



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

HELD THURSDAY, May 26, 2011

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, May 26th, at the Mare Island Conference Center, 375 G St., Vallejo, California. The meeting started at 7:01 p.m. and adjourned at 8:39 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)
- Miguel Buchwald
- Michael Coffey
- Chris Rasmussen
- Paula Tygielski
- Wendell Quigley

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

- Janet Lear (Navy Co-Chair)
- Marie Dreyer (Navy)
- Reginald Paulding (Navy)
- Dwight Gemar (Weston)
- Neal Siler (Lennar Mare Island)
- Steve Farley (CH2MHill)
- Gil Hollingsworth (City of Vallejo)
- Elizabeth Wells (Water Board)
- Janet Naito (Department of Toxic Substances Control)

Community Guests in attendance:

- Maurice Campbell
- Dijl Christian
- Karen Rasmussen

RAB Support from CDM:

- Carolyn Moore (CDM)
- Doris Baily (Stenographer)
- Wally Neville

I. WELCOME AND INTRODUCTIONS

CO-CHAIR LEAR: Welcome to the Mare Island RAB meeting. And we can start with introductions. My name is Janet Lear, I'm the Navy co-chair.

CO-CHAIR HAYES: And I'm Myrna Hayes and I'm the community chair.

MR. RASMUSSEN: My name is Chris Rasmussen, I'm a resident of Mare Island.

MS. TYGIELSKI: My name is Paula Tygielski, I'm a resident of Benicia.

MR. BUCHWALD: Miguel Buchwald, I'm a resident of Mare Island as well.

MR. QUIGLEY: Wendell Quigley, resident of Mare Island. I found my way back.

MR. FARLEY: Steve Farley with CH2M Hill.

MS. WELLS: Elizabeth Wells with the Water Board.

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

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

MR. COFFEY: Mike Coffey, RAB member from American Canyon.

MR. GEMAR: Dwight Gemar with Weston.

MR. PAULDING: Reginald Paulding with the Navy.

MR. SILER: Neal Siler, Lennar Mare Island.

MRS. RASMUSSEN: Karen Rasmussen, his wife.

(LAUGHTER.)

MR. RASMUSSEN: You always blame me.

MS. DREYER: Marie Dreyer with the Navy.

MS. MOORE: Carolyn Moore with CDM.

II. PRESENTATION: *IR 17 and Building 503 Area Status Update* Presentation by Reginald Paulding (Navy)

CO-CHAIR LEAR: Okay. So we have a couple of good presentations tonight. Reginald Paulding with the Navy is going to be presenting IR-17 Building 503 area status update, followed by a presentation by Neal Siler on the Building 206/208 sampling results and a path forward for that site. So that said, we can get started with our first presentation. IR-17 Building 503 status update, Reginald Paulding, Navy remedial project manager.

MR. PAULDING: All right. Good evening. Tonight we're going to be talking about a status update on IR-17. As you may know, starting last year we did three excavations at IR-17 to remove contaminated soil. And we're currently doing groundwater sampling. Back in November of last year we did some soil gas sampling and soil sampling-. We'll start out tonight with the site history. We'll go through those excavation activities, also known as the non-time critical removal action [NTCRA]. We'll talk about the post excavation monitoring. We'll go into the wetland investigation a little bit. We'll talk about what we did there. The wetland, you'll see, is adjacent to the Paint Manufacturing Area. And we'll talk about what's next.

So here you'll see IR-17 and where it is in relation to the rest of Mare Island. IR-17 is outlined in blue here and here. It's on the north end of the island. Here's the bridge, here's the causeway, it's in between up on the north.

What you're looking at here is a 1949 aerial photograph, and you have a blowup version in the packet. There are three 11x17 pages in the back of the packet there. The first one is an 11x17 of this photo. I'll just point out a couple things. You have here Building 503 which is where they did the main paint manufacturing at the site. You also have three tank areas: you have Southern Tank Farm; you have the northern tank farm; and then you have this tank battery right out adjacent to Building 503. A couple other Buildings are 519 where they had the varnish plant and Building 499 where they stored the finished material. You'll have here, this purple area, this L-shape or foot shaped section is the non-tidal wetland, which we'll get to at the end of the presentation.

So to go through the site history. As I said earlier, this is the former Paint Manufacturing Area. And starting in the early forties through the mid-fifties they manufactured paint and varnishes, mainly for the ships that were built and maintained at Mare Island. We have raw materials that are stored in those tank farms that I showed you on the previous slide in the aerial photo. Okay. So starting in 1985 the Navy began doing investigations in this area, collecting soil samples, groundwater samples, just to assess the area and found out that there were some issues. There were some earlier excavations back in 1998 and '99 timeframe to remove lead contaminated soil. So in 2006 or so timeframe there was a remedial investigation report that recommended removal of residual free product that showed up in the groundwater in the wells. When you collect samples you could see what looked like separate phase oil product sitting on the water column. And that was identified in two wells which I'll point out on a couple slides from now. And the Navy and the regulators, agreed to conduct a non-time critical removal action.

In order to find out what areas to investigate, starting in 2008 we collected some additional data to refine the areas, and we performed a vapor intrusion risk evaluation where we collected specifically soil gas samples -- and soil gas is, you put these probes in the ground -- we started out with what you call a passive soil gas survey where these probes were placed in the ground for ten days, they were left there, came back ten days later, you collect them, send them to a lab, and they analyze -- it's typically a fabric material -- you analyze the fabric and it's an indicator whether something is there or not. It's a hot or not kind of analysis. And they went back following that, did an active soil gas. And we'll talk about those results, the active soil gas in the following slides. And that's how we identified these three excavation areas.

So we did an Engineering Evaluation and Cost Analysis and Action Memo that identified the three areas, that identified the screening criteria. And we moved from there into the non-tidal correct --

CO-CHAIR HAYES: Non-time.

MR. PAULDING: Excuse me?

CO-CHAIR HAYES: Non-time.

MR. PAULDING: Non-time critical removal action, thank you. The excavation activities started in the beginning of December of 2009 and went through August of 2010. Then following that we did post excavation monitoring. And we're currently in the middle of -- or we just completed the third round of groundwater sampling for the four quarters of groundwater

sampling, so we have one more quarter coming up in August, 2011. Yes, and like I said previously, the third quarter sampling was just completed today.

