

**MARE ISLAND NAVAL SHIPYARD
RESTORATION ADVISORY BOARD (RAB) MEETING MINUTES
HELD THURSDAY, OCTOBER 26, 2006**

The Restoration Advisory Board (RAB) for former Mare Island Naval Shipyard (MINSY) held its regular meeting on Thursday, October 26, 2006, at the Mare Island Conference Center, 375 G Street, Mare Island, Vallejo, California. The meeting started at 7:07 p.m. and adjourned at 8:58 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
- Jerry Karr
- Wendell Quigley
- Paula Tygielski
- Kenn Browne
- Jim O’Loughlin

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

- Michael Bloom (Navy Co-Chair)
- David Godsey (Navy Lead RPM)
- Brian Thompson (SF Water Board)
- Alona Davis (Sullivan)
- Dwight Gemar (Weston)
- Cris Jespersen (Weston)
- Larry Maggini (Weston)
- Chip Gribble (DTSC)
- Richard Perry (DTSC)
- Steve Farley (CH2MHill/Lennar)
- Neal Siler (Lennar)
- Gil Hollingsworth (City of Vallejo)
- Carolyn D’Almeida (USEPA)

Community Guests in attendance:

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

RAB Support from CDM:

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

I. WELCOME AND INTRODUCTIONS

CO-CHAIR BLOOM: Hello, everybody. Welcome to the October, 2006, Mare Island RAB meeting. We’ll start with introductions. I’m Michael Bloom, the BRAC environmental coordinator with the Navy.

Attendees introduce themselves as requested.

CO-CHAIR BLOOM: Thank you, everybody. We're going to go ahead and get started with our first presentation. It's going to be given by Dwight Gemar from Weston on behalf of the Navy. And it's going to be an update on the Navy Defense Reutilization and Marketing Office (DRMO) removal action.

**II. NAVY PRESENTATION: *Navy Defense Reutilization and Marketing Office (DRMO) Removal Action/Fieldwork Update*
Presentation by Mr. Dwight Gemar, Weston Solutions, Inc.**

MR. GEMAR: Okay. Thanks, Michael. This is, as Michael indicated, an update on the Removal Action (RA) that was started recently at the DRMO. And this map is just a location map for the DRMO, and it's located in a central part of the island near the intersections of A Street and Azuar. And just as a refresher, the DRMO yard was developed as a scrap-yard for the shipyard in the early 1940's, and served that function until the scrap-yard was closed in 1995. During that time there were some emergency Removal Actions for munitions that had been inadvertently commingled with the scrap that was being processed in the late eighties and early nineties. And, therefore, when the shipyard—or excuse me—when the scrap-yard was closed in 1995 there was a surface clearance done for munitions. However, later there was a concern about, you know, the potential for munitions to be in the near surface, you know, but below the surface; and, therefore, a Non-Time Critical Removal Action was approved in August of 2005 to address the potential for munitions in the sub-grade at the site. And, as well as, at the same time to address the potential for chemical contamination in the shallow soils.

So the two goals of the Non-Time Critical Removal Action are to address the munitions and contamination in the shallow soil. And for history buffs, this is how the shipyard, scrap-yard area—or excuse me—the DRMO fenced scrap-yard area looked in 1949. The red outline is the fenced scrap-yard area that is the subject of the Non-Time Critical Removal Action. And just for reference, this is Azuar Drive, which at the time this photo was taken was Cedar Avenue. And then this is Dump Road to the north, and A Street going off to the east. And this is for comparison purposes. A photograph—and I believe the photograph was taken of the scrap-yard area in 1980. And you can see that the footprint really has not changed since the 1949 photo was taken.

So the work that has already been completed as part of the Non-Time Critical Removal Action initially consisted of removal of some railroad lines, as well as asphalt, and some miscellaneous structures, in order to allow the crews to then excavate the upper eighteen inches of the soil within the fenced scrap-yard area, which is noted here as about a 4.6 acre area. The soil that was excavated was then mechanically screened through a sifting type machine, and then also visually inspected for munitions and explosives of concern which we abbreviate as MEC. There was some MEC removed during this activity. There was 11 items of live munitions items. And a number of munitions debris components, about 200 munitions debris items that were inert. And about 265 small arms cartridges were also recovered during this activity.

During the removal of the munitions, the site, the excavated area of the site was also analyzed for a list of target cleanup compounds that are listed here, including metals, semi-volatiles, polychlorinated biphenyls or PCBs, as well as pesticides. And for information purposes, every other grid was also analyzed for petroleum hydrocarbons.

And this is just a photo of the site as it appeared in 2005. You can see a couple of stockpile areas here and here. Here is where the soil processing activity was ongoing for the—to remove the munitions. And, again, this is the excavation area of interest. So all of the soil down to at least eighteen inches was removed in this area, and there were some additional hot spot areas that I'll show in a moment that were also excavated a little deeper than that. So once the soils were excavated, the areas were compared with a number of criteria based on a future land use of industrial use. These included the higher of the EPA's preliminary remediation goals for industrial areas, and the Mare Island filled ambient background levels. And I listed a couple of example PRGs on this slide. For example, the lead PRG for the cleanup goal is 800 milligrams per kilogram. And for PCB aroclor 1260 it's 0.74 milligrams per kilogram.

So the excavated soil was—in addition to analyzing the remaining soil in the excavation area, the soil that was removed was also analyzed for the purposes of disposal off-site. And a portion of the soil that was excavated and screened for munitions was transported off-site to landfills. However, due to inclement weather, the work was suspended in early 2006. Later this year the Navy contracted with Weston Solutions to complete the non-time critical removal action scope which at this point consisted of removing additional soil from twenty grids, and also four deeper hot spots that had contaminant levels greater than the cleanup goals. And after that work is completed, the plan is to backfill the site to within eighteen inches of the original grade. And, again, the excavated soil will be analyzed for disposal purposes.

The current proposal from the Navy to the regulatory agencies is to transport the remaining stockpiled soil on the site, as well as the soil that's been excavated this month, and transport that to investigation area H1 for use as sub-grade under the cap. This proposal is currently being evaluated by DTSC, and their decision is still pending.

And this is a grid map of the fenced area. And the grids that are on your handout are more yellowish than up here, but the yellowish grids and the reddish grids are the ones that Weston excavated this month that had exceeded the cleanup criteria for lead and for PCBs. And so that work has been proceeding.

And I just have a few shots of some of the activities. The first one is your basic excavator removing two feet from one of the grids. And as the excavator digs the contaminated soil, it's loaded onto a large off-road truck, as you see here, and then transported to a stockpile area. We have an unexploded ordnance (UXO) technician here that observes the excavation in the chance that there's any munitions deeper than the eighteen inch lift that was taken in this whole area. We also monitor the air for particulates, metals, and PCBs while that activity is ongoing. And the last shot here is—it's either praying to Mecca or sampling. I think it was sampling in this case because he's facing the wrong direction. So the field work, to wrap up the Non-Time Critical Removal Action, began with mobilization and setup on October the 11th. Weston then initiated and completed excavation of the grids that had been identified as exceeding the cleanup criteria for lead and PCBs on October the 20th, and we sampled those grids on the 23rd and 24th. We're still awaiting results for those grids. And depending on the results, if they still exceed the cleanup criteria, then the Navy will need to make a determination as to whether further excavation is appropriate in consultation with the agencies. And assuming that those grids are cleaned up to the cleanup objectives, the plan is to backfill those grids in November. And then also pending final determination from the agencies in terms of hauling soil to H1 for use at sub-grade, that can—is planned to take place in November through December. So the remaining work is pretty straightforward. And I'd be happy to entertain any questions on the current status. Jerry.

