that they'll go ahead, you know, breathe the area, and eat the petroleum hydrocarbons away and break it down into a less toxic compound.

MS. TYGIELSKI: Okay. Thank you.

MR. SILER: Sure.

MS. TYGIELSKI: I was --

MR. COFFEY: This isn't the same kind of --

MS. TYGIELSKI: I was wondering if you were trying to oxidize the compounds themselves, but you are giving oxygen to the bacteria. Thank you.

MR. SILER: That's the main thing. You will get some oxidation in some of this, but the main component is to enhance the microbial population so they will continue to break down the petroleum hydrocarbons.

MS. TYGIELSKI: Thank you.

MR. COFFEY: This isn't any of the type of stuff they use in the Gulf, is it, to disperse the oil?

MR. SILER: This is not a dispersant.

MR. COFFEY: No.

MR. SILER: This is not a dispersant. All that does --

MR. COFFEY: Just, like, break it down.

MR. SILER: That is something like sodium hexametaphosphate, which is like Calgon. And what that does, it breaks the -- it'll just basically start, you know, breaking down bonds between certain compounds and just makes them kind of fall apart.

MR. COFFEY: Oh.

MR. QUIGLEY: Interesting.

MR. SILER: Myrna?

CO-CHAIR HAYES: Neal, I have a couple of questions. You've got -- I am not going to apologize, but I just simply cannot see any of these numbers on here, and you haven't made them bigger on the screen for us, even though they are on the screen big; so I have no idea what the difference is between your -- what you have there now, 'cause you don't show that anywhere, and what you are attempting to achieve in your soil and groundwater cleanup levels. Can you tell us what the levels of some of these contaminants are now?

MR. SILER: I think the highest concentration that we found was around 16,000 to around 20,000 milligrams per kilogram; isn't that correct, Steve? It's in that area?

MR. FARLEY: It's on that order. I think it's a little higher, but it's on that order of magnitude.

MR. SILER: Yeah, tens of thousands --

MR. FARLEY: Yeah.

MR. SILER: -- of milligrams per kilogram, and so we are trying to get this down, for our screening levels, down to below 5,000 for motor oil, below 2,100 for diesel, which is considered to be, for the reuse of the area, protective of human health and the environment.

MR. FARLEY: It's about a ten-fold decrease in concentrations. That's sort of the target.

CO-CHAIR HAYES: Well, just -- just my question, you know. You had an interesting term you used. You were going to "behead the source"?

MR. SILER: Yeah.

CO-CHAIR HAYES: Is that what you actually said?

MR. SILER: What we're doing is we're beheading the plume.

CO-CHAIR HAYES: The plume.

MR. SILER: You know, I mean, that's the whole idea, is that if you lop the head off, which is the source, and the body withers and dies.

CO-CHAIR HAYES: Well, that's very graphic. Thank you.

MR. FARLEY: Not that you are the source here.

(Laughter.)

CO-CHAIR HAYES: No beheading to be done here, huh?

MR. COFFEY: Or withering and dying.

CO-CHAIR HAYES: Or withering and dying. Thank you. Thank you. That's encouraging. Actually, you said there isn't any source, so how could you -- how do you know that when you do all of this excavation that you will have accomplished --

MR. SILER: What we couldn't do is we couldn't find any physical source that told us that there was a tank, or there was a pipeline, or there was some pit that they just put oil in.

CO-CHAIR HAYES: But you might dig -- in your digging, you might find something.

MR. SILER: We might find something, that's correct.

CO-CHAIR HAYES: Because how will you know that you have actually -- I mean, you could remove all of the soil within the plume but you still -- it might still be wandering around out there, a ghost of a source, or a plume.

MR. SILER: What I am talking about, what I am saying, taking out the source, the free-phase petroleum hydrocarbons is a continuing source to groundwater contamination.

CO-CHAIR HAYES: Sure.

MR. SILER: So we need to get that out of there. That's the source I am talking about that feeds what gets dissolved and goes into the groundwater contamination.

CO-CHAIR HAYES: Well, we don't know what fed the plume.

MR. SILER: That's right. We just don't know.

CO-CHAIR HAYES: All right.

MR. SILER: And maybe we will find something, maybe we won't, but we'll find that out when we start digging it out.

CO-CHAIR HAYES: So that's what one other purpose of the monitoring wells would be, then, to see if your numbers deteriorate, or stay the same, or --

MR. SILER: Yeah, if -- if they stabilize and start to decrease, that tells us that we have removed the -- starts to tell us indirectly we have removed the source. If, you know, it stays steady and starts to increase, then we have to start going, "Maybe there's something else that we missed here."

CO-CHAIR HAYES: Could this --

MR. SILER: That's why we want to do that monitoring, also.

CO-CHAIR HAYES: Could this just have been kind of like an early sump like you had out by the -- and dump like you had out by the -- that is included in the landfill now?

MR. COFFEY: Seems unlikely.