So to jump into the most recent removal action, which began in December, 2009 with the removal of a rail line and spur that you can see here that was adjacent to Building 759 which is on the corner of Azuar and J Street. And here you see where we were getting some asphalt removal to begin the excavation activities down at the corner, the intersection of Azuar and J Street. And here we have the three areas -- remember the areas A, B, and C were the excavations that were done. Area A was about 1,600 cubic yards. The excavation activity took place over a week in April. You've got Area B which was a much larger excavation, about 7,500 cubic yards. And that work was done from April to July. And then Area C was a much, much smaller -- you'll see it consists actually of two smaller areas, and that was about 360 cubic yards. All of the excavation activities and site restoration were completed on August 10th, 2010.

Here you can see a couple of the site features. You can see the three excavation areas that I had mentioned. You can see Excavation A is furthest to the north, adjacent to Building 519. You'll see Excavation B is near the Southern Tank Farm and continues north adjacent to Building 759. And then you have the C Excavation which consisted of two small excavation areas, C-1 and C-2. You also have a blowup of this figure in the back again, another 11x17 page, that's the second one in that packet. Then here, again, is that non-tidal wetland area.

So there's two different shadings here, you have this green and yellow. The green colored items were areas that were investigated and/or excavated in 1998/1999. So in that period they removed the product lines that ran from the two tank farms into Building 503. They removed Building 519 which was the varnish plant. And then up here was an oil water separator that was also removed.

Here we have some photos of the work at Excavation Area A. They went about 8 feet deep. Excavation B, again about 8 feet. Excavation C is shown here. And then here we just have a shot of the water line replacement at the intersection of Azuar and J Street. Dwight, are you in this photo?

MR. GEMAR: No, no, I'm working, not just standing around.

MR. FARLEY: You must be the guy in yellow watching.

MR. GEMAR: No, I was the guy watching those guys.

MR. PAULDING: And then here is a post-excavation -- after everything was complete -- this picture was taken in October, 2010. So what you're looking at here is the intersection, this is Azuar and that's J Street, and this here would be the Southern Tank Farm, looking northeasterly. And these stakes with the orange spray paint on the top, those were the locations where we eventually installed soil gas probes and/or wells.

So here's a closeup of Excavation A. These triangles are the active soil gas points. The purple one is the pre-excavation point, Soil Gas Point 14. The clear ones are post-excavation -- in this case Soil Gas Point 42. And then you'll see there are two wells, 17W20 and 17W05.

What you'll see is the pre-non-time critical removal action sample in October, 2008 had a benzene concentration of 6,100 micrograms per meter cubed. And as you can see, that was almost twice the industrial risk-based concentration. And the risk here in these calculations was based on the industrial worker. You'll also see we had some yellow, the other two chemicals

highlighted were the ethylbenzene and the 1,2,4-trimethylbenzene. Those contributed to the risk for the industrial worker at this location. So based on the risk calculations in our screening criteria we excavated Area A. And then here you have Soil Gas Point 42. You'll see that post the excavation activities in November, 2010, we no longer detected the 1,2,4-trimethylbenzene or ethylbenzene, and the concentration for benzene was significantly reduced.

CO-CHAIR HAYES: Maybe -- I guess I did miss something. The 14 and the 42 are two different sites, right, two different monitoring wells?

MR. PAULDING: They're two different soil gas points. So 14 --

CO-CHAIR HAYES: So why does one -- why are you comparing those two on that next chart? Wouldn't you be comparing one against itself, pre and post?

MR. PAULDING: Okay. Well, we had to remove Soil Gas Point 14 when we did the excavation. This sample was collected in 2008 prior to the excavation. So then we dug out the soil at A, so that's what this is a picture of. Then we brought in clean material, compacted it, filled it in. And then after the filling, you have what this looks like now, the post excavation. So then we came back in November, 2010, and then installed this point.

CO-CHAIR HAYES: Okay. So you removed 14?

MR. PAULDING: Correct.

CO-CHAIR HAYES: That's my only question.

MR. PAULDING: Oh, I'm sorry, yes. Yeah, we removed 14 and then this is a new point.

CO-CHAIR HAYES: Yeah, I've heard about this stuff a few times, I'm just trying to figure out how those two related.

MR. PAULDING: Okay. So then you have Excavation B, which was the large one. And here you have several different purple points which were the drivers for the excavation activity. And as you can see, they pretty much define the area. So we have some -- we have BTEX, which is benzene, toluene, ethylbenzene, and xylene, which are the main constituents for -- typically for gasoline. And you have those in the groundwater up here at this well, at well 17TW02. And you again have it at 17W15. 17W12. Remember previously I had discussed that we had identified some free product? That free product was identified in 17W12 and 17W15 in 2002.

CO-CHAIR HAYES: Can you explain why gasoline was the product that you found in a paint manufacturing facility?

MR. PAULDING: Yes. Because in these tank farms -- it's very similar to the solvents that they use to manufacture the paint, it has very similar properties to what you would see in gasoline. The chemical compounds, the benzene, the toluene, those compounds were also used in paint manufacturing.

CO-CHAIR LEAR: It's more of a paint thinner.

MR. PAULDING: Paint thinner.

CO-CHAIR LEAR: It was called a distillate, but it does have the BTEX in it, it's a paint thinner type product.

CO-CHAIR HAYES: He should probably say that.

MR. PAULDING: Okay. And then you'll also see here in the soil gas again we have these, the purple triangles; you have one here at IR17SG002. And then you also have some Soil Gas Points SB008, SB007, and then this SB034 at this far southern end.