CO-CHAIR BLOOM: Thank you. Oh, there are questions.

MR. KARR: Dwight, where will the fill come from?

MR. GEMAR: The backfill?

MR. KARR: Yeah.

MR. GEMAR: We've actually sampled some material that Lennar has stockpiled on the island for determination if that is acceptable. And if that is acceptable, that would be one potential source. If it's not acceptable due to any residual contamination that may be in that soil, probably the alternative source would be to talk to the agencies and the Navy about using dredge pond sediment, for example, which has been extensively sampled as well.

MR. KARR: And then on—excuse me. On the grid map, there are some different colors in the perimeter. Does that have any significance?

MR. GEMAR: Yeah. Along the very edge you'll see some colors that are blue, and some that are kind of orange. The orange grids or lines represent a sidewall sample that exceeded the cleanup criteria, whereas the blue color had a sidewall sample that did not exceed the criteria. So, for example, this had a clean sidewall sample, and this had a dirty sidewall sample. However, the current scope of the Non-Time Critical Removal Action is limited to the area shown here. So that sidewall data, you know, is being collected for evaluation for any further, you know, work that needs to be done beyond that boundary.

MR. KARR: But as a separate project?

MR. GEMAR: Right. Any other questions? Yes, sir, Chip.

MR. GRIBBLE: That approval has been approved and you should be getting a letter here. I just talked to Michael about it, getting the—exchanging letters to document that in the next few days.

MR. GEMAR: Good.

MR. GRIBBLE: So you should be able to—

MR. GEMAR: So your people will be talking to their people and—

CO-CHAIR BLOOM: And our people will be talking to your people.

CO-CHAIR HAYES: Is that one of those cases again, Chip, where it will take you several days to write the letter? Or is it the signatures that will take several days?

MR. GEMAR: Any other questions before I launch—

MR. GRIBBLE: Just for the record, that was a joke.

CO-CHAIR HAYES: Just for the record, I concur, that was a joke from previous comments. You would have had to have been there—or here. I have a question.

MR. GEMAR: Okay. Sorry.

CO-CHAIR HAYES: Or, no, I have a comment. I would like to thank you, and I would like to point out to other presenters that this presentation meets with my satisfaction in terms of—it has actual data in it, like PCB—over here.

MS. TYGIELSKI: Like 800 milligrams per kilogram, a real number.

CO-CHAIR HAYES: We haven't seen a real number in a presentation for a heck of a long time. So, I mean maybe not from Weston, but definitely other presenters have slacked on that. So this is really what I'm looking for when I am looking for numbers, when I'm constantly complaining about that. This is as simple as we're looking for, and I really appreciate it.

MR. GEMAR: You're welcome. Yes, Michael—or Paula—or Michael, I guess.

MR. COFFEY: What's the status of the building that's remaining on the site?

MR. GEMAR: That one I'm going to have to maybe pass that to Dave Godsey or someone from the Navy. Are you talking about this building here?

MR. COFFEY: Yep.

MR. GEMAR: I don't have an answer unless you do, Dave.

MR. GODSEY: There's no intention at this point to deconstruct it or anything else. It will remain.

MR. GEMAR: So that would be for like a future development?

MR. GODSEY: I can't talk about what the plans of the developer, but right now the Navy has it.

MR. GEMAR: Okay. Yes, Paula.

MS. TYGIELSKI: I remember this site from near a dozen years ago when, I think it was Barbara Bryant brought it up, because it was a mix of PCB contamination and MEC which—and also, and also radiological contamination. And at that time it was decided to dig it up and sift through. And they figured out that the radiological contamination was little breaking pellets from instrumentation, the glow in the dark things. And was there any hint of that in this study, or is that -- all of that gone?

MR. GEMAR: I believe that they cleared the site of all radioactivity. When I was talking to Bob and Bruce about the site here recently, they reminded me that, like I said, about a million pounds of soil was sent off-site to a landfill designed for securing radioactivity materials. So at that point I think it was part of the T-RAM report as well that it was cleared for radioactivity.

MR. GRIBBLE: Dwight.

MR. GEMAR: Yes, Chip.

MR. GRIBBLE: I think if I can help Paula here with the question, I think she was asking, and it might be helpful if she wasn't so I'll ask. In this Removal Action, did you screen for radioactivity?

MR. GEMAR: Since I wasn't involved in the MEC screening portion, I guess I'm going to have to defer to the Navy on that one. I don't know if specifically they were using a radiation detector on the screening.

MR. GODSEY: Well, the site was radiologically released and determined to be clean prior to the start of the first removal action back when CH2M Hill was the contractor. So I don't think we did take any other additional actions to determine if there were any radiological materials remaining on the site because, like I say, the site was determined to be clean in terms of radioactive material.

MR. GRIBBLE: So let me add my recollection which may or may not be accurate. First off, it's not a recollection, it's a fact that we did complete the cleanup of radioactivity, radiological contamination out there. Our conclusion was that the residual contamination was background contamination only, that there was no Navy—Navy source of radioactivity that remained on that

site. The Navy removed all of the radioactivity contamination, and that was our conclusion. And that was actually one of the last radiological surveys or cleanups that was done on the island, other than the issue that we still have with the dredge ponds. And it was three and a half million dollars.

The Navy initially said they didn't want to do it because it was a figure of \$50 million they were projecting. And after we got into it, and actually the Navy pulled out some new technology which is really—a lot of it you see with Weston doing on the ordnance surveys actually, it's this GPS kind of locating. And all the sudden we got very, very refined in where the contamination was, and significantly narrowed the scope of the cleanup, with a lot of data to back it up by the way. And I think the final figure was three million and something. And we thought that was an excellent cleanup, and we still do.

My recollection now is that when the Navy first went out to start this Removal Action, that in the work plan the contractor wanted to use radioactivity detectors, and we said that the cleanup was done. And I think their preference was to use it in the context of their personnel protection, as a screening for their own personnel, which we didn't have any objection to. And I don't know that that actually happened in the course of this Removal Action or not. And so that's as far as I can recall.

MR. GEMAR: Yes, Wendell.

MR. QUIGLEY: Yeah, Wendell Quigley. Will the H1 area be designated now for a new removal site—not removal site, but dumping site for areas such as this for the entire island now?

MR. GEMAR: Well, I don't think that that is the case, but I think there is a case by case basis that will be looked at. Certainly the DRMO yard is adjacent to H1, and that seemed to be kind of a natural possibility. There's another site or two on the island that I believe are being considered for removal of soil to the landfill, but I think perhaps the Navy and DTSC could better comment on that.

