MARE ISLAND NAVAL SHIPYARD
RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES
HELD THURSDAY, MARCH 29, 2007

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, March 29, 2007, at the Mare Island Conference Center, 375 G Street, Mare Island, Vallejo, California. The meeting started at 7:04 p.m. and adjourned at 8:24 p.m. These minutes are a transcript of the discussions and presentations from the RAB Meeting. The following persons were in attendance.

RAB Community Members in attendance:

- Myrna Hayes (Community Co-Chair)
- Michael Coffey
- Wendell Quigley
- Jim O'Loughlin
- Gerald Karr
- Kenn Browne

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

- Michael Bloom (Navy Co-Chair)
- David Godsey (Navy Lead RPM)
- Marie Dreyer (Navy)
- Gil Hollingsworth (City of Vallejo)
- Carolyn Hunter (Tetra Tech)
- Brenda McConathy (Tetra Tech)
- Linda Rao (RWQCB)
- Cris Jesperson (Weston)
- Dwight Gemar (Weston)
- Steve Farley (CH2MHill/Lennar)
- Sheila Roebuck (Lennar)

Community Guests in attendance:

- Bob Bancroft
- Jim Davies
- James Porterfield
- Louise Johnson
- Mervin Johnson

RAB Support from CDM:

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

I. WELCOME AND INTRODUCTIONS

CO-CHAIR BLOOM: Welcome, everybody. We're going to go ahead and get started. Welcome to the March, 2007, Mare Island RAB meeting. We'll start with introductions. I'm Michael Bloom, the BRAC Environmental Coordinator and the Navy RAB co-chair.

Attendees introduce themselves as requested.

II. NAVY PRESENTATION: *Pilot Study for the Offshore Sediment Investigation at Investigation Area K.*
Presentation by Ms. Marie Dreyer, Navy and Ms. Brenda McConathy, Tetra Tech.

CO-CHAIR BLOOM: Okay. Thank you, everybody. We're going to go ahead and get started with our first presentation. It's going to be a presentation on the pilot study the Navy did on the offshore sediment investigation in investigation Area K, and it's going to be given by Ms. Marie Dreyer who is our Navy project manager, and Ms. Brenda McConathy from Tetra Tech.

MS. DREYER: Good evening. My name is Marie Dreyer. As the new kid on the block, I figure I should give you some brief introduction on who I am. I've been with the Navy for about two and a half years now. I recently joined the Mare Island team about four months ago. And my background is in environmental engineering. Tonight I'm presenting—or one of the projects that I've been given is to investigate the offshore sediments at investigation Area K. And to further this investigation, the Navy put together a pilot study which I will be—with the help of Brenda -- presenting tonight for you. So we're going to begin. I'm going to talk a little bit about the purpose of the offshore investigation. And then Brenda McConathy with Tetra Tech will be taking over to give you an overview of the actual pilot study, present some preliminary results, and then outline the next steps in our phase for the offshore investigation. To complete the investigation we had to further characterize sediments associated with the outfalls, and extending away from the outfalls. And before performing a full offshore investigation, we decided to conduct this pilot study to better determine whether or not we were using the proper sampling methods and tools. And, of course, the pilot study, the full offshore investigation will help us to complete the remedial investigation, the human health risk assessment, and also the ecological risk assessment. Here's a map—I'm sure you've all seen this before—of investigation Area K. As you know, this site was historically used for ship building, repair, berthing, mooring, as well as munitions manufacturing and storage. The map here shows that the green areas are the deep water areas, the yellow areas are the shallow water areas, and then the blue areas are the mud flat areas of the—of particular concern for the offshore investigation. With that, I'm going to turn it over to Brenda who will be talking about the specifics of the pilot study.

MS. McCONATHY: Thank you. So we really had three objectives of our pilot study. The first was to evaluate the use of some rapid sediment characterization tools. These are tools we could use in the field to get some real-time data. The second objective was we wanted to confirm that the conceptual site models that the team had developed were accurate for the different types of outfalls that we have at Mare Island. These three conceptual models related to outfalls that are discharging into deep water, into shallow water, and on to the mud flat areas. And finally, we wanted to confirm the presence of some biota out in the sediments so we knew whether or not we could collect them for the full investigation. So I'll go into each of these in a little bit more detail.
The rapid sediment characterization tools give us information on the sediment concentrations in the field. They're very useful because we can then use that to help to direct what sediment samples we want to actually send to the analytical laboratory. We used two different methods for this investigation. The first one is a handheld XRF unit which stands for x-ray fluourescence. I'll go through some pictures in a couple of slides and show you what those look like. They measure metals concentrations in the sediments. We used them at ten outfalls that we could walk to from the shore. And we also collected sediment samples from boats. Those samples were taken back to an on-site laboratory for analysis. The second rapid sediment characterization tool is called an

immunoassay. This one isn't quite as fast of a turnaround, but it does analyze for polychlorinated biphenyls or PCB's. And for this one we send it to a laboratory that gives us the results within 24 hours. So that's also a rapid turnaround compared with our other laboratories. For the handheld XRF units, you can see here on the figure that the purple ones are the ones that we were able to walk out to and collect some data in the field. The yellow ones were ones that we looked for but we weren't actually able to find in the field. So those weren't sampled. And then the gray ones are outfalls where we either have already sampled those in the past or they were only accessible by boat.