Here, again, we'll go through a similar idea. We had the soil gas samples that drove the excavation due to risk to the industrial workers. You have ethylbenzene at 1,200,000 micrograms per meter cubed, which is obviously a very high concentration. Benzene at 280,000 micrograms per meter cubed. Then we also had -- remember 17W12 and 17W15, these two wells, and their concentrations where in 2002 we had the detected product in the wells? And then these are the maximum concentrations of xylenes, benzene, and ethylbenzene in these two wells also that date back to the 2002 timeframe. In 2008, however, the concentrations had dropped off at 17W12, but they were still relatively high at 17W15. So then again post-excavation -- these points were taken out for the excavation, the SG02, 17W12, 1715 were removed for the excavation. So then post-excavation we installed SG047, 17W26 and 17W25. Then in November, 2010, we collected new samples. And you can see that the soil gas results were significantly reduced here at Soil Gas Point 47; 17W26 was in the same range as 17W12; but 17W25 we had, again, some pretty good reduction.

MR. HOLLINGSWORTH: Before you change -- go ahead.

CO-CHAIR HAYES: No, you first.

MR. HOLLINGSWORTH: Before you change that I have a question, and I'm more interested in the November, 2010 results on both of your slides.

MR. PAULDING: Uh-huh.

MR. HOLLINGSWORTH: You have those results now. Do they concern you other than they're not -- they are detects, but are they detects that would require at this point --

MR. PAULDING: Any additional --

CO-CHAIR HAYES: -- any increasing concern?

MR. PAULDING: No, not at these locations, but we do have some concern at Area C which we're going to follow up.

MR. HOLLINGSWORTH: Okay.

MR. PAULDING: But A and B they look pretty good. They're below the screening and action levels.

CO-CHAIR HAYES: Two questions. Will those still require, at that low level, any kind of land use control on those?

MR. PAULDING: I wouldn't say land use controls, no. This area is slated for industrial use.

CO-CHAIR LEAR: So it would be limited to industrial use, so it would have a land use control.

CO-CHAIR HAYES: Even though they appear to be numbered that are below residential -- or am I wrong on that? -- why would they be restricted to industrial?

CO-CHAIR LEAR: Well, we would have to look at all the data, but the basis of the original removal action was industrial use, so the slides may not present all the locations that were in between those two.

CO-CHAIR HAYES: My question, I know you -- I don't know what the deal is with your money or whatever or why you haven't come to us and talked to us about, you know, getting our help with getting more money, but if this was only money that was driving this, I would just be curious about what impact those high numbers had in groundwater and why then it took so many years. I mean this looks like 150 years you sat there and waited to try to figure out what to do about this. I don't know. It seemed like a pretty straightforward thing when you got it finally going just to remove the material. So I remember, you know, at the beginning of time, Tetra Tech giving presentations about free product in these areas, so what took so long? And what impact has that had to the groundwater in the meantime?

CO-CHAIR LEAR: Do you want me to take that?

MR. PAULDING: Yeah, go ahead, Janet.

CO-CHAIR LEAR: A few years ago, about -- a little before I came on board, so probably about three years ago, there was a plan to move forward with the FS -- or the removal action at that time, and it was just a removal of the soil for residual free-phase product. And at that time it was decided by the BCT that we needed to further evaluate the vapor intrusion risk at this site, and we did not have soil gas data. So we went back in 2008 and did additional investigation to get that data and to evaluate that risk pathway, which resulted in a slightly expanded action at the site. So I can only speak to those three or four years, in that timeframe, but that's what happened there.

MR. PAULDING: Right. Cause Area A and C were beyond those areas that had the free product.

CO-CHAIR LEAR: Yeah.

CO-CHAIR HAYES: And so to answer my question about what groundwater impacts it had?

MR. PAULDING: So the groundwater impacts, which we're still investigating, but it would appear that it didn't spread beyond the initial area which was basically Area B, but we have one more quarter of the four quarters of sampling. And when I get to the discussion on Area C, we're also looking at some additional sampling. And then here you have the soil results within Area B which I showed you previously. We had the SB007, SB008, and SB009 on that figure. And then we went back and one of the locations that we reinstalled is SB034, which is a new location. And so we got less benzene, we're below our screening levels for the xylenes. We've still got an issue with the ethylbenzene, but we're monitoring the groundwater to hopefully show that there's no issues there remaining of impacts to the groundwater.

So then we got Area C which is, I'm sure Gil will be interested in here. So you'll see C, we've got Soil Gas Point 23, Soil Gas Point 24. And at these two locations we were surprised to identify chlorinated compounds. So you've got TCE at Soil Gas Point 23, and you've got Vinyl Chloride here at Soil Gas Point 24. And then Soil Gas Point 43 was the point we put in post-excavation to sample this area. Plus we also installed wells 17W28, -29, and -30 to monitor the groundwater in this area.

So looking at the results, you got the pre and the post. The Soil Gas Points from 23 and 24. You have the trichloroethene at 26,000 micrograms per meter cubed. And Vinyl Chloride at 56,000, which were both above the industrial screening criteria established. Dug those out. And then remember Soil Gas Point 43, now we had 10,000 micrograms per meter cubed for the trichloroethene at Soil Gas Point 43, and 840 [micrograms per meter cubed] for the Vinyl

Chloride. So it looks like we captured most of the Vinyl Chloride, but we still have a lingering trichloroethene issue. So in groundwater, pre-excitation, at this temporary well, IR17TW03, which is right here in the Area C1, we really didn't see much in the groundwater, but then post excavation we're starting to see some compounds creep into the groundwater, specifically Vinyl Chloride at 22 micrograms per liter.

So here what you have in this column is a risk based concentration for a construction worker in a trench. The reason we selected these risk calculations was because we felt that this was the most likely scenario where someone would come in contact with the groundwater here at IR-17. So -- well, I guess to jump ahead slightly, since we're all talking about the Area C, but the plan currently is that we have a request for proposals out right now with some contractors to come in and complete the assessment of the Vinyl Chloride here in this Area C. And that work will be kicked off here in the next couple of months.

So with that, I will jump to the non-tidal wetland investigation. So here at the wetland, which was, if you remember, was south of the Southern Tank Farm. And your last 11x17 slide in your packet has a blowup of the wetland and the sample points in the wetland over several different investigation activities. So some history on the wetland is that it was filled in with dredge material from Mare Island Strait in the thirties and forties timeframe. Out in this area we have, you had a series of communication towers that were associated with Building 505, which was the main communications building on Mare Island back in the thirties and forties timeframe. But there were never any permanent structures or activities associated with this wetland.