CO-CHAIR BLOOM: Yeah. This one here was planned for that, you know, before the H1 landfill is totally capped. That was the plan for this one. There are one or two other areas that we're thinking about doing if contracts get awarded, and the projects move ahead, and regulatory concurrence is provided later on this year. You know, if—before the landfill gets capped. But other than that, no, that would be it.

MR. GRIBBLE: So the DRMO fenced scrap-yard area is actually part of a much larger area called IR01, which a good portion of that extends east of Azuar Drive. IR01 is an area that encompasses a huge collection of historical dump sites, many of which include contaminated waste, some of which include construction debris and municipal waste, but it's very extensive. And I don't know if you've got a red thing you can kind of run around there a little bit.

MR. GEMAR: If you'd hit the lights again, Wally? Yeah. What Chip is referring to is this, which was kind of the edge of the island in the early 1900's, and there was a lot of waste disposal activity in the—what now is occupied by the DRMO site, by the crane test area over here, and actually over by where the sports complex or that roundhouse is over in this area. This would be A Street here. And even on probably this side of A Street. So this was kind of the edge of the island, so it became the natural kind of dumping ground for the island until the early forties when this whole area out here had been developed through reclamation activities, and then all of the waste disposal activities moved out to area H1. But before that time this was really the center of the disposal activities on the island.

MR. GRIBBLE: So some of these areas that are more easterly within the IR01 area are discrete, and we found many of those, but we continue to find some. And, notably, the crane test area to the north of Dump Road and west of Azuar. And there seems to be extensive hazardous waste in the debris in that area as well.

And so the idea of taking the contaminated soil from the DRMO scrap-yard and putting it into the containment area within H1 is essentially consistent with the remedy for H1, which is to consolidate many of these debris—known debris sites or hazardous waste sites—I shouldn't say debris—hazardous waste debris sites, consolidating that material within the containment area, and have one large contained hazardous waste entombment. And for that we get a lot of cleanup throughout the rest of our IR01.

Some of these other areas that Michael mentioned are also—sort of fall within that category of miscellaneous hazardous waste or debris areas that are part of this IR01, which are random disposal sites, generally speaking, in the western half of Mare Island. And we support that. We think that's an extremely economical way to proceed, and will get a lot more cleanup if we are able to follow through on that.

MR. GEMAR: Yes, Brian.

MR. THOMPSON: Could you touch base—part of the objective is—for the soil Removal Action wasn't it to address petroleum hydrocarbons? During the excavations could you touch on any observations of petroleum hydrocarbons you may have encountered?

MR. GEMAR: Sure. As I recall there was one area that we did see some tarry, almost like a seep, and it was kind of in this area here. So there definitely appears to be—which really you already know, under the railroad area in this part of Dump Road, you know, there are definitely some petroleum hydrocarbon products there. So finding this oily material here was certainly not much of a surprise. I don't recall us seeing any other petroleum related issues in these other grids.

CO-CHAIR HAYES: The only other thing I'll say about this site, going back to what Paula and Chip talked about the radiological, is I think that this site and the effort that we made to ensure that the Navy did clean up the radiological contamination, because they originally really thought that because of their technology inability to track that RAD, that they were just going to leave it in place and it would be a five acre fenced site.

So I am very proud, and I think all of us are who were on that RAB, of the effort that was made by all parties at the table, including the City of Vallejo, to lean on the Navy. They sent a Captain out and he attended the RAB meeting. And we all agreed that it would be beneficial for the community—for the Navy to take its tremendous ability to assemble technology on the cutting edge and apply it to this site.

So if you ever think for a moment that the RAB is just a place to, you know, give presentations and have some of us whine and complain, I think this is a really stellar example of how we pressed the Navy, you know, they met our wishes. They developed technology that, as Chip said, is probably being used now worldwide based on the effort that was made in this small parcel. So it's another example of what a small group of people can do together.

MR. GRIBBLE: I think we even got a letter from Congressman Miller's staffer, Abby Hoffman—or excuse me, Kathy Hoffman—I'm sorry, Kathy.

MR. GEMAR: Sixties weren't that bad on you, huh.

MR. GRIBBLE: Kathy Hoffman drafted a letter supporting this, the effort to convince the Navy to clean up the site. So we did have a lot of political support as well.

MR. GEMAR: Anything else?

CO-CHAIR BLOOM: One more.

MS. TYGIELSKI: One last quick question. There's a dark area in that slide, it's a picture that says DRMO 1980. The dark area off to the side, is that the oil sump?

MR. GEMAR: No, actually that's just water there. That's what's called wetland B.

CO-CHAIR HAYES: Is that past it then?

MR. GEMAR: The oil sumps would be up in here. You can't really see anything.

MS. TYGIELSKI: So that's wetland B.

MR. GEMAR: This is wetland B and this is what's called wetland A over here. Okay. Thanks. I'll turn it over to Larry Maggini who's actually going to do the second half because I figured you couldn't handle two presentations from me. So I'm happy to let Larry run with this one.

CO-CHAIR BLOOM: So next will be Larry Maggini to do the munitions response update.

III. WESTON PRESENTATION: *Munitions Response Update: Western Magazine Area Presentation by Mr. Larry Maggini, Weston Solutions, Inc.*

MR. MAGGINI: Okay. It's good to be back again. Tonight we're going to be talking about the Western Magazine area and the ongoing munitions response action that Weston has been working on now for about a year in that area. And this is a view from over Carquinez Strait looking to the northwest. And the red outlined area is the boundary of the munitions response action for the western magazine. This is a historic photo we found, and it shows the area under construction in the late 1930s. And from the captions on the photos and some other information we've been able to tell that it was created from tidal wetlands using upland fill from the former munitions area of Mare Island. And it was used primarily to store the gun ammunition. There are about twenty magazines or so that are located in the area that were used for storage of munitions. The site was deactivated in 1975 with the exception of one magazine that was used by the shipyard in support of submarines. But with the exception of that, it was pretty much closed down in 1975 with the other portions of the ordnance facility.

There were several emergency response actions that were completed in the early 1990s, and these were just isolated items that were found in the course of the shipyard work that was being done out there. And they were handled by our own DOD unit that was on Mare Island at the time, DOD mobile unit nine. The area was identified as a munitions area of concern in 1994 by the ordnance preliminary assessment that was done by Tetra Tech. And as a result of that it was included in the UXO site investigation that was completed after that in 1995 through 1997. The geophysical surveys that were done as part of the site investigation identified 1,065 anomalies in the area.

The anomalies were investigated, and munitions that were found were removed during a later UXO intrusive investigation that was done. And all munitions that were recovered by that action can be classified—and this is an important note—as discarded military munitions. This means that they had not been fired, they had not been armed, they hadn't been prepared with the various safety

devices built into the items to detonate. So as munitions items go, they're relative safe if they're encountered or handled.

The goals of the current response action are to locate and remove any remaining munitions that we can detect in the area. And to do that consistent with the intended land reuse, which is open space and recreation at this point. To do that we used improved survey techniques and equipment over those that were used in the 1995 surveys. We did a hundred percent survey of all the accessible areas; the non-wetland. We stayed out of all the wetlands to keep from getting into trouble. But all other areas were surveyed. And it was a much more rigorous quality control and quality assurance applied to this project than was done in the previous one. All around it was a better survey.