Here's a picture of one of the handheld XRF units. For this pilot study we evaluated three different units. They were all very similar to this one. Here's a picture of one of our field team members using it in the field. It is used by a point-and-shoot method. You're able to just put it into the sediments, take a reading, and back in the lab download the data from the unit, and find out the concentrations. We used three XRF units because with sediments we wanted to see which tool would give us the best accuracy and precision when correlated with our analytical lab data. So for the immunoassay we picked two sites where we had previously found some PCB concentrations, and this indicated how we collected our samples. We did a step out sampling event so that we could see right at the mouth of the outfall and then as we moved out what the concentration gradients were. We wanted to make sure the conceptual site models were appropriate for the three different outfalls that we were sampling, and we also wanted to test some of the different methods for collecting the core samples. We used a vibracore which I'll show you a picture of in a minute. We also collected core samples from land, and we also used grab samplers. Here's one of the shallow water outfalls where we collected samples. This is in the northern part of Mare Island, north of the fleet reserve pier. So it's the northernmost part. Right here in this picture you can see the fleet reserve pier. And this is one of our shallow water outfalls. It may not look too shallow right here, but it actually was very shallow, and our boat could only go in when there was enough water there that it wouldn't bottom out. So we used a three point anchoring system— that's what's shown in this picture—so that we could get directly on top of the outfall, right at the mouth of it, and then also step out in ten foot increments. Here's a picture of the vibracore sampler. It comes off the back of the boat, and it's basically just a large tube with an engine on the top that vibrates it so that the core tube will go down into the sediments. So these are just a few pictures of the sampling team.

Once we brought the samples on board the boat, we would put them into long tubes, plastic trays where we could extract the core of the sediments into the trays. And then we actually had someone, a UXO specialist that scanned all of the cores to make sure that we didn't identify any metal that we would send to the laboratory. During that effort we never did identify any munitions items in the cores. Here's just a picture of the grab sampler; it's another sampling technique that we used from the back of the boat. Here's a picture of the sediments in the grab. This is only good for collecting the surface sediments. So we use that in areas where we weren't trying to get a deeper sample. And we also used it in some of the locations where we were collecting deep samples but we needed more than just the small amount in the core to send off to the laboratory for analysis. Here's a picture of one of the deep water outfalls that we sampled. This is outfall thirteen, which is right along the industrial part of Mare Island. You can see right here is the quay wall, and we were sampling just right off of the quay wall. This outfall had kind of a unique challenge in that we collected two 30 foot cores, and that was to obtain some data from the pre-Navy sediment layer. So as you can see, they collected the core tube, and then had to put another tube on the top. And then getting the tube off of the boat was kind of an interesting endeavor and

bringing it back to our field lab where we could extract it. So it was a very, a very long core to collect. Those outfalls that we did on the south shore included this one, Outfall 40, where again we used kind of a fanning out pattern to collect sediment samples. And those we were able to do by hand because the mud flat was exposed and the water was shallow there.

We also, during our investigation, confirmed whether or not some benthic biota were present, which are used in the ecological risk assessment. The regulatory agencies commented on our previous investigation that they wanted us to collect some data from the field and use that in our risk assessment, instead of using some of the tests that were done in the laboratory to estimate concentrations of chemicals that would be in the animal tissues. So this was to see if we would be able to collect enough of the tissues to actually send them to the lab when we do the full investigation. Here are some pictures of the field team collecting these. We used a Van Veen grab sampler, so it's a little larger than the other grab sampler. We put the sediments, when we brought them on board, into a tray here, and then we actually used the hose with the site water and sieved through the sediments in order to obtain the clams. We were specifically looking for Asian clams that are common in the North Bay. And they are different from the native clam that we had run our tests on earlier. So the Asian clam has a different rate of accumulating some of the chemicals into its tissues, so the agency asked that we look specifically for this clam to see if we could obtain enough in the future to run a tissue analysis of it. As you can see, we did find some in the picture there with the sieve. We also were looking for bottom dwelling fish, and we were looking for fish that were specifically resident in the sediments in the area. So not ones that would, you know, travel around the whole Bay Area, but really are associated with the sediments at the site. So here you can see a picture of the trawl net that was deployed off the back. And then, as you can see, we were able to find some fish here. The preliminary results showed that, for the most part, the sediment concentrations that we're finding are below the ecological screening criteria that we were using. We were using criteria developed by the National Oceanic and Atmospheric Administration (NOAA), often referred to as the effects range low and effects range median. I'll show you some slides with some of that data on it in the next couple of slides. We also were able to begin to confirm that our conceptual site models were accurate. For the shallow water conceptual site model we did see a pattern of chemical concentrations at the outfall and then decreasing as you move away from the outfall, which was what we had expected. And in the deep water we didn't see much of a pattern of chemical distribution; however, that was what we had predicted early on because we felt that as the sediments or chemicals would come into the strait, in the deep water, it would become much more dispersed and wouldn't really be related or associated with just the mouth of the outfall. And then on the mud flat we actually saw a limited pattern of chemical distribution which we were a little surprised by, but that may be because the concentrations that we actually were finding were so low. So it just could be picking up more of an ambient type concentration and not really a pattern of contamination. As I mentioned, we were able to find the biota that we were looking for. However, the Asian clams were very small in size, and it may have been because we were sampling in January, and that time of the year they may not be reaching their full adulthood. So we're hoping that by sampling a little later in the year we might find some larger clams.