CO-CHAIR HAYES: I mean, because he said diesel and motor oil. I mean, it could just be just a place where it was handy to go dump that stuff.

MR. SILER: Yeah, and we're not seeing, though -- usually when they dump stuff, you know, and we've, you know, looked at only petroleum hydrocarbons, but some have volatile organic compounds. Volatile organic compounds, we don't see any benzene, toluene, ethylbenzene. We don't see any MTBE [methyl tertiary butyl ether]. You used to get a mixture of like everything at a dump. You'd get like, you know, chlorinated solvents. You'd get PAHs [polynuclear aromatic hydrocarbons]. We do have some PAHs here, but they are ones that are normally associated with a petroleum hydrocarbon fuel, like fuel oil or diesel. You see a wide range of differing things that you would see, and we don't see that here.

CO-CHAIR HAYES: How many acres is this property, or the plume?

MR. SILER: It's about 11,000 square feet on the surface, so, you know, you would have about -- acre is about 45,000, so it's about a quarter of an acre, or something like that.

CO-CHAIR HAYES: Oh, that's pretty small. So it could have been some above-ground source?

MR. SILER: Possibly, but we haven't seen anything that tells us what that is, though, right now, so it's possible.

MR. COFFEY: Or pictures that show anything like that?

MR. SILER: Yeah, except for that water fountain.

MR. COFFEY: Yeah, who knows what they were bubbling in there.

MS. TYGIELSKI: It could have come off -- all that stuff could have come from vehicles driving around that.

MR. COFFEY: Around and around.

MR. SILER: That's right.

MS. VILLASEÑOR: Or an airplane going through it.

MR. COFFEY: Texas tea fountain.

(Laughter.)

CO-CHAIR HAYES: That's all my questions.

MR. SILER: Anybody else have any other questions? Thank you very much.

MR. FARLEY: Nice job, Neal.

MR. COFFEY: Yeah.

ACTING CO-CHAIR WOCHNICK: Thank you, Neal. We now move into our first Public Comment Period. If anyone has any public comments?

(No response.)

ACTING CO-CHAIR WOCHNICK: Okay. Doesn't look like anyone. So we are actually on time. That's amazing. So we will have a ten-minute break and meet back here at 8:15.

(Recess taken from 8:04 to 8:14 p.m.)

#### **IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Heather Wochnick)**

ACTING CO-CHAIR WOCHNICK: All righty. On to Administrative Business and Announcements. If anyone has any comments on the RAB meeting minutes from the May 27th meeting, please either e-mail or provide your comments to Myrna Hayes or myself, Heather Wochnick.

#### **V. FOCUS GROUP REPORTS**

ACTING CO-CHAIR WOCHNICK: Okay. So, moving on to the Focus Group Reports and Discussion.

##### **a) Community (Wendell Quigley)**

ACTING CO-CHAIR WOCHNICK: Community. Wendall, any updates?

MR. QUIGLEY: No update.

##### **b) Natural Resources (Jerry Karr)**

ACTING CO-CHAIR WOCHNICK: Natural Resources?

MR. COFFEY: Jerry's not here.

ACTING CO-CHAIR WOCHNICK: Not here.

##### **c) Technical (Paula Tygielski)**

ACTING CO-CHAIR WOCHNICK: Technical, Paula?

MS. TYGIELSKI: No comment. Nothing, no. Nothing to report.

##### **d) City Report (Gil Hollingsworth)**

ACTING CO-CHAIR WOCHNICK: City?

MR. HOLLINGSWORTH: Nothing to report. Thank you.

ACTING CO-CHAIR WOCHNICK: Thank you, Gil.

##### **e) Lennar Update (Steve Farley)**

ACTING CO-CHAIR WOCHNICK: Lennar Update. I know you will have something, Steve.

MR. FARLEY: Indeed. We have our monthly handout, and just for perspective, the location that we're -- the Navy's doing their work is right up here, right against A-3.

CO-CHAIR HAYES: I know where that is.

MR. FARLEY: Well, I know you do. I am pointing it out to the rest of the crowd, Myrna.

CO-CHAIR HAYES: Oh.

MR. FARLEY: If we start with the photographs in the upper right, that is the work being done at Building 461. The photograph on the bottom is an example of the work that we're doing, the conditions that we're encountering underneath there. And if you look at the columns there, you can see where the staining is; and if you look back along that row of those columns, you can see the amount of excavation that we're doing underneath there. The white material there, and particularly in the background, is the lead precipitate that I talked about either in the last meeting

or the meeting before. That's the target of the material that we're removing. The photograph on the top is not part of the work we're doing, but it's -- I have included it to show you or to demonstrate how much care is being taken. They are doing vacuuming of some dust and dirt that got into the building as part of some of the work that the contractor was doing.

MR. COFFEY: Underneath?

MR. FARLEY: No, inside the building. They were doing some work and it -- just sort of some incidental dust from the activities got in there, so they went in and were excavating -- or not excavating but vacuuming up the dust that was on the floor.