Beginning in 1998 through 2003 there was a series of sediment and groundwater samples collected in the wetland, just to see if there were any impacts from that adjacent Southern Tank Farm. In 2008 the BRAC Cleanup Team, the regulators and the Navy, looked into doing additional characterization and doing a revised risk assessment in this non-tidal wetland area. So in November, 2010, the same time we were doing the post excavation work, we went out here into the wetland and we took that opportunity to collect sediment samples at thirteen locations, groundwater samples at five locations, and then the soil gas samples at ten locations, which you'll see on that third 11x17 page. We detected metals, volatile organic compounds, these PAH's, semi-volatile organic compounds, polychlorinated biphenyls, pesticides, and some, I guess coal tar, which is also identified as this TPH. And the same thing in the groundwater and volatile organics in the soil gas. At relatively low levels I should point out.

Here you'll see the green squares are the November, 2010, sediment sample locations, so you can see they're spread pretty well across the wetland. And then the purple triangles were the 2010 soil gas sample locations. And the well symbols, which are, you know, these almost bulls-eye type symbols, were the new wells that were installed -- the 17W24 and 17W23 were installed previously, but then the blue wells were the ones that were installed for this excavation work -- or sorry -- for this assessment work. The results will be presented in this non-tidal wetland report which is due to come out in June in draft phase. So a sneak peek on the preliminary on the results, what we've identified is this benzo(a)pyrene which is one of those PAH's that were detected and poses a potential risk. This is in the, what I'd like to caution, would say is in a very early risk evaluation. And then we also have DDTs, a pesticide, and molybdenum, which is a metal, and looks, in a very early risk assessment, like it poses some risk to ecological receptors. We believe that once we follow up with some site specific information, input site specific information into our risk assessment, some of these and/or all of them will show that their concentrations -- so, for example, the benzo(a)pyrene and the molybdenum, are consistent with

ambient concentrations here at Mare Island. And the DDTs would be consistent with regular application back when this was an active base. Groundwater and soil gas, there were no chemicals that were above any of the initial risk calculations, so those don't get carried through to the more site specific risk assessments -- they were covered in the very conservative initial risk assessments.

So what we're seeing here is the nature and extent of contaminants at the site. There's no evidence of a point source or that any contamination spread from that Southern Tank Farm which was adjacent to the wetland which is a very positive development. And the conclusions in the draft report will be based on, obviously, the work that was done and the assessment of the data. So stay tuned.

The next steps. What we talked about here, the third quarter groundwater monitoring in the upland area which is the Excavations A, B, and C was completed today. And so we're waiting for that data to see what it looks like. The Draft Non-Tidal Wetland Investigation Report, as I said previously, it's coming out in June. And fourth quarter groundwater monitoring will be conducted in August. So then we have the Final Non-Tidal Wetland Report. And there will also be a report for the groundwater monitoring that will combine all four events, and we'll discuss in detail what the results mean for the post excavation work. And as I said also, we have requests for proposals out currently to do additional work around this Excavation Area C. And that takes us to questions. If there's any additional?

MR. HOLLINGSWORTH: Well first, just for everybody's information, after a number of years and when the City saw that Lennar's property, which was always our number one priority, was on its way and we had it all scheduled out, a number of years ago we shifted our interest as our number one priority to the north area, and IR-17, of course, has been our priority. And even though we've lost the developer that caused us to really look at that whole situation, we, the Navy and the City made a decision to proceed with that particular area being our number one priority. And it continues to be our number one priority. We are currently estimating a 2015 NFA [No Further Action] and deed transfer which gives us, you know, gives us a lot of time. By the way, this is a very good report because I have to sit down every month and talk to my boss, that's the only thing in this entire city he asks me about is IR-17 -- but the question I have is your results on that second quarterly report, and I have an idea of why you have got now a sampling versus the quarter before that when you had a non-detect. My question is really, is it going to slow things up? Are we going to see an extension of this one year monitoring period that would cause that 2015 to slip? What do you think?

MR. PAULDING: We're doing our best to stay on schedule for sure, but Janet?

CO-CHAIR LEAR: You know, to be honest I would expect that there would be some slippage in that one area, in Excavation C Area. But property has been developed at other bases with a groundwater cleanup program and groundwater monitoring program ongoing. So I don't think it's a show stopper, but I would imagine that the monitoring would go on a little bit longer.

MR. HOLLINGSWORTH: Well, of course if it was just monitoring it wouldn't be a problem. What I'm worried about is having to go out and dig up a whole bunch of land, but this is water. I mean this is basically groundwater, so I don't guess digging up is the solution.

CO-CHAIR LEAR: I wouldn't expect it would be the solution.

MR. HOLLINGSWORTH: Yeah. Okay.

CO-CHAIR LEAR: But we'll know more.

MR. HOLLINGSWORTH: Well, we'll be looking at that next quarter, or this one.

MR. PAULDING: Okay. Thank you.

**III. PRESENTATION: *Building 206/208 Area Sampling Results and Path Forward*
Presentation by Neil Siler (Lennar Mare Island)**

CO-CHAIR LEAR: Okay. Our next presentation is Building 206/208 sampling results and path forward presented by Neal Siler, Lennar Mare Island.

MR. SILER: Okay. If you all don't have a packet you should have got the packet that was up at the front desk. It includes the presentation, and there are four 11x17 figures that are attached to it that you can refer to during the presentation. But what I'm going to discuss is some of the recent characterization sampling that we performed at the former Building 206/208 Area, and present some remedial alternatives in light of those sampling results. So those are the topics I'm going to talk about.

So the location of the Building 206/208 Area, it's located in the central portion of Investigation Area C-2 and the central portion of the Eastern Early Transfer Parcel. It covers an area of approximately two acres. And was historically used for commercial industrial purposes. And that's the future proposed land use also, commercial industrial purposes. Building 206 was an office building that was constructed in 1917. It was used for offices. It had an auditorium on the second floor. And also there was some testing that was performed in the building. Building 208 was also constructed in 1917. It was used for offices, and at one time was a cafeteria on the base. There was an ancillary building, Building 810, that was located to the west of Building 206 that was constructed in 1943, and it was used as a paint and rubber plant.