Here's one of the pictures, as I mentioned, from the outfalls. This one is outfall four. And you can see that this is for total PCBs. And at the outfall, right at the mouth, we did find some PCBs in the surface that were above one. As you went deeper down the concentrations did become much lower. And the bottom sample was actually less than 0.02 mg/kg. So our ecological criteria are up here, and the ERL is 0.02 mg/kg, and our ERM is 0.18 mg/kg. And then as you moved away, at the

second step out location we also still found some concentrations that were exceeding the criteria at outfall—or at step out three we also found some. But then as we moved away, we didn't find any concentrations that were above the criteria that we were using. Here's Outfall 40 which is on the south shore. And as I mentioned, these concentrations were very low, but you can see it was a little bit higher here at the outfall mouth with, as you stepped out just in the lower foot, half foot to two feet sample. And then as you moved out again the concentrations were all below the criteria. Even these that are above the ERL, they're still below our effects range median, so those concentrations are still very low there. So our next steps for this investigation are we finished our laboratory analysis. We're in the process of doing our data evaluation. The one piece of the data that we haven't done or finished yet is doing the correlations with our XRF instruments to find out how accurate they were. So we're hoping that they're very accurate and we can use that data fully in the future investigations. We'll be preparing the technical memorandum that the Navy will be reviewing in April. And then we'll be moving forward, distributing that to the regulatory agencies, and working on our sampling and analysis plan for the next round of sampling. So we're hoping that the agencies will be reviewing that this summer, and finalizing it in the fall, so that we can get back out and do the larger investigation. So are there any questions?

MS. RAO: I have one. When did you conduct this sampling?

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

MS. RAO: Oh, I'm sorry. Linda Rao with the Water Board. I was wondering when you conducted the study?

MS. McCONATHY: In January.

MS. RAO: Oh, it was in January.

MS. McCONATHY: Yes, it was a week-long sampling event. And the boat captain said it was the coldest nights he ever spent on the boat. It happened to be that week when temperatures were in the thirties in the morning.

MS. RAO: I know that just in terms of we submitted some comments on the draft data quality objective study. And I know in terms of looking at using San Pablo Bay Island as a reference site, we are going to pass reports, we noticed we had unexplained toxicity in winter months, so we usually don't recommend that folks do their sampling of fish and such in those months. Is there any chance that you could sample in other months and possibly you would get different results?

MS. McCONATHY: Right. At this point we didn't actually analyze the fish tissue and clam tissue, we were just checking to see if they were present.

MS. RAO: Okay.

MS. McCONATHY: And we didn't run any biological tests, it was just the bioassays on this. We were just getting the sediment data to make sure when we do the full investigation we choose locations that will give us the full range of sediment concentrations when we run our bioassays. So it is an option for us to— if everything stays on schedule, we will be out there probably next January, but there may be an option to maybe move that a few months to make sure that we're sampling at the optimal time.

MS. RAO: That would be great. Thank you.

MS. McCONATHY: Thank you.

CO-CHAIR HAYES: I do have a question or two. What was the—could you explain again like practically the first slide there, the individual using that handheld unit, how deep that was going and what it was—what you were evaluating with that instrument?

MS. McCONATHY: This one?

CO-CHAIR HAYES: Yeah.

MS. McCONATHY: This is just—it's called a handheld XRF. And he's putting it into the sediments so that maybe about this much of the sensor is down into the mud, so it's only reading the concentrations at the very surface of the sediments, and its reading concentrations for metals.

CO-CHAIR HAYES: And that's a similar pattern of evaluating close to the outfall and then stepping out?

MS. McCONATHY: That's what we have to correlate. We have to correlate the results we got from these instruments with the results that we got from the laboratory, so that evaluation is happening right now. In general, these units are proven to give you very accurate concentrations of metals, so it is a proven technology, but we were trying to refine which unit was best for the environment here at Mare Island, because we have fine grain sediments and our sediments were more wet than some sites where they do it more on beaches or dryer areas. So that's why we evaluated three different units, to make sure that the one we choose to use for the larger investigation gives us the most accurate data.

CO-CHAIR HAYES: I guess I have a couple of other questions related to that procedure. How deep is that instrument able to determine metals?

MS. McCONATHY: Only the top surface sediment, so maybe a few inches, two inches or so.

CO-CHAIR HAYES: So wouldn't those be rather recent sediment deposits? Why would you be looking at that?

MS. McCONATHY: Well, we were using this instrument at the sediments that were at the surface at the mouth of the outfall. So even if those are kind of recent, those are the areas in the past where we did find higher concentrations. And then, secondly, we were able to use this instrument in our field laboratory with the sediments that we collected in the pour tube, so we brought that back, and then we'd use the unit on those to help us determine if, you know, one depth interval looked like it had a higher concentration, and then we could send that one to the laboratory. So we're able to use it in the field, but not in this method on the deeper cores that we're collecting.

CO-CHAIR HAYES: And I guess my other question would relate to the earlier question. Why do you sample in the wintertime?

MS. McCONATHY: Well, higher tides in some cases because we have an interesting situation at Mare Island where in the south shore we want the tides high enough to get the boats in so that we can collect the samples. We chose a week where the tides were a little bit lower for winter tides so that we were able to walk out to the outfalls where we wanted to do it—collect the samples right there at the outfall from the land. So it's kind of a balancing act. If you do it in the summer months when we have the lowest tides, then we wouldn't be able to get the boat into where we need the boat to get into. This one was just sort of from the timing of when we got all of our plans approved and wanted to get the data, so that's how we ended up in January.