CO-CHAIR HAYES: That's some serious vacuum cleaner.

MR. FARLEY: And you can see they are in respirators, too. Yeah, a pretty good-sized hose for a Kirby.

ACTING CO-CHAIR WOCHNICK: Industrial-sized Kirby?

(Laughter.)

MR. FARLEY: In the low left corner is some work that we're doing over by Building 669. Building 669 is right on the right corner of the photograph. The building in the background is Building 535, which is -- I think everybody knows that that's the old Navy's facility right on Azuar Drive, just a little bit south of the sports complex. The work that we're doing there is related to some sanitary sewer lines. There is some contamination that we found inside a couple of the manholes, and so we're going in and excavating the pipelines and collecting soil samples and then replacing the pipeline after that. In the body of the figure, there's a couple of things that are highlighted. Of course, Building 680, down in the lower right corner, the good news is that we're essentially done with the work inside that building. There's a few, sort of, checklist items that need to be taken care of, but the actual remediation is done. And if you have a chance -- for those who have gone into that building historically, if you have a chance to peek in through one of the knotholes or the windows, it's pretty amazing, the condition of that building. It looks like a brand-new structure or brand-new facility inside, so it's really nice when something like that turns out, and hopefully it turns into a resource for the community.

MR. COFFEY: RAB tour.

MR. FARLEY: Yeah, if -- I mean, if there was an interest, I am sure we could arrange that. The other -- couple of other things: Right next to 680 is a building labeled "386," and there's a label "IR-21," Installation Restoration Site 21. We're doing some work there. We have encountered some petroleum hydrocarbons there, and we're working with the agencies, in particular the Water Board, in developing scope of work to do some additional characterization in that area. I guess the other main thing is to point out the blue lines that are in many places across the Eastern Early Transfer Parcel, or EETP, and it's labeled IR-14, or Installation Restoration Site 14. That's the old Industrial Wastewater Pipeline System, and you can see how many legs there are to that and how many locations that it covers. Ultimately, that network -- industrial waste flowed through that network and left the EETP up by IA B-1 Dump Road and went out to the old Industrial Treatment Plant out far in the west -- west side of Mare Island. The reason I show that is because we have -- there's two main issues associated with IR-14: There's the issues related to the soil contamination that was around the outside of that pipeline, and that's been investigated and that's been taken care of. The other thing, and I bring this up mainly because maybe some folks have had experience with this, but there's a whole separate issue with this type of piping

system, and that is, that it's a permitted RCRA unit. And so we have to go through the public -- we had to clean and flush the pipe, then the next step is, once that is all done, it's going to have to go through a Public Comment Period, so that's coming up. I don't think it's next month, I think it's -- it's coming up soon. I don't remember the exact date. But I wanted to point that out because it's something a little bit different than we talk about on a regular basis. There will be a Public Comment Period, a public meeting for that -- for closure of the RCRA permit for IR-14 pipelines. So, again, just to point out something a little bit different. And then the other two things is, if you look underneath "Documents in Review," there are two new documents in that section: One is the Draft For Public Review Feasibility Study and Remedial Action Plan for Installation Restoration Site 15, IR-15, and I see there's -- it says "IR-5." It is actually IR-15. And the FS/RAP has gone into the agencies for review, and there will be a Public Comment Period that is, at least for now, planned to start in -- sometime in July with a public meeting sometime towards the latter part of July, and there will be a public notice coming out for that public meeting sometime, I assume, in the next few weeks or so. The other thing is, the other document is the Remedial Action Work Plan for these fuel-oil pipeline segments. There's very interesting nomenclature. The G1/X/B493 has to do with the pipeline diameter and the building number, and then there's a segment number that goes along with that. And we have a Project Manager for the Fuel-Oil Pipeline System, or FOPL system, and she can rattle those things off, I think, faster than I can -- than I can listen to them, so it becomes a very interesting conversation when Daisy is talking about fuel-oil pipelines at the site. So those are the highlights for tonight, and I would be happy to answer any question.

MR. COFFEY: Steve, what is the average diameter of the industrial water pipes?

MR. FARLEY: It's on the order of 8 inches, or something on that order, maybe a little bit larger in some places, and it's connected to different lift stations, pump stations, and that sort of thing, so --

CO-CHAIR HAYES: Steve, did you say that -- what have you done with that pipe? You have cleaned it out, or what?

MR. FARLEY: We cleaned and flushed the whole pipe.

CO-CHAIR HAYES: But then how do you know that there aren't leaks and that there wasn't contamination dumped outside of it?