One of the things that we did as part of the survey was to do a geophysical prove-out. And this was kind of important because the background of different areas, the survey instruments are sensitive to things other than munitions; they're sensitive to interferences. The soil conditions themselves can influence whether or not they can detect a particular item at a given depth. So we placed a variety of munitions items in soil conditions that, you know, are somewhere identical to those in the area. And this allowed us to verify and to—basically to tweak the equipment and the techniques to optimize the detection capabilities to be able to detect the smallest items that we could at the deepest depths.

Detection of the items was actually dependent, as I said, on the size and depth of the item and the survey equipment that's used. We used two types of equipment, a magnetometer system which can locate ferrous objects at relatively deep depths. And we also used, in areas that had a history of having non-ferrous and other metals like brass and copper, which are typically used ordnance items, in those areas we used an EM system which can locate ferrous and non-ferrous items, but at a slightly shallower depth. So we used a combination of the two that we believe gave a good detection capability for what we believed was there. And both of these sensors were coupled with centimeter accuracy navigation systems. So with the sensor as it was being carried around, and recording data, there was a GPS antenna with a sub centimeter accuracy GPS system that recorded the data from the sensor and the GPS together onto the instrument. So by looking at the data we can better tell what's there and optimize the anomaly selection. And the anomaly selection process is kind of, as far as I'm concerned, kind of a cross between an art and a science. It's amazing to watch the people do the things that they do to pick anomalies out of nothing, you know, what seems to me to be nothing, you know. A lot of blobs of color and data, and they can pick them out and they pick them out well. The anomalies were selected from the data, the geophysical data, and they were then excavated and removed to determine whether they represented ordnance material. And whatever was found as far as MEC and munitions debris was removed.

This shows a picture of two of our geophysical survey people doing a survey with the magnetometer. You can see the GPS antenna and the little dome on the post in the center of the cart.

One other thing that was done, one of the issues that DTSC raised during the past survey and after that was the building footprints, there were never any surveys done underneath the buildings. Even though we believed that the fill was clean if it came from the uplands, there was always a concern that something may have rolled or been placed under the magazines. So we contacted our friend Matt Gifford—you may remember him from dredge ponds fame—and arranged a return engagement for him. And this is just a picture of him and his Flintstone mobile as he calls it. It's really a lot more sophisticated than it looks. What he does is he uses a magnetometer sensor that's

part of a standard system that we use for the other surveys, but he takes a very high data density, he takes, you know, data points very, very close together. And the reason for that is, as you can see the pillars around him there, there's rebar inside those. And rebar to a magnetometer registers as interference. And when you get underneath a steel reinforced floor with steel reinforced pilings next to you, it presents a real problem for picking anomalies up. So by getting a very high data density he can manipulate the data. And he was actually able to be really pretty amazingly effective in regards to the targets he put in. And we did do a separate geophysical prove-out area under one of the buildings for MEC. He uses—since he can't get GPS signals under the buildings, he use a combination hybrid system that uses laser and an ultrasonic positioning system. So he's also, as he's taking the data points, the magnetometer sensor itself, the location of it is being monitored and recorded. So you get the same result, you get a data point and a position.

This is a view of the Western Magazine area. The areas that look kind of green there, those were the surveyed areas. And they're not actually shaded in green, but they're a representation of the signals. You can see up at the north end. Up in this area you see some red spots. Well, that was a location we believed might have been a historic dredge outfall, and it turns out there is a bunch of stuff there. But the signal strength is it pretty much—it starts out green, and then it goes up through red. And you might want to take a look at one of these drawings on the wall at the break, you can tell some of the other areas better. But this is included mainly to show you the covers that we did. We covered all the roads, around the magazines, lay down areas, and everything that wasn't an actual wetland, which is this dark part area here that we didn't go.

This shows the grid up in that northern area at—very near where we believed there was a dredge outfall. And this just gives you an idea. Each of these little dots or crosses here—which you can't hardly see because they're blurred—is an anomaly that was selected. And some of these hundred foot grids had literally hundreds of anomalies in one hundred by hundred foot grids. And you could also tell—this gives you a better view of the higher signal strength areas where there's probably something under there. And, in fact, there was something under there.

Okay. The anomaly investigation process is several steps. The first one is to go out—from the anomaly selection they generate dig sheets. And on these dig sheets is anomaly location, a north and east thing. And the information is loaded into a GPS unit, and somebody goes out with a GPS and walks around and they find points to like within a tenth of a foot, and they put numbered flags. That's step one.

Step two, the UXO technicians will go out and they'll do a surface sweep of the area for any surface munitions items. And they also do a radiological survey. The reason for that is that dredge pond outfalls at Mare Island have a history of having RAD items. And, in fact, we did locate several RAD items at the outfall location. So for the entire western magazine area, that's one of the steps that we do automatically just to make sure that we find everything that could be there.

Okay. Each anomaly is then excavated. If we find an anomaly we can clear it in there. If we don't find an anomaly or if we find debris that is not MEC, we'll go down to a depth of four feet in the radius—two foot radius around the anomaly flag, and investigate. If we find MEC items, we'll continue, we'll follow. If we don't find MEC items, and it's apparent that whatever's there is inert debris—we found a lot of railroad debris, construction debris, concrete, and things of that nature—if there's no evidence of MEC after we get to that point, we would stop and write the hole off as just not cleared. That's what the first one is on here talks about, if we don't encounter MEC we stop.

Once the excavation is completed, the hole will be checked by one of our UXO techs who is designated as a quality control specialist. And he will determine and record whether or not the hole has been cleared or not cleared. And all this information that I talked about from the anomaly, the signal strengths, the northing and easting location, if they do find an item, the depth, the orientation, the mass, the description, all of this is recorded in a program that we use called UXO facts, and it's recorded into a PDA in the field. And that eliminates a lot of transposition and copying errors and things like that. The data is dumped right from the PDA into the database, and it's been really pretty effective. The excavated soil is also checked prior to backfilling to make sure that no items are in the soil. And to date we've investigated, like I just updated tonight, I believe there's about 5,200 anomalies in the area.

Some of the grids that did have a history of ordnance, being a hundred percent anomaly, we did investigate. Others that did not have a history, and had no apparent reason that we could see to contain MEC, we only did a percentage on, somewhere between ten and twenty percent, in that order. If we do a reduced percentage and we find MEC then, you know, we would dig more anomalies, and we'd step out to define the area and make sure that we find everything.

This is a list of some of the items that we've found. And I've got some pictures later on of some of the interesting ones. Again, as is common with other places on Mare Island, the most numerous are the 20 millimeter rounds. These are anti-aircraft rounds from World War II, 40 millimeter larger anti-aircraft rounds. Again, very typical of dredge ponds and other disposal areas. We found a number of gum primers. And this was primarily down in the south where we believe it was a lay down area at one point where they stored material. And you can see some of the other items there, projectile fuses. And some of the interesting ones. We found a one hundred pound Parrott projectile—we've got a picture of that—that dates back to the Civil War. And also what had us worried for a while was a depth charge one day. First we found the launching bracket that used to launch it off the side of destroyers. The next day we found a depth charge. And for a while we thought it was a full out depth charge, but we found out it was only a practice depth charge with a really reduced explosive charge. So that was reassuring to us after that. We found four five-inch projectiles, a rocket warhead, another late 18th century or 19th round Hotchkiss projectile. Some incendiary bombs. These are the bombs that were packed together in canisters and dropped from B-29s on Japan, that era. And cartridge cases that still contained the propellant. So these are all the live items that we found. A total of 531 items. And we also found 3,600 munitions, inert munitions items. This shows a hundred pound one on the right there. This is one of our UXO technicians; we call him Donut because he likes donuts, as you can see. And on the left is a photograph, you can see the piled up projectiles. These are the same projectiles, and they're 100 pound Parrotts. And they're from the bombardment of Fort Sumter trying to get them back from the Confederates. And right here is a bottle of whiskey, one of the things you need to handle weapons and explosives.