MS. RAO: Sorry, one more question.

MS. McCONATHY: Yes.

MS. RAO: You said in your presentation that you were testing protocols, I believe, to see if you could collect enough fish for tissue samples?

MS. McCONATHY: Uh-huh.

MS. RAO: Did you?

MS. McCONATHY: Yes, the fish—the most common fish that we found was the bay gobie, which is actually a good fish for collecting. We also caught a few bass, and quite a few shrimp, and then a few rarer species that we wouldn't be using for the tests. So for the fish, the bay gobie seems like it will be a good fish to collect. And for the clams, we may just need to limit the analyses that we do on the tissue because we may not be able to get quite enough tissue to run like a full suite of semi-volatile compounds, PAH's, PCBs and metals, because you need a lot of tissue to run all of those analyses.

MS. RAO: That may be another thing you might want to talk to Fish and Game about. I believe in warmer months you'll find greater species abundant and an opportunity for more tissue for your samples.

MS. McCONATHY: Thank you.

III. LENNAR PRESENTATION: *Lennar Mare Island Environmental Program Update 2007*
Presentation by Mr. Steve Farley, CH2MHILL/Lennar.

CO-CHAIR BLOOM: Thank you. Thanks a lot. Steve, were you going to use the CD on this one?

MR. FARLEY: Yeah, I was going to try and do that.

CO-CHAIR BLOOM: Okay. Great. So our next presentation will be Steve Farley with CH2M Hill, and he's going to give a presentation on the Lennar Mare Island environmental program for 2007.

MR. FARLEY: Can you hear me okay? Is that working? How's that? Okay. We're going to talk about the work that we're doing on the EETP. Let's go to the next slide. And this is going to be, for lack of a better term, a ten thousand foot level look at the activities that we have performed in the first quarter of this year, and the things that we're—the major activities that we're looking to perform for the rest of the year. We're going to touch here—here's the agenda—we're going to touch on some of the major attributes of the EETP, the eastern early transfer parcel. Touch very quickly on the major programs that we're focusing on. And then, as I said, talk about the major accomplishments for the first quarter, and those planned for the remainder of the year. Then we'll do a quick summary and then the Q & A. The thing I'd like to try and get you to focus on is that you're going to see that we have completed several major investigations or remedial activities in the first quarter of this year. Some of those things, for example, include ultraviolet optical screening tool examination of some fuel oil pipelines. We've done a lot of PCB site remediation. We've also completed a number of major decision documents, such as the B-2 remedial action plan or RAP. A number of other decision documents or key technical documents will be submitted in the second half of this year; for example, the B-1 feasibility study and RAP. And I'd like to point out that one of our major goals for this year is to complete the NFA certification for IA-B.2-1. So

those are kind of the highlights that I'm going to be talking about, trying to get you to see kind of what the major focus is for tonight's discussion.

The EETP, or eastern early transfer parcel, was transferred from the Navy to the City of Vallejo, and then from the City of Vallejo to Lennar in March of 2002 (672 acres). And originally the EETP was comprised of eight investigation areas, or IA's, and they're listed here. Once the work began, we developed some subparcels within those eight initial IA's based on environmental conditions, meaning things that might hold up the closure of an entire IA, or that combined with a development schedule to try to move things along a little more quickly. I've listed the subparcels that we currently have. There may be others, but these are the ones that we're operating with right now. And the point here is that the goal of the program is to get closure on the IA's and get the property in a condition that it can be redeveloped and reused, stimulate the community involvement, and that is one of the reasons why we subdivided some of these parcels. There are five major programs that I'm going to touch on tonight. They're listed here: our installation restoration program, all of our major soil and groundwater contamination sites, the fuel oil pipeline program is 111 segments within the EETP, our UST program, and our PCB program which is 570 PCB sites. And then we'll touch on our long term groundwater monitoring program as well. Next slide, please. IA-B is one of the IA's within the EETP. It's on the west side of the island. G Street is right here, and Azuar Drive is right here. This area is comprised of about ninety acres, and it's one of the IA's that we've subparceled, so we have an IA-B1 and an IA-B2. And the purpose there is to move some things along in IA-B2, while the B-1 work lags a little bit. This is the crane test area, there's a separate program that we're working on for that. The major accomplishments for the first quarter of '07 was that the IA-B2 RAP was signed by the regulatory agencies in January of this year. That was a major, major accomplishment. We have also submitted a briefing memo to the agencies that defines the portion of IA-B2, which we're calling B2-1, which is this area, that can proceed to NFA certification. This area here—this small portion of IA-B2 is being held back because of some additional contamination that is—that would slow up all of the B2 closure, so that's going to lag behind a little bit, probably even lag a little bit behind the B-1. Our major activities planned for the rest of this year is to submit the RIF—or excuse me—the FS and RAP for the crane test area, or IA-B1, and to obtain NFA certification for the rest of IA-B. C-1 is in the northeastern portion of the EETP. Again, here's G Street and the Mare Island bridge, the waterfront is here along the strait. Major accomplishments for this area was the completion of a UVOST, or ultraviolet optical screening tool, investigation of some FOPL sites, fuel oil pipeline sites, within this portion of C-1. And the fuel oil pipelines were basically right in through here. Our major activities for the rest of '07 are to finalize the IA-C1 RI/FS report, and to finalize the IR-15 groundwater feasibility study. IR-15 is an area right down in here. It's one of the larger groundwater contamination sites, so we're handling that separate from the rest of C-1.