MR. FARLEY: There was an extensive soil investigation that was done along that entire pipeline, and I forget the exact distance between the borings, but there was a tremendous number of borings, primarily done by the Navy, although in some places we did some because there were some segments that were removed, but we did a cleaning and flushing. And the other thing that we did is, and this is pretty typical for cleaning and flushing pipelines, you monitor the amount of water going in the pipeline and you monitor the water going out. And it's not a quantitative thing, but if you are pumping in X number of gallons per minute and there's nothing coming out the pipeline, then you know you have a fracture in the pipeline. So, and then the other thing we did, when you would catch all of the rinse water and all of the solids, if there were any, and then we'd collect water samples from the pipeline to demonstrate that the pipeline was clean. And the jetting tool that's used -- I don't know how many folks have seen these things -- but there's this large nozzle that goes into the pipeline and then it's pulled backward. The nozzle squirts, or blasts, on the pipeline in the direction of pulling the pipe back out, so it causes everything to come back out the opening where you inserted the pipeline.

CO-CHAIR HAYES: On Building 461, where you are removing the lead, do you have to backfill on that?

MR. FARLEY: I don't think there's any backfilling necessary. Right now, that's just a matter of removing -- yeah, the building is all supported by piers and stuff, yeah. That's a good question, though. Okay. Thank you very much.

ACTING CO-CHAIR WOCHNICK: Thank you, Steve. We now move to Chris for the Weston Update.

**f) Weston Update (Chris Jespersen)**

MR. JESPERSEN: Thanks, Heather. We also have a handout here. First up is the status of the Investigation Area H1 Containment Area Soil Cover and Cap, and Weston's continued placing the 2-foot soil cover over the completed geosynthetic installation; and we've been importing some remaining soil for the cover from the Highway 12 site, but unfortunately that process was interrupted and it's now planned to wrap up the last week in June. We've also had to identify an additional source of import soil to complete the 2-foot soil cover that is also required in some upland areas outside the containment area. And we've identified that source, taken some samples, and we've got the results then pending regulatory approval for us to use that source. Once we get that approved, the soil will be placed, probably, in the month of July. And the final task we have in Investigation Area 1 are the construction of the perimeter road and security fence, installation of settlement monuments for the east side of the containment area, and that is all planned to be done by the end of July of this year. Next up is the document status, and that's essentially unchanged from last month. You can kind of see the list of documents we planned on submitting in the next 30 days, and I won't read through all those. Next up would be the second quarter RCRA Groundwater Well Sampling for Investigation Area H1, and we completed the second quarter of groundwater sampling. That includes 33 monitoring wells. In addition, our crew collected groundwater level measurements from 100 wells and piezometers to prepare for the quarterly groundwater contour gradient map that we're required to submit. You can see a picture there of, actually, three people. It doesn't usually take three people to take groundwater samples, but we've got some people being trained in there, so -- at least that's what they told me when I looked at the picture.

MR. COFFEY: Trained them how to sit in those chairs, huh?

(Laughter.)

MR. JESPERSEN: And then finally we've got an update on the Western Early Transfer Parcel San Pablo Bay walking trail. Weston has completed the permit process for the City of Vallejo to construct the public access walking trail up to San Pablo Bay. The 12,000-linear-foot trail is going to allow walking access around the Investigation Area H1 containment area and out along the Western Dredge Pond Levees that overlook San Pablo Bay. The construction right now is anticipated to be completed in July 2010, and we will open the trail for use when the remaining containment area perimeter fencing and soil cover replacement activities are completed so it's safe for public access out there. And you can see a map there of the proposed routing of the trail. So, I will answer any questions if anybody has anything. Thanks.

ACTING CO-CHAIR WOCHNICK: Thank you, Chris. We'll now move on to the regulatory agency updates. For DTSC, I know we have two DTSC stand-in representatives. And Janet Naito had given me her update, so I will just kind of go through her update for her.

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

DTSC UPDATE (Heather Wochnick on behalf of Janet Naito)

ACTING CO-CHAIR WOCHNICK: DTSC and the Navy worked to investigate Ms. Schivley's previous comment that was noted in last month's RAB meeting. The comment was related to a UXO [unexploded ordnance] technician and elevated radiological readings. The update for that I will provide a little bit later during the Co-Chair Report. DTSC is also reviewing the munitions and explosives of concern, technical memorandum for screening technologies in the Investigation Area K, which is the offshore areas. They are reviewing the Installation Restoration 04 Remedial Investigation Report. That is a Draft Final Report. And I am glad Steve pointed out all of the IR-14 pipelines, because Janet wanted me to indicate that on the Eastern Early Transfer Parcel, that the interior pipeline closure determination was supposed to be released today. I can't confirm if that actually happened or not for DTSC, but she was anticipating it was going to be released today.

MR. FARLEY: It was.

ACTING CO-CHAIR WOCHNICK: It was? For public comment, and that was going to be 45-day Public Comment Period. There is also -- for Navy Parcels, the Corrective Action Complete Determination Public Comment Period for Navy FOST [Finding of Suitability to Transfer] parcels ends July 1. Those parcels include Investigation Area A2, the SSTP [Sanitary Sewage Treatment Plant] Outfall and XB-1,2, and 3. So, Carolyn, EPA update?