MR. KARR: More than one.

MR. MAGGINI: One interesting thing, to me at least, is we never had any history of bombs on Mare Island, but we did find some arming wires. You pulled out a fuse and let the vane in front of the bomb rotate. We found a bunch of the wires. We also found, you see these magazines sitting on top of the 20 millimeter guns right here, they hold 60 rounds of 20 millimeter ammunition, and we found two. And as far as we can tell they're full. We didn't try to take them apart, but you can see the rounds in there. And they were in such good condition we color coded them. The projectiles were still intact. We were able to tell what they were, the gun explosive incendiary. This is our friend the depth charge. This is the launcher that they were launched in. This is called a

spigot, and this is the part here that cradles the depth charge. This has a black powder charge in it, and if you've ever seen the World War II pictures, the depth charges being kicked off the side of the destroyer, that's what launches it.

And this you really can't tell, but this is the head of the depth charge, and this is most likely the body. We did find a yellow blob in the middle of it, which was probably the three pounds of TNT that it was supposed to carry. So that's a magazine awaiting disposal at this point. This took our UXO techs overnight to ID this one. This was kind of an oddball. They're normally pretty good about doing it on the spot.

And we also found a shipping container which has deteriorated away. But inside of that, these were used to package 40 millimeter ammunition. It held four four-round clips. And they're still there, four rounds and four clips, in position in what used to be the shipping container. And a thousand plus, these are inert rounds, but just for the sheer volume, it's kind of interesting, inert 40 millimeter rounds. One hole was unending.

CO-CHAIR HAYES: What would they do with a training round?

MR. MAGGINI: They were used for—

CO-CHAIR HAYES: How would you use them?

MR. MAGGINI: They would load the guns for handling training.

CO-CHAIR HAYES: But they were inert? They didn't have anything in them?

MR. MAGGINI: No, they weren't fired, they were just loading the practice type dummies, train the loaders and things like that.

CO-CHAIR HAYES: Why would they be there? They didn't need to train with them anymore.

MR. MAGGINI: Apparently not.

CO-CHAIR HAYES: They didn't go and collect them?

MR. MAGGINI: I don't know. They were put there. They were all in one big pile. When we started the project our largest expected munition was a three inch round, and we got partway into it and we found four five-inch rounds. And this shows one of the rounds. This is the round as it came out of the ground. This shows two similar rounds. You can see these caps on the end; these are the protective fuse caps that were screwed onto them until they were loading the gun. And the guys were able to unscrew them. And underneath one of them you can see this is a plastic material, a radio proximity fuse that they developed in World War II to use against aircraft. They're little, like a miniature little radar that sensed when they were within the correct distance from an aircraft or a metal target, and they would detonate the projectile.

This shows the locations that we recovered munitions debris and MEC in the site. And you probably, again, have to look at one of the charts on the wall during the break. But the investigated grids that we've actually gone in and dug anomalies in are outlined in bold black color. The yellow dots show munitions debris, and the red dots show where we found MEC. And there was MEC found up in this area where the outfall was suspected to be, and also another associated area next to it. And there was MEC along this area here that I'll show in a minute, and that was a lay down area for ordnance back in the forties and fifties. When we first started finding things, it didn't seem to be any rhyme or reason where we were locating them, they kind of had us worried, because if things

are everywhere you almost have to go dig everything, which is not a desirable thing to do from our standpoint, one of which is cost to the stakeholders.

We had Matt Gifford and some of our people take a look at some aerial photographs from the forties and fifties. And the picture on the left here shows a current photo with the MEC locations overlaid on it. This is the same area from 1949. You can see the MEC items line up almost exactly with the stored material that was stored in the lay down areas. And he was able to account for virtually every single MEC item that we found, you know, why it was there and why it shouldn't be there in the areas where we don't think it is. So far what he's found and what we've located during the investigation match pretty well.

As I mentioned before, one of the strengths of what we're doing with the current action is quality control and quality assurance. We did some limited QA in the first investigation, but not nearly anything like we're doing now. We've got Weston QC. We've put—before we did the investigation—or excuse me—the surveys, we went around and put blind seed items. And by blind I mean unknown to the people doing the surveys and the anomaly selection to see if they would detect and select the anomalies. We had independent oversight of the anomaly selection process. And we verified a percentage of the anomalies as they're being relocated for investigation to make sure that they're within the accuracy that they need to be, a tenth of a foot or so. And we had an independent verification of the cleared anomaly excavations by the UXO quality control specialist. And in addition to that, the Navy is doing QA on us, and they've also put blind anomaly seeds in above and beyond the ones that we put in. And they are going to be doing independent survey and excavation of selected grids to verify the effectiveness of what we've done. The surveys that we're doing now and the QC techniques we're using are much improved over what was done in the past, and we believe we're going to be successful in reducing the risk in the area significantly.

The MEC and MD locations correlate well with the historic outfall and munitions lay down areas. As I mentioned, we've been able to account for virtually everything we found and why it might be there. We've also identified several areas where the anomaly density and the amount of metallic debris and MEC that we've been able to find in doing the preliminary investigation leads us to believe that we need to do some soil sampling. There's much too high a density to pull the items out one at a time, it would take forever. And so we've identified these areas, and we intend to sometime in the future go back and do some sifting, investigation sift of the soil. And for all I've said, further discussion with stakeholders is still required. We've done some preliminary presentations to the regulators, and we believe we've got a pretty good idea of what we need to do, and believe that we can support the recommendations that we're going to be giving.

The current schedule is to complete the investigation of the selected anomalies by the middle of next month. And, again, this is a hundred percent in some of the grids, and a lesser percentage in some of the rest. Following that, weather permitting, we're going to start installation restoration site five and dredge pond 7S. This is the other area that was done pretty much in concert with the Western Magazine area, at the same time. And the excavation and sifting of the soil with high anomaly density is probably not going to be done until next season, we don't have enough time left this year to even start that. But we're hoping to identify the areas and get ready for it again.
Questions?

MR. KARR: Yeah. Larry, on one of the slides there you mentioned 5,000 plus anomalies have been investigated to date.

MR. MAGGINI: Right.

MR. KARR: Is that out of the total number?

MR. GEMAR: I think the number of total anomalies is somewhere around 15,000 and we've dug 5,000.

MR. KARR: And then is there—any thought been given to a non-intrusive survey of the wetlands out there?

MR. MAGGINI: Just to get out there is kind of intrusive.