So the next slide shows you the current conditions of the site. Both Buildings 206, 208, and 810 have been demolished, they're no longer there. This area to the south of Bagley Street, this building to the north, or this area to the north of Bagley Street, this is where former Buildings 208 and 810 were located. So this view right here is to the east, and this view right here is looking to the west.

This is the rocket ship that XKT is constructing for me so I can go back and forth to work and home faster. So hopefully when that gets done I'll be able to move back and forth here very fast.

MR. COFFEY: Does homeland security know about that? They will.

MR. SILER: That's right. The work that is associated with the Building 206/208 Area originated from work that was performed at the adjacent Industrial Wastewater Pump Station No. 6 Area.

So if you look at the next slide. This is the location of former Industrial Wastewater Pump Station No. 6. It was part of the industrial wastewater pipeline system which is known as Installation Restoration Program Site 14, IR-14. It had a number of pipes that went through this area. The constituents of concern that were associated with this pump station were petroleum hydrocarbons. We detected petroleum hydrocarbons as diesel up to 1,600 milligrams per kilogram. But surrounding this area, and it was thought was associated with the pump station, was lead and fill which was detected up to 31,000 milligrams per kilogram.

Now, the investigations that took place around this area took place over a series of years. The initial characterization of the IR-14 site began in 1983 and continued on to 2002. In 2003 there was an interim removal action around Pump Station No. 6, where about 250 tons of soil was removed. At that time it appeared that the material that had to be removed actually extended quite a bit around there. In 2003 there was some additional investigation work done. There was some additional investigation work that was done in 2004. And then in 2009, that was when the full scale remediation that you see here, or removal action that's outlined by the purple line around here, took place. And at that time about 3,000 tons of soil was removed down to a depth of about fourteen feet.

Now, as they started to remove this area, it became apparent that the lead debris, the lead containing debris, was not something that was associated with any utility, the Industrial Wastewater Pipeline System, or just the Pump Station. So CH2M Hill started to look in the area because they knew they had the debris that extended off to the west, and they wanted to see how far it extended to the west. So what they did was, while they were doing this work here, they actually did some hand augers, and used what's called an X-Ray Fluorescence instrument, commonly known as an XRF gun, and did some hand borings through the area around here, to the west of the Industrial Wastewater Pump Station No. 6 site, to see if this debris layer extended to the west, how far it extended, how deep it extended. When they did this, they found some high readings in the debris itself. The highest is right here, it's about 50,000 milligrams per kilogram. It doesn't exactly equate to what you would find in a laboratory, but they just knew it was high with what you'd find in an XRF gun, and that's what they looked at there. That was the highest reading, there's a 21,000 instrument reading right here. And what they found was that the debris extended, was thicker and deeper to the southeast of Bagley Street, extended to the west, but dissipated as you went to the west, and thinned and dissipated as you went to the northwest.

So at that time they had some data gaps in this area, these buildings were still present, they could not get into these buildings to see what was in the footprint. So what happened was that Lennar Mare Island developed and implemented a work plan to collect soil and groundwater samples beneath the debris to verify how far it extended, you know, to the west of the Industrial Wastewater Pump Station No. 6 site.

This right here is a photograph of what the debris looks like, very metallic looking, kind of rusted out. But that's what you would normally see as far as the debris is concerned. So again, going over what we knew before we actually implemented this work in December of 2010, we knew there was a data gap in the footprints of Building 206/208 Area. We found lead in the debris as high as 55,000 readings, or measurement instrument readings on the XRF gun. The debris layer was thicker and deeper as you went to the southeast, thinner and shallower as you went to the northwest. It was not observed, it was thinned out as you went to the southwest and to the northwest. And we did know nothing about the concentration of soil that was beneath the debris layer.

So the whole idea of the plan was to verify or refine what we knew about the debris layer before, and see if the debris had impacted underlying soil and groundwater. So we implemented a plan of fifty soil borings, and these are these diamonds that you see. And the diamonds alone, that was where we actually did just lead sampling. Where you see a diamond that's surrounded by a circle, we did some lead and petroleum hydrocarbon and polynuclear aromatic hydrocarbon sampling. And we did that because when we did this excavation right here at UST 1310, we had

to do it with crunch plates, because we could not get under the building. We knew there was some extended under the building, but we could not get to it because of the fact that if we had tried to do something different here, we would have undermined the building and would have lost that building at the time. So we wanted to verify and see if we got everything in this area here. So, what this slide shows you right here is the extent of the lead impacted debris layer as characterized by the data that was collected while they were doing the Removal Action at Industrial Wastewater Pump Station No. 6, supplemented by the data that was collected in December, 2010.

This slide right here shows you the thickness of that debris layer. It ranges anywhere from 0.1 feet up to 2 feet, which is this area right down here. You can see it's about 2.7 feet down here. There were a few areas where we found some Black Granular Material and some Green Sand.

The next slide shows you the depth of the bottom of the debris layer. Again ranging from about a foot below grade down to about 5 feet below grade down here to the southeast. Also what we were able to confirm as we went to the southeast here, we did these borings down here, we were able to confirm that the layer stopped as we went to the southeast somewhere in this area in here. We confirmed it dissipated to the west, northwest, just to fill in the data gaps, find out if there was anything under the buildings here.

So the samples that we took for lead and soil and groundwater, surprisingly, the levels of lead that were immediately below the debris layer and deeper as we went down in the soil column had very, very low levels of lead in them. We only found one sample where we had lead above the cleanup level, which was this one right here, which was 1,400 milligrams per kilogram at this location.

And we also took some groundwater data. And surprisingly enough, the highest groundwater sample or concentration we got was this sample which was right below the 1,400 [milligrams per kilogram] which was 9.1 micrograms per liter. So everything here that you see is below the commercial industrial cleanup standard, and, in fact, a lot of it is below the residential cleanup standard, and it's below the Tier I and Tier 2 screening levels for soil and groundwater in a commercial industrial setting.

Then also we wanted to confirm this hydrocarbon data that was to the west of this underground storage tank. And what we confirmed was that there really wasn't anything that was in this area that was above any kind of a commercial industrial cleanup level. Some places we got non-detects in soil and groundwater for petroleum hydrocarbons. And we got levels that were below the cleanup levels that were subsequent to the cleanup action that was taken at UST 1310. Also we did not find any petroleum aromatic hydrocarbons as we went through this area, which was an area of concern with the debris, so it appears that this does not migrate into the subsurface environment from the debris layer.