CO-CHAIR HAYES: Would you try not to use acronyms? We actually have guests.

MR. FARLEY: Yeah, I am trying, thank you for reminding me. I am trying, but I'll try to do better. Let's go back to the previous slide. An RI/FS is a remedial investigation and feasibility study. And that basically is the document that identifies where the contaminants are, what the risks are, and what the engineering solutions to those contaminants in the media of concern. IA-C2 is in the central portion of the EETP. It's this large area here, bounded by the dry docks on this side, and some of the IA-D1 areas over here, and Touro College down here. The major accomplishment the first quarter of this year is the completion of a cleanup for lead and soil at the building 690 south yard area. That area is right in here, and that was an area that we thought was going to be

several hundred cubic yards of lead contaminated soil, and it grew quite a bit, over 3,000 cubic yards of lead contaminated soil. Major activities for the rest of this year is to submit the draft IA-C2 remedial action plan for public comment. Obtain agency approval of that remedial action plan. And then complete the environmental restoration work at IR-21. And IR-21 is right here. This is an installation restoration site that's comprised of three buildings, 386, 388, and 390. IA-C3 is the IA area that's along the strait, has all the dry docks in it, dry docks one, two, three, and four, and the two ways area, and then a couple of the berths down here. It's about fifty acres in size. Our major accomplishment for the first quarter of '07 is we're about 98 percent—and they wouldn't allow me to say we'd completed the work, so we had to say nearing completion of the cleanup actions at a storm sewer line at building 516. And that storm sewer line ran right across here just on the northeast side of dry dock number two. Major activities planned for the rest of 2007 are completion of all remedial activities at UST and PCB sites in C-3. And as shown here, a couple of the UST sites that are going to be worked on over the course of the next few months. And then submittal of the final implementation report for C-3. The implementation report is the document that follows the completion of all the cleanup activities, and documents the final conditions, and is the basis for an NFA certification from the agency. So those are the geographic areas known as the IA's. This is a summary of the fuel oil pipeline program or FOPL program. We have about 111 fuel oil pipeline sites in the EETP. We've received closure from the agencies on about 59 of those segments—four of them came through actually today—which is about 53 percent of the total. Our major accomplishments for the first quarter. We completed a major characterization phase of work for the FOPL segments in IR-03. I showed that a little earlier for the C-1. Those FOPL segments were— it was kind of a complicated numbering system, but these are the three FOPL segments that we did the work at. Major activities for the rest of 2007 include the cleanup of most of the FOPL segments in C-1 and C-2. And this area here, these pipeline segments that are actually in C-1 are the only ones that we don't think we can get to the cleanup phase this year, it's probably going to move into next year, but we hope to get the remedy selection process behind us sometime late this year. Our underground storage tank program, there's 112 sites in the EETP. We've received closure on about 74 of those sites so far this year, so that's 66 percent. Our major accomplishments again are another ultra violet optical screening tool investigation at UST 102 and 142. Those are two of the UST's that I just showed you for C-3. Our major activities planned for the rest of 2007 is the preparation of a single remedial action work plan for all of these UST sites. And you can see they're in B2-1, C-1, C-2, C-3, and H-2. So this work plan will be a very important work plan covering a lot of geographic areas for the UST program. Our PCB program, 570 sites within the EETP. We had regulatory closure on about 70 percent or 397 of those.

Our major accomplishment for the first quarter of '07 is that we completed the remedial actions at eleven of those outdoor sites—here's the building names. Now, there's eleven sites, but there's not eleven buildings here. And the reason for that is that there are some buildings in which there are multiple PCB sites. Sometimes a building will have a PCB site listed as the first floor of the building and the second floor of the building, for example. And we are 97 percent of the way complete with our planned remedial actions at three PCB sites in building 637. Our major activities planned for the rest of this year. We want to complete the remedial actions at 28 PCB sites. And, again, they are in C-1, C-2, and C-3, so 28 sites over a broad geographic area. The first group of that 28 sites are these buildings here. We've actually had a kick-off meeting for those, we have a contractor on board, we should be starting with those sites sometime next month. And then, to complete the remaining implementation reports, summarizing the work completed and requesting closure of approximately 40 PCB sites. The implementation reports are the reports that

we prepare after we've completed the remedial action and achieved the cleanup levels. It documents all the work that was done, and the remaining concentrations of any, and we submit that to the agencies for their approval. We have another program that we implement at Mare Island, it's called a long term groundwater monitoring program. It's actually a separate project, but it's part of the closure activities. We do, roughly, quarterly groundwater monitoring of monitoring wells at the EETP. Another part of that program is to actually construct wells, abandon wells, rehabilitate wells, and maintain wells as needed. For the first quarter of '07 we completed a groundwater monitoring round in February of this year, and we collected groundwater samples from 56 wells. The number of wells included in each quarter's monitoring varies a lot depending on the specific data quality objectives for sites that are going through the investigation and cleanup phases. Our remaining activities are to complete the other three rounds for the rest of 2007. And specifically, our next round is going to be in April, starts in about three weeks. Okay. So that was kind of a whirlwind tour of the major activities that we've completed, and the major activities that we're planning on performing for 2007.