MR. KARR: Well, I understand that. I know nothing would be easy. But any place where there is water things have been thrown. And, you know, the young people that will populate Mare Island at some point are going to be out there crawling around in the mud because I sure would be. So, yeah, get caught or not, they'll be there.

MR. MAGGINI: That's true.

MR. KARR: And I just wonder is there any thought being given to a suspended system or giving it a gross look—

MR. MAGGINI: We could have probably done something, but what the regulators—and what we finally agreed on was we would do a survey up to the edge of the wetlands, as much as we could get without going into it and doing damage. And if we did find anything that looked like it was going into the wetlands or any evidence of anything that, you know, a path or, you know, debris or anything like that that looked like something might be there, then we'd pursue it. Otherwise we wouldn't. And so far we haven't found anything that looks like that.

CO-CHAIR HAYES: Just to follow up on that real briefly, those are constructed wetlands, are they not, as part of the mitigation? So there was some pretty intensive construction and grading of the soil at the time of that construction, so I would think that they would—

MR. MAGGINI: The ones in the east particularly—we went down while they were doing that and walked around—this is after we had been finding items in the dredge ponds already in the early nineties, and we went out there occasionally and looked, and we found absolutely nothing, no debris, let alone MEC, but no debris of any kind that looked like there might be anything there. And they were completely grading it. I mean if there was anything there, it was probably buried at least on that side.

MR. GRIBBLE: If we just switch for a minute to go to the historical dredge ponds, Jerry, and we had a conceptual model out there where virtually all of the ordnance was at the outfalls and near the berms and out in the berms, and virtually none of it existed in the interior of the dredge ponds. And I think that was—that was an outcome of a lot of work over the years, and it continues to be supported every time Weston goes out there and they want to take some more dredge pond material for something else, and we, you know, they do a—there will be a limited survey of the material and the material in the dredge ponds for the material that they're going to take away and use someplace else, you know, like in H1 or whatever.

And again, they still—they never find any ordnance or MEC material in the interiors of the ponds. So we have a pretty high confidence at this point that there is very little, if anything, in terms of MEC in the interior of those historical dredge ponds. And we know that because of all the work that's gone into it, which includes a lot of knowledge about how the material was actually moved in the dredge ponds, how they were developed or managed, and which way the dozers moved the

material etcetera. And we can see a lot of that from aerial photos, thanks to Larry and some other people.

So these two—these dredge ponds out here in the Western Magazine area have a somewhat more complicated history in that they—our understanding now, which is far from complete, that's the key—has been heavily disturbed, much more so than the other dredge ponds. And with that limited knowledge or information, we conclude that there may be a significant potential or probability for MEC across the interior of those ponds. But the thing that's missing is we don't have all the details of the history of how those dredge ponds were recreated or redeveloped or groomed for their current configuration. And if we had much more specific knowledge of that, we might be able to draw a different—assign different probabilities to the likelihood of MEC in the interiors of those as well, or in certain parts versus the other parts.

What's happening out here at the Western Magazine is when Weston first went out, according to their work plan—which is still in effect, by the way—the Navy is obligated, the Navy committed to removing—to excavating all anomalies. And I believe that's correct. And as they got into it, they found a lot more anomalies, a lot more material out there than they had anticipated. And they were—I think it's fair to say they were overwhelmed. And the effort now with Matt Gifford's overlays of those photos is not just so he can—so what, now you can explain how each of those finds were there—got there, so what do you do with that information? That really is—if you can develop enough of that information, you can get a much more refined picture of where the stuff is likely to be, and, more importantly, where it's likely to not be. And with that, you may be able to significantly narrow the scope of the removal action or the work that needs to be done to do the cleanup out there while saving significant amounts of money. So that's where Weston is, and the Navy is headed with this, and hopefully it will, you know, it will pay off.

MS. D'ALMEIDA: I was just curious if anyone had any information on what happened with the six inch round that was found on Wilson Avenue a few weeks ago?

MR. MAGGINI: I haven't heard anything else. It looked like a three inch fifty and a six inch round.

MS. D'ALMEIDA: I was wondering if it was live or—

MR. MAGGINI: All I know is what I saw in the paper. The DOD said they were going to dispose of it the next day, but I never heard anymore.

CO-CHAIR HAYES: Well, that certainly confirms our historical evidence and knowledge that our river park was also a dredge pond and, therefore, has outfalls. We have photos that show those. And the City of Vallejo, Greater Vallejo Recreation District is very remiss, and I think appallingly, disturbingly cavalier for not having notified the contractors and made a plan to address that issue. Because we've been able, thanks to a lot of research on the part of the Navy and its contractors, to identify that site as having been a former dredge material disposal site. So just for the record, I've been just pooh-poohed with some very strong language by the Board of Directors for even bringing that topic up. So that was a little bit vindicating for me, but I'm more concerned for the contractors.

MR. MAGGINI: Chip.

MR. GRIBBLE: Yeah. We're aware of that same information and we have been able to—that's not a part of Mare Island Naval Shipyard, so we can't address that through this Mare Island cleanup program. But we have been able to list it as a FUD site, which is an acronym for formerly used

defense sites. These are sites that were, once upon a time were military property and had some military history, and have some potential to have contamination. And those sites are managed by the Army Corps of Engineers under a program that has, as I understand it, very, very limited funding—funding at a rate that would take it out to, I don't know, forever to get those sites addressed. Which really gets back to the affected communities, by and large at this point it's up to the affected communities to put pressure on the Army Corps of Engineers and Department of Defense to increase their funding and get some action going for investigation on those sites. But, as far as we understand it, it does include the significant portions of the waterfront along the Vallejo side that have a potential for a MEC problem.

MR. MAGGINI: Any other questions?

CO-CHAIR BLOOM: Thank you. We're at our first public comment period. Any public comment? If not we'll go ahead and take a break. Thank you.

(Thereupon there was a brief recess.)

IV. ADMINISTRATIVE BUSINESS (Myrna Hayes and Michael Bloom)

CO-CHAIR BLOOM: All right. We're going to start off with our administrative business and announcements. I would just say that if anybody has any comments on the—our last RAB meeting, September 28th, please give those to me and/or Myrna so we can incorporate those and comment on those. Myrna, did you have any other announcements to make?

CO-CHAIR HAYES: Not related to this.

CO-CHAIR BLOOM: Not related to this, okay.

V. FOCUS GROUP REPORTS

CO-CHAIR BLOOM: -- With that, we'll go into the focus group reports. And community is still vacant, so our natural resources.

a) Community

Vacant.

b) Natural Resources (Jerry Karr)

CO-CHAIR BLOOM: So natural resources, Jerry.

MR. KARR: Nothing really specific. But I did attend a full day workshop yesterday up at Sacramento State on natural resources and land use planning. And that was very informative, and a lot of issues discussed were applicable to the RAB in some of the things we're doing, so it was time well spent.

CO-CHAIR HAYES: I'll just follow up with Jerry's announcement to say that Kenn needed to leave, but this would be as good a time as any to make an announcement that this Saturday, that would be the day after tomorrow, at 9:00 o'clock in the morning—I'll send this flyer around and you can get the information off of it—he is leading a hike at the south end of Mare Island along the shoreline. But we've been working with the city, and it looks like we may also begin to again offer those outings to the top of the hills. So I think maybe he may be squeezing that in as well for people who want a little extra hike that day. It is this Saturday, the 28th, at 9:00 a.m.