So the conclusions that we came to as far as for lead is concerned, there is high levels of lead in the debris layer. It needs to have some sort of a remedial action. The soil that is below the debris layer, whether it's a foot or deeper, the only place we would have to do a remedial action is very, very limited, it's in that one point we got where it's 1,400 milligrams per kilogram. And groundwater was not impacted by the lead.

For the hydrocarbons that were adjacent to former Underground Storage Tank 1310. Again, none of the compounds we found were in excess of Tier I or Tier 2 screening levels, so no

remedial actions are necessary for soil. We didn't find anything in the groundwater, and so no remedial actions are necessary for groundwater.

So we know we have to do something in this area. We put down some options. We haven't actually gone through this and made any kind of a formal proposal to anything. These top three are basically things that most likely aren't going to happen but they're placeholders. So the two that would be most likely happen are: the excavation removal of the debris layer -- and if you did that, the only land use covenant you would have in the area would be the one for the restriction to commercial industrial use, you'd be prohibiting the sensitive uses like residential development in that area; the other one would be to partially excavate the area, take out the debris in the Bagley Street corridor, take out that one hot spot, and put a cap in this area. And the reason we're looking at that is because we need a clean corridor through Bagley Street to be able to place infrastructure down there. And if somebody has to go in at a later time and repair something, they would have a clean corridor to go in. When you get outside of Bagley Street, the projected use at this time would be a parking lot in both those areas. The area between Building 1310 and 746 and that triangle, that's designated to be a parking lot. So is the area that's south of Bagley Street which is designated to be a parking lot also. So we would construct a cap that would conform to the development as we know it at this time, and provide the protection that you would have in that area. Now, if you did that, and you didn't dig up the debris, you would have an engineering control land use covenant, so you would have to do annual, at least annual inspections. You'd be doing a five year review of that area. You would also have to have an operation and maintenance agreement with DTSC. There would be an operation and maintenance plan in place. And we'd also have to put up some form of financial assurance. So we're looking at these options right now. So that's the completion of my presentation. If anybody has any questions, I'd be glad to answer them.

CO-CHAIR HAYES: I suppose on Option B you're really talking about human contact, not a "human contract" with lead?

MR. SILER: Yeah, it should be contact.

Anybody else have any questions?

(No response).

MR. SILER: Okay. Thank you very much.

CO-CHAIR LEAR: Thanks, Neal. Dwight has asked to give his update now before the public comment period and the break because he has to do something more important.

CO-CHAIR HAYES: More important.

MR. BUCHWALD: Where's the party?

MR. GEMAR: I'm here, aren't I?

CO-CHAIR HAYES: But we'll miss you.

IV. FOCUS GROUP REPORTS

a) Weston Update (Dwight Gemar)

MR. GEMAR: I have a manicure, so I'm sorry, I gotta go. Here's my update for Weston, it will be very brief. I have a number of documents that are in the review cycle, and so we'll be

working on those with the regulators and the Navy over the next month or two, I'm sure. And we do have one more document, the Post Closure Care Plan that's with the Navy to review.

The only field work this past month has been out at IR-05, the site at the south end of the island. You might recall last month that we had three small excavations out there -- one was for lead and the other two were for petroleum. And based on the sample results we had one side wall sample from two of the excavations that still exceeded our cleanup criteria, so we went out there, actually today, and excavated an additional fifteen feet or so, and we collected confirmation samples yet again. And hopefully that will be the last of the lead and diesel at those two small locations.

In the upper right is a picture of the one diesel location there. So there's pretty small excavations. Over at H1 not a whole lot going on. We did collect some oil, about 1,300 gallons of oil over the past month or so, and that was collected in the oil water separator and removed for off-site disposal.

And in the lower right, doing a little grooming of the trail. Nothing too spectacular, but it's still looking good out there.

MR. QUIGLEY: That's nice.

MR. GEMAR: So that's all I have. And I was told I could leave early as long as I brought the treats, so there are some sweets in the side conference room for the break.

MR. RASMUSSEN: Is the collection of that much oil any surprise to anyone?

MR. GEMAR: No, we believe we've probably -- cumulatively we've probably collected about 4,000 gallons of oil. Within the containment area there was an area called the oil sumps, and it was about a four acre lake of oil that used to be there at one time.

CO-CHAIR HAYES: Four million gallons.

MR. GEMAR: And typically what we'll see is a little slug of oil, and then we won't see oil for months, and then maybe we'll get a little bit of a slug. So it's starting to slow down, I don't know how much is left, but it's not that unusual.

CO-CHAIR HAYES: Especially compared to how much is estimated to have been out there at one time, like between two and four million gallons.

MR. GEMAR: Right, yeah.

CO-CHAIR HAYES: So a little bit here and there is probably to be expected.

CO-CHAIR LEAR: And this brings us to your first public comment period.

(No response.)

CO-CHAIR LEAR: All right. Ten minute break.

(Thereupon there was a brief recess.)

V. ADMINISTRATIVE BUSINESS (Myrna Hayes and Janet Lear)

CO-CHAIR LEAR: Okay. So administrative business. As usual, please get your comments on the meeting minutes to Myrna or myself so we can finalize those. Myrna, did you -- excuse me, Myrna. Did you have any administrative business?

CO-CHAIR HAYES: (Shook head.)

CO-CHAIR LEAR: So we can go to focus group reports. Community reports.

VI. FOCUS GROUP REPORTS

b) Community (Wendell Quigley)

MR. QUIGLEY: I have nothing to report.

MR. COFFEY: There's a surprise.

MR. QUIGLEY: That's what I did last time.

c) Technical Report (Paula Tygielski)

CO-CHAIR LEAR: Technical report.

MS. TYGIELSKI: Nothing.

CO-CHAIR LEAR: City report.

d) City Report (Gil Hollingsworth)

MR. HOLLINGSWORTH: I have nothing to report.

e) Lennar Update (Steve Farley)

CO-CHAIR LEAR: Lennar update. I can always count on you, Steve.