EPA UPDATE (Carolyn D'Almeida)

MS. D'ALMEIDA: Well, I don't have much. I'm caught up on my Navy PCB [polychlorinated biphenyl] report reviews. I have still just got a few for CH2M Hill, so for me, the light at the end of the tunnel is coming. You want to -- do you have yours?

MR. SIMON: Yeah, um ...

WATER BOARD UPDATE (Erich Simon on behalf of Elizabeth Wells)

ACTING CO-CHAIR WOCHNICK: Erich Simon, Water Board.

MR. SIMON: Elizabeth did leave me some stuff to impart to you guys, so let me read that. First of all -- well, she is on vacation. She will be back July 12th, so you should see her at the next RAB meeting. This past month, we said good-bye to our esteemed supervisor, John Kaiser. I think you guys got to say good-bye at the last RAB meeting, so we have welcomed in our new supervisor Alec Naugle, who we'll try to get to a RAB meeting in the near future for you guys to meet. Elizabeth did go out to Building 742 a couple times recently to look at the RAB groundwater sampling efforts that they are doing out there, and that's in IA-C2, sort of close to the water. She also closed UST A230, so that was an accomplishment. And she's been reviewing several reports, including a Draft Final -- Finding of Suitability to Transfer for a few parcels and a de-watering plan for the IR-05 and paint-based area and she also reviewed and commented on a Draft Work Plan for Investigation of the non-tidal wetlands and post-removal monitoring for IR-17 and Building 503. On the early -- Eastern Early Transfer side, I have been looking at a fair number of reports. A lot of implementation reports are coming our way right now which summarize all of the work done to date on the various investigation areas. A lot of those are still in the draft stage, and there is still some work being done, but to expedite the review and move things forward, they are writing the Draft Implementation Reports now so that

we can see what they are going to look like. And also all of the stuff that Steve talked about I have been working with these guys on. That's it.

ACTING CO-CHAIR WOCHNICK: Thank you, Erich. We now move on to the Co-Chairs' Report. Myrna, I don't know if you want to go first.

CO-CHAIR HAYES: Go ahead.

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

ACTING CO-CHAIR WOCHNICK: Okay. I wanted to address a comment that was, again, put on the record last month during the RAB by Councilwoman Schivley. She had noted on the Public Comment Record during the Marine Corps Firing Range Proposed Plan Public Meeting on April 21st, and again during the last RAB meeting on May 27th, she noted a complaint from a resident of Vallejo that a UXO tech had noted elevated radiological readings during an investigation. The UXO tech had reported these readings to their supervisor, and the claim is that someone at Weston had told them that this is not what he was supposed to be doing and discounted the event, so obviously we wanted to look into this. Mrs. Schivley's main concern was that the Navy may not have known about the events, or that the Navy was maybe not doing our due diligence while we're doing our investigations to do radiological investigations along with those, and that her other concern was that the City of Vallejo would be stuck with the bill of a dirty property once the property transfers.

So I did want to make a couple notes and then I can go into the investigation of the claim and what we found. So the first note I want to make is that I want to reiterate the fact of what we talked about last month; that when we transfer our investigation areas, they are turned over to a transferee with a CERCLA warranty, and that certifies that all of the remedial action necessary to protect human health and the environment has been accomplished and that any additional remedial action found to be necessary at a later date would be conducted by the United States. The second note that I want to make is that the Navy does take radiological impact seriously and does provide RAD [radiological] technicians in areas which are known or are suspected to have RAD impacts. Currently, investigations are being conducted on Mare Island to locate and remove radiological impacts. In addition to these current investigations, there have been many past investigations conducted to certify areas and buildings to make sure that they are good for unrestricted use with respect to radiological impacts.

So, the Navy and DTSC obviously had concerns about this claim, and we did some investigation into it. And so I just wanted to, for the record, put some notes down. In late 2009, Lennar had requested Weston to do some UXO tech support for a geotechnical investigation along the historic shoreline of the Eastern Early Transfer Property. This is near but outside the boundaries of the Navy's Marine Corps Firing Range. On November 23rd, 2009, Weston's UXO supervisor and a UXO subcontractor, who is not actually a Weston employee, did provide UXO support to Lennar. This area outside the Marine Corps Firing Range is not a location known or suspected to contain radiological materials. And this is kind of an important piece of the puzzle because we all build our health and safety protocols on what is either known or suspected to be known in that area. And so there is -- suspected to be known that there is munitions and explosives of concern at the eastern -- at the shoreline. However, there is not known or suspected materials for radiological, so that is why the UXO support was all that was requested and that was what should have been provided. So the UXO subcontractor, again, not actually a Weston employee, had

also been working at another project on Mare Island for the Navy and Weston where there was known RAD, and in this area there were RAD technicians that were working on that project for - the project on health and safety support. The UXO subcontractor that was offering Lennar some help mistakenly thought that all normal health and safety procedures required RAD support. So, this is not normally the case. And we cannot guarantee what training he might have had on the RAD meter he was using because he wasn't actually a radiological technician.