We've completed a number of major investigations and remedial activities for the first quarter, performed a UVOST, or ultraviolet optical screening tool investigation of FOPLs, and we've completed a lead remediation at the building 690 south yard area, and we completed all of the actions at eleven PCB sites. Some of these PCB sites are relatively small and easy. Others, like building 637, even though they're not complicated, they are—it's difficult to get down to the subpart one milligram per kilogram concentration. And sometimes we have to do more concrete removal or floor removal or soil removal than we had originally anticipated. But we were happy to get through with the eleven sites that we did complete. Major decision documents. A decision document is a document such as a remedial action plan where there's actually a decision that's made, signed off on by the agencies, and then we move on. We either got that approved or we submitted them for agency approval. A perfect example is the IA-B2 remedial action plan which was approved by the agencies in January of this year. We also submitted, as I mentioned, a briefing memo that is forming the—essentially the technical basis for requesting NFA or no further action certification from the agencies on that portion of IA-B2 that we think is ready to go to closure. We're also—for the rest of this year, we'll be submitting some other decision documents such as the IA-B1, this is the crane test area, feasibility study and RAP. That's another major document that we plan to get in the hands of the agencies. And the IR-15 groundwater feasibility study. This is the site that I mentioned in C-1 that is one of our more problematic groundwater contamination sites. And then also the C-2 remedial action plan will go to public comment later on this year. And then the implementation report for C-3. The implementation report, as I mentioned a few minutes ago, is a major and a very important document. We worked very closely with the agencies to make sure that we have it properly scoped and that we have all the right pieces of parts in there so that they can review it and then hopefully approve it for no further action. And then, as I mentioned early on, a major goal for 2007 is obtaining NFA certification for IA-B2-1, that large piece of B2 that is east of Azuar Drive. So that brings us up to Q & A. Again, I want to make sure that everybody understands that what we're trying to do is complete a number of important investigations that feed into feasibility studies and remedial action plans, that we've submitted a number of very important decision documents, and others are coming up in the course of the next several months, and our real goal is to try and get closer to closure on a number of IA's and to get NFA certification or no further action certification for IA-B2-1. So with that, I'd be happy to entertain any questions.

MR. KARR: Steve, I have a question on—just refresh my memory. How was the fuel oil pipeline broken up or how was it segmented for, you know, the geographic or from hole to hole or—

MR. FARLEY: The naming—the naming conventions were established by the Navy. We could go back here. And, Dave, you might be able to help me on this here. But the numbering here had to do, in part, with the building that was associated with the fuel oil pipeline. I believe this is the diameter of the pipeline, is that right, Dave?

MR. GODSEY: No, it had to do with the grid of the system, they had the quads with these fuel oil pipelines.

CO-CHAIR HAYES: You want to use the microphone?

MR. FARLEY: I can restate what Dave was saying. It has to do with the grid of the island. And these numbers, for those who were involved in the management and development and maintenance of the fuel oil pipelines, that all made sense to them as part of an active base. For us, we've inherited those names. We have those in a GIS system. And, in fact, I brought a map tonight that shows—in case anybody was interested— that shows all of the PCB sites, all of the UST sites, and all of the fuel oil pipelines. And I can bust that out later and we can take a look at it just so you can get an idea of how these things are distributed across the island. These numbering, this numbering—these numbering conventions, unless you know something about—very detailed information about the island, you will never figure out where these things are. We have a woman who's the manager of the fuel oil pipeline program, a woman by the name of Alexa Stamets, she could probably close her eyes and tell you if it was north, south, east, or west, and what street it goes under. I have to look at a map. So anything I need to know about our GIS system, I type in a name and it tells me where it's at. I brought a map tonight, we can take a look at that during the break and you can see how these things are laid out. There are places within the EETP where there are virtually no fuel oil pipelines, and there are other places within the EETP where there's four or five pipelines that run parallel or cris-cross all over the place. And I'll add also that in some places the fuel oil pipelines are buried in the ground. And in a lot of places, they're in utilidoors. And for those that don't know what the utilidoor is, it's basically sort of a concrete tunnel that has supporting structures inside of it—the pipelines rest inside of that concrete structure. A lot of times they have lids that pop off so we can get to them and maintain them. They have valves in there and that sort of thing. So a lot of these fuel oil pipelines are buried. A lot of them are in the utilidoors. A lot of them now had been removed as part of our work, part of the Navy's work historically. But they're not evenly distributed around the island. Does that—

MR. KARR: No, thanks.

CO-CHAIR HAYES: Steve, I have a couple of questions following up on your comments there. In general, are all of the fuel oil pipeline segments and lines themselves being abandoned? Do you have any that you'll maintain for any reason?

MR. FARLEY: No, none of them will be used again. Is that what you meant? None of them will be used again. We have cleaned and flushed them or removed them, but none of them will be used again.

CO-CHAIR HAYES: What were they generally used for?

MR. FARLEY: Distributing fuel from building to building, maybe from boiler to boiler or from the— from the berths along the waterfront to tank systems in various places in the island. You know, back in the early part of the last century, a lot of the island ran on fuel oil. They had boilers

in the bottom of these buildings, and all the heat was generated by fuel oil in heaters in the basement. And so—in fact, in a lot of the old photographs you can see there's boilers all over the place, and they all ran, as I understand it, they all ran on fuel oil. That fuel oil was distributed around the island from tank to tank, from ship to tank, from ship to ship, based on these fuel oil pipelines. Some of the pipelines are very small, they're only a couple of inches in diameter, and others are quite large.

CO-CHAIR HAYES: My other question is somewhat unrelated to fuel oil pipelines, but it piqued my interest when you mentioned in the UST program—your last bullet on that slide—it mentions a UST 243 in investigation Area H-2. In going back over your previous slides I don't see any other mention of H-2, so I'm curious what the status of H-2 is.