MR. FARLEY: We have our normal 11x17 handout over at the table. If you didn't get one, grab one before you go. Let's start with the photographs. Some of this information Neal is intimately aware of, so if you have any questions about the specifics, we'll get Neal to respond to some questions.

The two photos on the upper left are both in the Building 84 Area. The one in the upper left is trenching and some other work being done for Black Granular Material or BGM on the outside of the building. The one down below is the removal of a UST or underground storage tank referred to as 84L, L meaning lower.

So there are two USTs stacked on top of one another in that building. In the upper right is some work that was being done on the north side of Building 531. And before I forget, the locations of Building 84 and 531 are shown with the leader line to the main part of the map.

So for the 531 Area there was Abrasive Blast Material or ABM, and what you're seeing here is the removal of that ABM around the vault.

In the lower left is our documents list. There's no changes from our last meeting.

In the body of the map, if you look in the upper right you'll see an IR-03 label, we're doing some groundwater monitoring in that area as part of the long term groundwater monitoring program. Moving down to IR-15, same thing there, and we've been working on some of the reports that we have to prepare following the groundwater remedy that we just completed. In the Triangle Area we're getting ready to submit a final implementation report for that site, so that will be nice to get that taken care of.

And then the other items that are down in the lower right corner, you'll see three PCB sites, the Buildings 388, UL-01 or Unknown Location 1, 382 AL01, or Assessment Location 1, and then

the Building 678, AL03. Those are sites that we just recently got closure on. So Neal, did you have something you wanted to add?

MR. SILER: Yeah, I wanted to mention something. And one of the requests we had from Myrna a few months ago was to do a presentation on Building 84, see how we're going forward. Unfortunately I'm not the person to do that, Sheila Roebuck is the person to do that, and she will be doing that during the July RAB meeting. But when I last talked about Building 84 was back in October of 2008, and we had mentioned a number of issues that had to be taken care of. There were some FOPL segments. There were a number of PCB sites. I think there were three PCB sites in the facility. There were also two underground storage tank sites. At the time we had closed out some of the FOPL segments, one of the underground storage tank sites, and had finished all the physical remediation in most of the PCB sites except for one which was the PCB mezzanine site in Building 84 itself. That work is complete and we've cleaned that up to the residential land use for the solid media. Also there was one underground storage tank, which was UST site 84 Courtyard, and then there was a UST site 84 Lower that we found that we didn't know about when we were taking out the UST 84 Courtyard tank. We have subsequently completed that work, and that's why you'll see those photographs on the left side of the handout. In addition, there was some additional work that we did outside the building where we found some high levels of lead, and that was associated with Black Granular Material.

We've just finished doing that work, so that work has been completed. But the main issue in the building, no matter how much we clean up inside the building, it's not possible at this point to get the PCBs in indoor air down to a level that would allow us to have residential reuse. So Sheila will be talking in the July RAB about what the plan is to move forward on this site.

MR. FARLEY: That's all I have. Any questions?

CO-CHAIR HAYES: I do want to thank Lennar, CH2M Hill for giving that brief update, because I had requested a Building 84 presentation for several months, and as Neal said, and didn't seem like we were getting anywhere with that request, so I appreciate what you have given, and we'll plan to have Sheila's presentation then in the July RAB meeting.

CO-CHAIR LEAR: Okay. So now we have regulatory update.

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

MS. NAITO: Nothing to report.

CO-CHAIR LEAR: Stop.

MR. COFFEY: Lie. Lie.

MS. NAITO: I wanted to follow Wendell.

CO-CHAIR HAYES: Don't go there.

MS. TYGIELSKI: At least you can tell us how many documents got read.

CO-CHAIR HAYES: Following Wendell is not a good idea.

MS. WELLS: Well, I'll give it the Water Board update, and then you can just -- for the numbers that I give you, you can add six or ten -- cause that's how much more Janet did than I did.

MS. NAITO: Not this much.

MS. WELLS: So in the last month the Water Board completed review of seven reports. We completed review of responses to comments on three reports. We provided comments by either e-mail or letter to the Navy and/or Lennar and/or the DTSC who then has passed it onto Lennar or CH2M Hill on three of those reports that we reviewed. We prepared a letter about the Marine Corps Firing Range. And I think that's about it.

MR. COFFEY: Woo hoo.

MS. WELLS: Oh, and two of those reports got their review completion done today.

MR. COFFEY: Double woo hoo.

MS. WELLS: That's right.

CO-CHAIR LEAR: Nothing to add, Janet?

MS. NAITO: Excellent summary.

VII. CO-CHAIR REPORTS

CO-CHAIR LEAR: Okay. All right. Navy report. We have our little Navy monthly progress report.

MR. COFFEY: Still don't know what the ship is.

CO-CHAIR LEAR: It says right there USS Frank Cable.

So during the last month the Navy conducted some field work at the PMA as well as IR-17 Building 503 Area. For the PMA Building decontamination work, after further review it was decided to add one additional task onto that work, and that is the removal of some drain lines from the pump house adjacent to Building A-216 or former Building A-216. Road closures are not anticipated for that work, and that will be started in June.

And the IR-17 Building 503 work that was part of Reggie's presentation earlier, the groundwater sampling for this quarter was completed out there.

The Caretaker's Site Office patrols, the officers continue to patrol the southern part of the island one night per week, and also continuing daytime checks of the buildings in PMA, South Shore Area and Western Mag.

Document submittals. The Navy submitted four documents during the reporting period, and received comments or concurrence from the Water Board on the Request for Beneficial Use Exception at the Marine Corps Firing Range.

The public comment period on the Engineering Evaluation/Cost Analysis for the PMA/SSA Non-Time Critical Removal Action ended on April 29th with no comments.

And BCT meetings. Our most recent one was today to discuss the environmental cleanup and upcoming projects. And as you all recall, we are meeting every other month now, the last Thursday, and the next RAB meeting is July 28th. I'll turn it over to Myrna for her update.