So we investigated what meter he was using, and it was not a Geiger counter, which was noted in the public record. Normally, for our investigations, we use a Sodium Iodide Scintillation Counter, which is a – this is a better meter to detect gamma radiation because it's much more sensitive, which kind of leads us to the problem of the readings that we got. So this is actually the instrument that was used: It was a Ludlum 2221 unshielded 2-inch by 2-inch sodium iodide scintillation probe. The probe was used in this instance to take several readings. They start at the surface and lowered the probe into an eight-foot-deep, small-diameter hole. The small diameter is actually an important part of this puzzle, and I will make a note of that later. So the readings on the surface were 7,000 to 8,500 counts per minute, and these readings are what we define as well within background for Mare Island. As the probe was lowered into the hole, the readings did go up to 17,000 counts per minute. I also want to note that no radiological materials or devices were found during this investigation. So, the 17,000 counts per minute may seem alarming to someone who is not actually a RAD technician, and it turns out that due to the nature of the geometry of the hole and the way that the detector reads, that this is actually a normal phenomenon. And so normally if you are taking readings at a surface, you are getting the gamma radiation from one plane, just coming from the surface of the soil. As you move the meter down in a small hole, now you are getting gamma radiation from all the terrestrial radiation in every direction, the sides, the bottom. And at first, I wasn't sure about this theory, so we had run it by quite a few people. This was verified by a Weston RAD technician. It was also verified by a Navy RAD expert that we have at BRAC [Base Realignment and Closure]. And it turns out it's also documented in a letter report that DTSC found for work conducted in Richmond, California. This letter report actually states the following, and in quotes (Reading:) "Measurements in excavation were slightly elevated above surface soil background due to natural geometric effects. These effects occur because at ground surface, gamma radiation is detected from soil in only one plane, whereas at depths it detects gamma radiation from soil in multiple planes, i.e., bottom and sides of the excavation." So these are the notes I wanted to put on the public record, but DTSC and the Navy will continue to follow up with Ms. Schivley and provide her with any additional information that we have. Okay, fieldwork. We have lots of fieldwork going on.

MR. HOLLINGSWORTH: Just so I understand it --

ACTING CO-CHAIR WOCHNICK: Sure.

MR. HOLLINGSWORTH: -- you have not gone back to her yet, this Councilwoman Schivley?

ACTING CO-CHAIR WOCHNICK: No, we wanted to come back to her when Janet Naito got back from vacation.

MR. HOLLINGSWORTH: Okay. All right.

ACTING CO-CHAIR WOCHNICK: But we basically gathered all of the information before she had gone on vacation and haven't had time to have a meeting with her.

MR. HOLLINGSWORTH: Fine. Just wanted to know.

ACTING CO-CHAIR WOCHNICK: Okay. The Navy is doing lots of fieldwork, as well. One of the areas that we are doing fieldwork and have gotten some inquiries is we are doing decontamination at eight buildings within the Production Manufacturing Area. This is in the former Ordinance Production Manufacturing Area. These buildings are being certified free of explosives or residual explosives. We're inspecting all of the buildings: The walls, piping, drain lines, heating ventilation, and the air conditioning systems just to verify that they are, indeed, free. The contractor that is actually working on this is through the Navy Surface Warfare Center Division. This is being done as part of a maintenance action at the site. The work that they have performed to date began on June 2 and ended on June 18th. They plan on coming back in November for additional work. So far, they have done the decontamination on four buildings, and a final inspection and issuance of the decontamination tag are waiting pending confirmation sampling results. The four buildings that have been completed so far are: A-80, A-159, A-271, and A-278. There's four more buildings that they will be working on in November when they come back. Those buildings are: A-215, this was postponed because they basically ran out of time this round; A-216, this will require some dismantling of some of the structure to access the piping; A-248, which will require removal of some of the ceiling tiles to, again, access some of the process piping; and A-280, which will require exposure of a drain line and removal of some miscellaneous loading bays or miscellaneous contents from two loading bays. So, that is in the Production Manufacturing Area. To date, no significant findings of explosive residue have been found in that area.

So now we move on to Building 742, and as Erich indicated, both DTSC and the Water Board have been out there to oversee some of our field activities. We're working on the Non-Time Critical Removal Action over there related to the Navy-retained condition in soil sediment and groundwater. The work is related to the storm drain associated with Outfalls 26 and 27. They have conducted baseline soil sampling. They will also be excavating portions of the former storm drain and the former degreasing plant. After they excavate the storm drain and the former degreasing plant, they will be using a similar item to what Neal indicated. We will be putting the oxygen-release compound in the excavation and then we'll be doing some groundwater and post-excavation monitoring in the area. Fieldwork started in June, early June, and is expected to end in September. Again, just like Neal would, we will be doing a year's worth of monitoring and then we'll assess where we need to go from there.