MR. FARLEY: H-2 is—we're—we think we're done with most of—we are done with most of the activities within H-2. The reason that H-2 is not included in this presentation is because there weren't any major accomplishments in the first quarter of '07. That's not a reflection on Jennifer Lowe our PM, but there weren't—just weren't any major 10,000 foot level kinds of accomplishments. But we have—we believe we're done with everything in H-2 with the exception of one area. And let me see if I can—it's kind of hard to see, but this is probably the best example. But we can also look at the map that I brought if you want and talk about it for a second. H-2 is south of B, so H-2 sits right down in here. A portion of it extends out to the west here on the other side of Azuar Drive. And we believe that most of the work in H-2 is complete, with the exception of two underground storage tanks that are—that have been removed, but that used to sit right in here. And we're working with the agencies to resolve some groundwater in soil and soil gas contamination issues. And so this area is going to be investigated, as will be described in that remedial action work plan that's shown in the bottom of the slide for the UST program. So in a nutshell, Myrna, the answer is we believe we're done with most of the work except for the work associated with these former USTs. And we have an investigation program that we're actually going to present to the agencies sometime in the next couple of weeks. Thank you.

CO-CHAIR BLOOM: Thanks, Steve. Our next section is for public comment. This is our first public comment period. Any public comment? No. Okay. We'll take our ten minute break.

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Michael Bloom)

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

V. FOCUS GROUP REPORTS

a) Community

CO-CHAIR BLOOM: Next we'll go on to the focus reports. Community is still vacant. Jerry.

b) Natural Resources (Jerry Karr)

MR. KARR: Nothing to report.

c) Technical (Paula Tygielski)

CO-CHAIR BLOOM: And Paula is not here on technical. So Gil, the City report.

d) City Report (Gil Hollingsworth)

MR. HOLLINGSWORTH: The city council doesn't have anything directly environmental pending before it, but we do have a secondary issue. As you remember, earlier this—or rather mid-month, we entered into an agreement with Weston Solutions to represent the city in negotiation with the Navy concerning the early transfer of the remaining property on Mare Island. That contract is worth about $2.1 million, and no one got authority from the city council to increase the budget to pass that money from us to them and vice versa. So anyway, we're going back to the city council on April 3rd. And it requires a visit twice to the city council, once within a resolution of intention, and the second time a resolution getting permission. So on the 3rd and the 17th of April we will be going to the city council just to get the money and the capability to—for Weston to give us a bill, us to go to Touro, Touro pays us the money, we turn around, take the money, pass it to Weston. The reason we're going on the 3rd and 17th is because they're not meeting on the 10th, that's their Easter vacation. And that's it.

CO-CHAIR BLOOM: Thank you. Steve, you're back up.

e) Lennar Update (Steve Farley)

MR. FARLEY: Thanks, Michael. Okay. A couple handouts in addition to the handouts from the presentation I gave a few minutes ago; a small, one page, two-sided thing, that's documents that are in the queue. And then the eleven by seventeen handout. And some of the stuff we've already talked about here so I won't go over it again. In the upper right corner we have a couple photographs of some work being done. That's the building 516 sewer line work that I talked about before. Dry dock number two is off to your left, you can just barely see it up on the left side of that backhoe. This is the work that we did along the sewer line. And this is a little remote control compactor that we're using to compact the soil back into the trench. On the left-hand side, the two photographs over there, are work that we're doing inside building 637. We're removing PCB contaminated concrete. Some of the key issues there that while we're working inside that building is dust control. And you can see that the gentleman on the far left there in the white suit, not only is he wearing a hard hat, but here's wearing respirators and spraying water on the concrete to keep the dust down. So that's a very important aspect of the health and safety for that. A couple of other things real quick. Significant upcoming documents. The draft which is in the middle of the boxes on the bottom, the draft IA-C3 implementation report. That's one of those documents I mentioned before that's key to getting the agencies to review and comment, and then hopefully agree with the work that's been done and that we are, in fact, complete with that work. And then the only other changes in the site closure status is we had one additional PCB site and four additional FOPL segments, fuel oil pipeline segments that were closed by the agencies. Let me draw your attention to one last thing here. UST 742, which is in the lower right corner of the map; and UST 839, which is sort of in the middle of the IA-B, the green area for IA-B, those are two of the sites that we're going to be doing some additional work at, both UVOST, ultraviolet optical screening, and some other soil and groundwater sampling to try and wrap up the investigations of those two sites. So that's all I have for this month. Any questions?

CO-CHAIR BLOOM: Thanks, Steve. Weston update. Cris.

f) Weston Update (Cris Jespersen)