CO-CHAIR HAYES: I guess I'm disappointed that the Navy did not include in its progress report the status of the request for public access to the South Shore, as has been being provided for the last fifteen years. And the only way that we've learned anything about the Navy and the City and, you know, whether they are or aren't addressing the issue at all is through a newspaper

article, which didn't seem very thoroughly prepared or very adequate. And so I'm disappointed that both agencies, neither one made any effort to address that issue.

And I'll just go on the record again here stating that, what I've written, and that is that beginning in January of 1996, Assistant Base Commander John Becker, who was responsible for base closure for Mare Island on day-to-day operations, ensured that the public had access during an event that they hosted in January. And then again the Navy from then on, and the City, provided for public access to all of the properties on Mare Island, through the San Francisco Bay Flyway Festival. Eventually the Sierra Club, through the City, had public access on a regular basis to the historic South Shore. And then, most recently, for about the last five years Sierra Club has had a direct license agreement with the Navy. So to have abruptly and unexplained, inexplicably just ended that program is very distressing. I've talked with Janet about it last meeting, and also in our agenda setting meeting last week. She had hoped to have some report to us, but there's nothing here. And so that's disappointing to me.

And it's alarming to me because it indicates, to me, that what I've been hearing from some employees, Navy employees, that it's the public and the public access that has increased the cost and the oversight required for the Caretaker's Site Office to patrol the area. That it's our public, providing for public access in an escorted manner that has escalated the thefts. And I just want to go on record as saying that I absolutely wholeheartedly, aggressively, and totally disagree with that. There have not been people on our monthly tours, Sierra Club, or the San Francisco Bay Flyway Festival tours, that have been scouting for copper on Navy property. And I think that the public after fifteen years is owed both an explanation regarding the change in the policy, and owed an opportunity to discuss with decision-makers a path forward that can resolve this issue, that can get the public back out there, especially since there's been a precedent set beginning with Assistant Commander John Becker and going forward, never one time when we were not granted the access that was requested. And never any incidences, whatever that might be construed to be. So I think that it's -- it's very important that the Navy and the City work with the public, the various organizations that have been providing those services to get that back on track.

Unfortunately, the way the article was written, the statements that were made by the two agencies has led me to receive approximately 25 to 30 emails, phone calls, and site visits from people who understood the article to state that the entire southern end, including our preserve, is closed to the public. So that's a tremendous setback to those of us who have been volunteering keeping that property open to the public, you know, without -- that doesn't have any environmental cleanup issues.

I think it's important for people to remember here that one of the reasons we're here, in fact, the only reason we're here, is to ensure that there is protective environmental cleanup for the environment, and for public use, whether it's going to be industrial, residential, commercial, or public recreation use. And I don't want us to lose sight that we actually have a purpose here, and we actually have an end product that is beneficial to us in those categories. And for the Navy to willy-nilly or without full disclosure explain, not explain why it's made this decision, and not provide some type of public discussion forum with decision-makers, is a real slap in the face to this process, because that's the only reason the Restoration Advisory Board exists is to have this two-way, three-way dialogue between the regulators, the community, and the U.S. Navy, and in the case of the responsible parties that you pass your responsibility onto for cleanup, those folks as well. So I hope that it's clear that we want a sincere and legitimate dialogue. We want to be at the table. And we want to get this resolved so that it's not continuing to be a black eye for the

Navy and a black eye for the City. I don't see that you're going to have the environmental cleanup in those areas done anytime soon, so the best way I think is for us to continue, as we have, given that there has not been any reason given for this radical change.

CO-CHAIR LEAR: Okay. I just want to go on the record as saying that the Navy has said, volunteered to meet with the City, with you, to discuss these issues. However, I'm not going to take any more RAB time for this topic, because this is an interim access issue and not an environmental cleanup issue.

CO-CHAIR HAYES: It is an environmental cleanup issue.

CO-CHAIR LEAR: It's not environmental cleanup.

CO-CHAIR HAYES: Yes, it is.

CO-CHAIR LEAR: We're not talking about technical cleanup of the environmental contamination of the site, we're talking about interim access, and that's a totally different subject.

CO-CHAIR HAYES: Well, it is not. At the Restoration Advisory Board, not to go on -- not to blow the schedule because we're supposed to retire at a certain time, but I want to be really clear that the Restoration Advisory Board -- and you're kind of new to it, Janet -- is actually for any issue regarding environmental cleanup, the nexus of environmental cleanup with any use issue on the island, and it is also for any other topic that anyone wants to bring up that is not agendaized. The public has the right to comment, and so do the Restoration Advisory Board members on any topic not agendaized. So there is a nexus between the property's access and the environmental cleanup. Because you would have full public access today if there wasn't environmental cleanup issues taking place. So there you have it.

You know, and to bifurcate, to divide these issues into separate topics, and I have not received any correspondence or any communication indicating that the Navy's happy to sit down and talk about interim use, there's nothing's come across my desk. So that's why I was bringing it up here. But it is appropriate to bring this topic up here. You're here, the Navy's here, that's the beauty of the Restoration Advisory Board.

CO-CHAIR LEAR: Well, I also have a right to disagree to that, and I read my Restoration Advisory Board Charters and my DOD documents before I came here. So, of course, the public is always welcome to comment on whatever they wish to comment on, but the Navy will not be using RAB time to further discuss this issue. And I think that's the next public comment period unless you have something you wanted to say Elizabeth?

MS. WELLS: No, I'm just taking it back.

MS. NAITO: Just taking it back.

CO-CHAIR LEAR: So, public comment period? Additional comments?

(No response.)

CO-CHAIR LEAR: Okay. Well, thank you, everyone, for coming, and we will see you July 28th.

(Thereupon there was discussion off the record.)

CO-CHAIR LEAR: Okay. The Navy will bring treats for the July meeting.

(Thereupon the proceedings ended at 8:39 p.m.)

LIST OF HANDOUTS:

- Presentation Handout – Status Update: Installation Restoration (IR) Site 17 and Building 503 Area
- Presentation Handout – Recent Sampling Results and Path Forward: Former Buildings 206/208 Area, Investigation Area C2
- Presentation Handout – Features within the Eastern Early Transfer Parcel (EETP) – CH2M Hill/ Lennar Mare Island
- Presentation Handout – Mare Island RAB Update May 26, 2011 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard May 26, 2011