On the PCB side of the house, we've been doing fieldwork activities at Building 163 and Building 832. Those are more Navy-retained conditions on the Eastern Early Transfer Parcel. For Building 163, we removed the vault lid and floor and did some sidewall scabbling in that area. We have taken verification samples, and all of our samples are below our clean-up action level of one part per million, so that's great. At building 7 -- or 832, you see one little picture of a little piece of concrete where we have conducted some scabbling. Again, we have taken our confirmation samples, and, again, have met our cleanup criteria. So, in July, we will be spending the majority of our time restoring those sites.

Okay. Everyone's favorite, Defense Reutilization and Marketing Office Area, the DRMO. We have obviously spent extensive time excavating many yards of the TPH [total petroleum hydrocarbon]-impacted soil. Since March, the Navy's been busy restoring this area. As part of those restoration activities, we installed 400 linear feet of storm line along the left side of Azuar Drive, and we did video surveying. Everything was great. We hydroseeded within the fence

scrap yard area and parts of Parcel 16, which also had been excavated during this action. You heard an update about IR-17, so I won't go into any of that.

As for documents, we submitted four documents: Two were related to the PCB use, and these will -- we've already gotten our closure letters on these, I believe. We submitted the Final Work Plan for the Non-Time Critical Removal Action at Building 742, and then you will note in both the Navy and Water Board that we received concurrence from both of them on that. We also submitted our Draft Site Management Plan for our fiscal year 2011, which lays out our schedule and how we plan on submitting our documents in the coming year. The DTSC provided us, again, concurrence on the Work Plan for Building 742. The Water Board has provided us lots of good feedback on the IR-17 Wetlands Investigation Report, Building 742, and the FOST. And Carolyn has been doing her due diligence and she has provided us ten closure reports on PCB sites within the Investigation Area A-2, so that is very helpful. And I just wanted to note that the next BCT meeting -- or, yeah, our next BCT meeting and the next RAB meeting are both on July 29th.

MR. COFFEY: No, June 29th. It says "June 29th."

ACTING CO-CHAIR WOCHNICK: It says, "Next BCT meeting, July 29th."

CO-CHAIR HAYES: Oh, that's true. Down here.

ACTING CO-CHAIR WOCHNICK: Missed that. Thanks.

CO-CHAIR HAYES: Thank you.

CO-CHAIR'S REPORT (Myrna Hayes)

CO-CHAIR HAYES: Just going back to that radiological issue. Heather said that the Navy had done a lot of previous work in the past reviewing and working on radiological material impacts at Mare Island. And before the Base was closed, in the two years that Paula and I served on the RAB, from the very beginning of the Restoration Advisory Board until the closure, so April of '94, when we started on the RAB, work had already been commenced, through March 31st of '96, when the Base closed, so it was our understanding, it was reported by the Navy, that \$130 million was spent on surveying for, and removing when it was found, radiological materials, and that's separate from the Nuclear Propulsion Program. So, we visited a lot of those sites, had lots of presentations by the Navy's Radiological Survey Team, some of whom continue to serve Weston as employees there. So, personally, and I don't want to speak for Paula, but I am pretty - - very impressed with the work that the Navy did to assure this community that the radiological issues related to general radiological items had been taken care of. And then, as we know, mostly through the dredge material or dredge pond sites, other items have come up, the radiological buttons. Did you want to comment anything about that?

MS. TYGIELSKI: I feel very -- I feel very confident about the work that has been done.

CO-CHAIR HAYES: That's mostly for those of you who, you know, have come along a little bit later, and also for the record, because I understood -- you just mentioned to me that you were going to start making sure that our City Council does get the same packet of information as the Restoration Advisory Board Members do, and I think that's a really, really great idea. I really applaud that. I would like to request that the Navy -- in the past, long-ago past, the Navy used to give us a report on your budget for your upcoming year or, at some point, maybe, at the beginning of your fiscal year, that would give us an idea of both what you are projected to spend,

or what you already have spent, intending to spend, either in this fiscal year or the coming year fiscal year, both in BRAC and in your other programs, like your CSO (Caretaker Site Office) program. That would be helpful to have in a future presentation. And I am not quite sure who will answer this question, but I would just like to -- I know -- I have read a little bit about some of the concerns of the communities at Kettleman, at the Hazardous Waste Landfill there managed by Waste Management, and I wanted to know what the -- and I don't need to know the answer tonight, but I would like to hear, you know, what the status is of that facility; because I thought I heard something about they might be possibly having a moratorium or some kind of -- not being able to expand or -- I didn't know whether that was having any impact on the completion of the environmental cleanup at Mare Island in terms of either cost or difficulty finding a Class I Disposal Site. And I wanted to actually thank Heather and the Navy for -- and the CSO's office -- what does that stand for?

ACTING CO-CHAIR WOCHNICK: Caretaker.