And also I could just report that the response request for proposals that I mentioned at the last meeting that were on the city's—are on the city's economic development website, actually those proposals were received and the interviews are scheduled for the respondents. So we're pleased about that. We don't know what will happen next, but at least that next step is there.

c) Technical (Paula Tygielski)

CO-CHAIR BLOOM: Thank you. Technical, Paula.

MS. TYGIELSKI: Technical does not have anything to report. However, I would like to say that I saw Diana Krevsky in the grocery store this afternoon, and she said she plans to be here at our next meeting. And she just returned from a trip that she went to Dublin, Ireland, and someplace in Germany, and also to Turkey.

d) City Report (Gil Hollingsworth)

MR. HOLLINGSWORTH: The city council has no environmental issues pending. There is one coming up that has a related is the—on the 7th—or is it—yeah, February the 7th—well, it's the first Tuesday in February, anyway. They will be discussing a designation of a developer in—for reuse area one. And the way it's related, of course, is that it would be an early transfer for a developer, and so we will either be proceeding with one of two teams or a combination of the two teams.

CO-CHAIR HAYES: And it's really February? You just said February.

MR. HOLLINGSWORTH: I'm sorry, February? No, it's March.

CO-CHAIR HAYES: Shall I give you a hint?

MR. HOLLINGSWORTH: It's a real long day; it's going on something like twelve or thirteen hours. Let's see, what is next month, November? What's the first—yes, it's November 7th.

MR. COFFEY: Election Day.

MR. HOLLINGSWORTH: Yeah, that's—and they're going to have a pretty full agenda which is not good.

e) Lennar Update (Steve Farley)

CO-CHAIR BLOOM: Thanks, Gil. Steve.

MR. FARLEY: Thank you, Michael. We have our normal two handouts, one being the status of our deliverables, and the second being this eleven by seventeen handout that has a few photos on it, the status of some documents in review and such. Let me start with the eleven by seventeen handout. Let me start with the upper right corner. The photographs are of some backfilling operations that we completed at UST 686. There's an arrow showing the approximate location of that former waste oil tank. The site had some benzene compounds that were removed during the excavation work. Because of some of the structures that remain on the site, we believe there's still some contamination underneath one or more of those structures. Chlorobenzene, for example, in a couple of hundred parts per million in soil underneath at least one of the buildings to the north.

During the backfilling operations we elected to apply some oxygen release compounds into the backfill material. And it's not going to address the contamination and the soil surrounding the backfill, but we thought that if there was any contamination migrating into that backfill from surrounding areas, that would help. It was relatively inexpensive; we thought it was a prudent thing to do while we were there. And in the lower right photograph you see one of the technicians

applying that material as the backfill is going on. During remediation of that area we moved a few hundred cubic yards of contaminated soil.

On the left side is a drill rig that we used to perform a soil gas survey in the location of two former UST sites. There were a total of four USTs, USTs 231 and 243 marked with the UST 231 label. Those tanks were previously removed, and we achieved the cleanup levels for those areas except in some surrounding areas where we think there may be some other sources. As a consequence, the agencies requested that we go back out and do a soil gas survey to—essentially to help define whether or not we had achieved cleanup of the area and whether or not there were any indications of additional contamination. The soil gas rig that you see in the photograph was used to install approximately 60 soil gas probes. And during those efforts we also collected about ten soil samples co-located with the soil gas probes. And we'll be collecting seven soil—or groundwater samples as well. We have some preliminary data, but it's only pieces and parts. We just completed the work a short time ago, but in a preliminary way we hope and are looking forward to that data helping us to either define the lateral extent of the contamination, or help us understand what—for example, what other sources might be in the area.

So when we did the original tank removals and soil remediation, we removed concentrations to below a thousand TPH diesel and 1,400 TPH gasoline. So those are the cleanup levels for gasoline and diesel in that area; we achieved those. But, again, the agencies asked us to go out and do some additional soil gas monitoring, and we did that. One of the important things about that survey was we wanted to perform that work when the water levels were at their lowest to make sure that we were getting representative soil gas data for the area, and that's why the work was done in October.

The other area marked on the map is in between dry docks one and two, labeled as the triangle area. It's an area where we've done a number of separate excavations, ten areas at least, some of them were relatively small PCB excavations, only a couple of feet deep. Others were fairly large excavations. And yet others merged from two separate excavations, for example, into a larger one. We removed at least a thousand or 2,000 cubic yards of soil from inside and outside of the buildings; the primary contaminants were lead and also PCBs. One of the things that we did encounter at a number of locations out there was the abrasive blast material, the green sand. We found that in a number of the excavations.

Let me focus in now on the lower left of the handout, and particularly the environmental site closure status. No change in the USTs or FOPL segments closed, but we did achieve closure of three more PCB sites. So we're making some progress there. Let me now jump over to the other handout showing the document schedule. Probably the important focus here are the major decision documents in terms of Remedial Action Plans or RAPS that are coming down the pipe. The IA-B2 RAP public comment period ended in early October. We did get public comments during the public comment meeting on the 13th. We've responded to those in the final RAP, and we received both DTSC and Water Board comments on the revised document, and our goal is to distribute that final RAP next week.

The IA-C2 RAP, the draft RAP is in agency review. We have DTSC comments. We're expecting Water Board comments fairly soon, hopefully the next week or the week after. And then the plan is to re-issue the draft for public review, RAP, in either late December or early January. As I mentioned a minute ago, the work in the triangle area is part of that RAP, and we've done that work under a separate work plan in advance of completing the RAP. So now we're working on the implementation report for IA-C2, in particular for those areas within the triangle area.

The other decision documents are the IA-C1, RI/FS, and RAP documents. The final RI/FS is in agency review. We met with the agencies earlier this week. The document fills a large box, so it's quite an extensive document, and we as an agency try and help get them through that report. I think we had some success, but it's still difficult to get through that document that large even in a face-to-face meeting.

The other thing that we're working on right now is the long-term groundwater monitoring program. We don't talk about that program a lot in these meetings. But separate from all of the soil contamination and groundwater contamination work that we're doing, we also have a program in which we perform groundwater monitoring on a regular basis; usually it's a quarterly basis. We just completed the round for October. We sampled 33 wells in six different areas and in three different IA's. And those areas were IR720, IR03, IR15, and pump station four, all of which are located within IA-C1.

We also did some work at one of the FOPL segments, which is in IA-C2 south of building 742. And then, of course, the UST 231 and 243 groundwater monitoring events that we're performing in H2 in the vicinity of where the soil gas surveys were done. So that's what I have for tonight. If anybody has any questions, I'd be happy to try and answer them.