MR. JESPERSEN: Thanks, Michael. First off, you can see the status of various decision documents that have either been submitted for review or will be going out in the next six months or

so. I'm not going to review them all. One of the major activities we've been performing during the month of March is going back and excavating a number of hot spot areas in Area H1 that are outside the containment area, and during the remedial investigation earlier in the project we identified a number of locations that had elevated soil concentrations for metals or other contaminants. And what we're doing is going back and excavating those areas and taking that material inside the containment area where it will be later covered by the cap of the landfill. Right now we're looking at probably removing about 50,000 cubic yards of material and bringing that inside the containment area. And as we excavate the areas we are taking confirmation samples from the bottom and side walls, and all the contamination we can find, remaining hot spot material, we'll go ahead and extend the lateral and vertical extent of the excavated area. We continue to do work in IR-05 and dredge pond seven south in our munitions response action. We're investigating a number of selected metallic anomalies in those areas. To date we have looked at 2,100 anomalies, a lot of them are survey data, and excavated those areas. We've found 45 live munitions items, and also 1,200 -- over 1,200 inert munitions debris items. Unlike some of the other areas, we had not found any radiological items, the radiological luminescent buttons that we sometimes find when we go looking for the munitions items. And as this indicates, 41 of the 44 MEC items were found at one disposal pit at the northwest corner of IR-05. As Gil mentioned, we finalized our agreement with the city to represent them in negotiation for the remaining parcels with the Navy here to do a final early transfer. We have to get with Gil about some of the details I apparently missed on whether I'm going to get paid or not. But essentially we finalized that agreement on the 19th of the month. We actually had our kick-off meeting with the Navy and a number of the parties, Touro, Lennar, and the city and ourselves the next day. And we've been trying to start up a weekly technical conference call working towards resolution of some of these issues, and hopefully get this thing pulled together. And, everything permitting, within the next twelve months or so be able to transfer the final parcels. So that's all I had for this evening. Any questions?

CO-CHAIR BLOOM: Thank you, Cris. We'll move on to our regulatory updates. I don't see—Chip is not here or anybody else from DTSC. Carolyn is not here from EPA. But Linda is here from the Water Board.

g) Regulatory Agency Update (Linda Rao)

MS. RAO: Yes. And I'll respond for both myself and the work that we've reviewed this last past month as well as for Brian Thompson who couldn't be here tonight. So, as I mentioned earlier, we provided comments for the offshore draft, the draft offshore data quality objectives report. And also for the data gap sampling plan for IR-05 and the Western Magazine areas. And I'm working now on the draft post closure plan. And Brian is preparing a letter which comes on the expanded site investigation related to building 742, and the former degreaser building within investigation Area C-2. He's also beginning review of UST sites within the south shore area and the western early transfer parcel. For the Lennar side of things, he's reviewed and provided comments on fuel oil pipelines within investigation Area B and C-1. And he's also reviewed the land use covenant and land use covenant operational maintenance plan for investigation Area B. He's working with Lennar, CH2M Hill, and DTSC to have institutional controls in place for residential petroleum hydrocarbons. Any questions?

VI. CO-CHAIR REPORTS

CO-CHAIR BLOOM: Okay. Thank you. Next is our report.

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

CO-CHAIR BLOOM: You don't have one, I will give mine. Everybody should have a handout. We—the first thing you'll see on here is we installed, actually finished installing the fence in the production manufacturing area. The last picture there is of the fence. We also began the final backfill of the excavation, the DRMO area that began on March 20th. And as you can see, it's the final major phase of the non-time critical removal action. And, of course, we'll be coming out with summary report after that's all completed. And we received a—we submitted one document for agency review which was an underground storage tank summary data report. And, as Linda mentioned, we received one set of agency comments from her on the offshore sediments data quality objectives. And, as Cris alluded to, Gil did a little blurb on the early transfer, it basically says that it's started up again. We did meet on the 20th, and it was our first meeting, and many more to come. So that's the Navy's update.

CO-CHAIR HAYES: I have a question regarding early transfer. What's the expectation—or do you have any ballpark on what that—the cost will be on that, and what will be the Navy's source of funding of that early transfer?

CO-CHAIR BLOOM: I can't talk about the cost right now, I don't have an estimate on the cost yet. But the funding would come out of the environmental funding that we have currently. Any other questions? Okay. Any other—public comment period. We're on our second public comment period. If not, we're adjourning.

LIST OF HANDOUTS:

The following handouts were provided during the RAB meeting:

- Presentation Handout – Pilot Study for the Offshore Sediment Investigation at Investigation Area K – Navy/Tetra Tech
- Presentation Handout – Eastern Early Transfer Parcel (EETP) Update – CH2MHILL/Lennar
- CH2MHill/Lennar Mare Island Deliverables Schedule March 2007
- Mare Island RAB Update March 2007 – Weston Solutions
- Navy Monthly Progress Report Former Mare Island Naval Shipyard March 2007

(Thereupon the foregoing was concluded at 8:24 p.m.)

CDM Transmittal

CDM.

9444 Farnham St. Suite 210
San Diego, California 92123
(858) 268-3383
(858) 268-9677

To:	Diane Silva	**From:**	David Lange
Organization/ Address:	Navy SWDIV 1220 Pacific Hwy., Bldg 129 San Diego, CA 92132 Phone: (619) 532-3676	**Date:**	August 1, 2007

Re: Mare Island Information Repository – Final Minutes for the RAB Meetings November 2006 – June 2007

Job #:

Via: *Mail:* *Overnight:* Fedex 2-day *Courier:*

Enclosed please find:

For your information	X	**Approved**	
For your review		**Approved as noted**	
For your signature		**Returned to you for correction**	

- **Message:**

Diane,

Enclosed please find two copies of the Final RAB meeting minutes from the November 2006 through June 2007 RAB meetings at Mare Island Naval Shipyard for the administration record/information repository. If you would like anything placed in the information repository, please forward it to the attention of Peggy Bloisa in our Walnut Creek Office. Please replace the current contact name of Darlene McCray with Peggy Bloisa. Please call me with any questions

Thank you,

David Lange
Project Manager

Signed