CO-CHAIR HAYES: Caretaker Site Office. I wanted to personally thank you and Patricia McFadden, who is with the CSO's office, for not only putting this topic on your monthly report, but also getting me out to the site where the decontamination is taking place in the Production Manufacturing Area, getting a chance to meet the workers who were working there, and learn a little bit more about what they are doing. There's been a lot of curiosity on the part of our visitors to the Mare Island Shoreline Heritage Preserve, and certainly from our volunteers, curious about, you know, what was taking place on the other side of the fence. And I think it's our responsibility, as Restoration Advisory Board members, and it's our opportunity, as well, to inform the public about what is going on in terms of the environmental cleanup, or at least direct the public to the source of that information, and I just want to thank the Navy for being cooperative on that. And it actually was very, very fascinating to me because it's always more -- so much more valuable to see the work in progress, to understand -- make come to life some of these environmental cleanup projects and their challenges. And this team was actually going -- crawling underneath the Production Manufacturing Buildings, which are on piers, similar to the way Weston's team was doing it earlier in the Western Magazine, where they were using geotechnical equipment that we saw actually on one of the RAB tours, to investigate for munitions. In this case, these guys were doing a very unglamorous job, which I know is the case on most environmental cleanup, but actually crawling under the building, breaking the ceramic pipe, as well as the cast-iron pipe, and bringing it up into the room where they had steam cleaners, and they had the drains sealed, and they were cleaning out the pipes of any residual contamination that may or may not have been there and then also steam-cleaning the floors. And these are in buildings where that crew had determined, because of their past experience, some cases, 30, 40, 50, more than 50 years worth of experience working at Indian Head, at the munitions plant there, they had determined that there were these buildings that are listed here as buildings that, based on their observations of the conditions of what they determined the building had been used for, might have some element of contamination. And I've got to say, these guys were truly amazing, interesting people. They were all in their 60's to 70's, and they had already had very successful careers at Indian Head, plant managers, division managers, involved in building the Polaris -- missiles that went on our Polaris submarines here, really cool people, and they've come back to work, to use their expertise in facilities like this. So, they're like my heroes, you know, after just a half hour of having the chance to visit with them. So, again, thank you to the Navy, and hopefully we might be able to arrange a site visit when they are back here working in November.

The last thing we've -- I had the privilege of hosting four members of a family whose father was the Base Supply Officer in 1959 to 1961, Captain Bill Porter. His children came from Hawaii. One was married to a former State Senator in New Mexico. He was with them, as well, from San Diego. And that team of four former residents of Quarter C, Lennar's property, actually grew -- lived there for two years, and they came back to Mare Island, based on having seen the ad for the Daffodil Tea being held at Quarter C. So, on Monday, I spent the day with them, escorting them around Mare Island and going to lunch with them at the golf course and taking them, you know, up just to see the land. So it was a really wonderful day, and they expressed a tremendous amount of enthusiasm still for Mare Island and all that it meant to them as children 50 years ago.

And the last thing I'll report on is that for our next Second Saturday, which is July 10, where we have the Mare Island Shoreline Heritage Preserve Open from 9 a.m. to 7 p.m., one of the things we'll do that day is to honor a family of the Chief Gunner Alan S. McKenzie, his wife, Malvina, who we actually just learned her name yesterday, off of Ancestry.com. She was always -- she is listed, in all Navy reports of the explosion that killed Chief Gunner McKenzie and his wife and their 12- and 10-year-old daughters, as simply "his wife." And thanks to Ancestry.com and the New York 1910 census that you can access like that, she has a name. So Alan Scott McKenzie, Malvina D., and Dorothy and Mildred all died in an explosion at the Naval Ammunition Depot July 9, the day before -- 93 years the day before our next Second Saturday. They were buried at the cemetery, July 9, 1917. So, in addition to honoring them and learning a little bit about their family in the last few days, I have had the great privilege of meeting, by e-mail, their great granddaughter. The only daughter who survived the explosion, because she wasn't living here, was an 18-year-old, and, again, through Ancestry.com. I am just so amazed. I have had several communications with them, and the grandson, who is 84, and his -- and his daughter. So, we'll soon be getting photos of that family, which we didn't have, so just, again, something that might be of interest to some of you who have visited the cemetery in the past, so that's it. Thank you.

ACTING CO-CHAIR WOCHNICK: Thank you, Myrna. So, now we move into our second Public Comment Period if anyone has any last remaining comments you want to get out.

(No response.)

ACTING CO-CHAIR WOCHNICK: Or questions.

(No response.)

ACTING CO-CHAIR WOCHNICK: No? All right. I guess the meeting is adjourned.

(Whereupon, at 8:55 p.m., the meeting was adjourned.)

#### **LIST OF HANDOUTS:**

- Presentation Handout – Installation Restoration (IR) 17 Fieldwork Update
- Presentation Handout – Petroleum Corrective Action Plan – Historic Independence Wharf Area
- Presentation Handout – Features within the Eastern Early Transfer Parcel (EETP) – CH2M Hill/ Lennar Mare Island
- Presentation Handout – Mare Island RAB Update May 27, 2010 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard May 27, 2010