MR. GRIBBLE: Question. On the B.2 -- B.2 RAP, and that includes the crane test area, is that—

MR. FARLEY: No, it doesn't. What we've done for IA-B is we've broken IA-B into IA-B1 and IA-B2. And IA-B1 is the crane test area, and IA-B2 is the part essentially that area east of Azuar Drive. And I might as well mention now because you brought this up a couple of times tonight, and I think it's worthwhile mentioning that we've had a number of fairly extensive discussions with the agencies about the crane test area, about the contamination there, and, as Chip mentioned, some of the fill material, construction debris that's in there. And we've worked very hard at developing a set of alternatives that the agencies are happy with for how to deal with contamination within the crane test area. And we're working on that. That will probably come out sometime next year.

MR. GRIBBLE: Does that include the option to move that over to the H1?

MR. FARLEY: Our expectations right now are that it will include that alternative. We know that that's what the agencies, what DTSC, in particular, is looking for. So as it stands right now, today, we plan to include that as an alternative in the feasibility study.

MR. GRIBBLE: And what are the other options that you're including?

MR. FARLEY: They're still in a state of flux, but complete excavation and removal to an off-site landfill. In other words, a landfill other than H1 is one alternative. Various capping options are other alternatives. And then there's the typical no action alternative and monitoring only. So it's pretty much the range of capping, no action, or complete removal.

CO-CHAIR BLOOM: Thank you.

MR. QUIGLEY: I'm sorry. On this capping, are we talking about the same area that they're doing in H1 now, or are we talking about other areas?

MR. FARLEY: It would be another area. And just for the record, I'm showing Wendell a map of the crane test area. The area that would be capped or excavated—actually the area that's going to be addressed as part of the B.1, or B-1 Feasibility Study, will be this area here, the crane test area, which is—which is the area of investigation area B that is west of Azuar Drive. So it would be that

area right there. So that's the area that's being evaluated in the Feasibility Study that I was just mentioning.

MR. QUIGLEY: Okay. So where would be a site that they are considering to put this dirt—this contaminated soil?

MR. FARLEY: There are two basic areas. One is potentially in the H1 landfill that Weston is working on now. And the other would be an off-site landfill. Whether it is Kettleman or Altamont, would be dependent on the exact character of the waste that has to be disposed of. Different landfills have different acceptance criteria. So it would depend on whether the landfill could accept that kind of material or not. So there would be a number of landfills in the State of California that can accept the waste.

MR. QUIGLEY: So this means that they're not considering using another area on the island?

MR. FARLEY: The only area—the only area on the island that this material would be taken if it is, in fact, excavated, would be to the H1 landfill.

MR. QUIGLEY: Thank you.

MR. GRIBBLE: Or capping in place.

MR. QUIGLEY: Yeah.

f) Weston Update (Cris Jespersen)

CO-CHAIR BLOOM: Thanks, Steve. Cris.

MR. JESPERSEN: Thanks, Michael. Earlier this month we received some comments on the Draft Final Area H1 Remedial Design Plan. We're in the process of addressing those, and hope to have the final version out to the agencies with their concurrence and review next week.

We've been continuing work on construction of the area H1 containment area cover. We had a presentation at last month's meeting or the meeting before looking at a lot of the details of how that cap system is going to be constructed. We're looking at completing about 45 acres this construction season. And to date we've done about 25 acres of that. We'll complete the rest of the cap in 2007, the spring. Once we excavate some additional hot spot soil within area H1 and incorporate it into the final landfill.

In two of the photos there on the handout, the one on the left-hand side shows a drill rig with some of the guys installing soil gas vents in the containment area. And the one on the top right shows a liner crew rolling out the geocomposite layer, the black material on the left, and then covering it with the geocomposite clay liner, which is the—on the right portion of the photo. Larry gave you guys a very extensive discussion of what we're doing with the Western Magazine area, so I will leave it stand at that.

g) Regulatory Agency Update (Chip Gribble/Carolyn D'Almeida/Brian Thompson)

CO-CHAIR BLOOM: Thank you. Regulatory update. Chip, DTSC.

MR. GRIBBLE: I'll just touch on a couple of things. Actually we've made a number of visits so far out to see the construction out at the landfill, and the consensus is that Weston is doing a very careful job in the construction so far from what we've seen. Gary Riley, who used to be with the Water Board and who's now with EPA working on other sites, he came out also. Not just for old time's sake, but he's actually working on another site with another property owner, and they

wanted to see—see this is an example of how to—it was presented as an example of how to do things with strong quality construction, quality assurance programs. So that's the one item I'll mention.

The other item is that—Henry Chui will probably get upset with me because he doesn't like to say much—Henry Chui is a father now. He's got a baby boy. And he's been on maternity leave for the last several weeks and he'll be back in November. (LAUGHTER.)

MR. HOLLINGSWORTH: They've changed the process, Jerry. When you and I were their age we only had to be there in the launching, we didn't have to be there any other time.

MR. KARR: All I had was a hangover.

CO-CHAIR BLOOM: Carolyn.

MR. GRIBBLE: Michael, I think you need to separate these two.

MS. D'ALMEIDA: Well, I've been in Phoenix all week and I just got back, so I don't have anything to report unless you are particularly interested in hearing about Williams Air Force Base.

CO-CHAIR BLOOM: Brian.

MR. THOMPSON: I have a couple of comments. One is I've been reviewing the Remedial Action Plan for investigation area C2. And as part of that review I'm taking a little longer to look at the information, at the data on groundwater because contaminants that get to groundwater have a tendency to move. And a lot of information presented in prior reports focused on particular areas, and I wanted to get an overall view of what pollutants are in groundwater and how they're related from site to site. So that's something I've taken a look at and will be meeting with Lennar and CH2M Hill tomorrow.

Also, tomorrow we have a meeting to talk about our document priority and tracking. If anyone who pays attention to this schedule that gets presented in these meetings, you'll notice that some documents have a tendency to show up on the list and disappear fairly quickly based on a more urgent review. And then there are sometimes conflicting priorities between what may be of environmental importance or of importance to Lennar and CH2M Hill to get reviewed. And so some documents have a short life on here, and some tend to have a long life. And so we're going to meet tomorrow to see if we can come to concurrence on how to prioritize our review and stay more focused in everyone's interest. That's it.

VI. CO-CHAIR REPORTS

CO-CHAIR BLOOM: Thank you. Next is our report. And would you like to go first?

CO-CHAIR HAYES: Well if I do I'll be asking a question that maybe you'll be answering which is when is the RAB going to have a tour and see the landfill? Are we going to do a helicopter flyover, or can we actually go out there? Is that going to take DTSC's director or who to tell us that we can? And, of course, probably also when will the home sales start being planned for the landfill? I hear it's got almost the best view of the entire island.

MR. HOLLINGSWORTH: The Forest Service still has the best view.

CO-CHAIR HAYES: The Forest Service still beats out. Okay. Well, that's my only comment. And maybe you can help me out here, Michael?

CO-CHAIR BLOOM: Actually, yes. We are working on trying to figure out when we can get the RAB trip going. We talked about it today actually, Neal, Dwight, and myself. So we're trying to either come up with something. Obviously November is next week, so we're trying to come up with sometime in November, and we're still working on that. So I'll talk to you about that as well. And that's part of what I wanted to do after the meeting. So if that doesn't work, then the next month is December so—but we'll touch base after the meeting.

And then as far as my report, or the Navy's report, I should say. We just already had a really great presentation on the DRMO area, so I don't need to—I won't get into that at all. But the other fieldwork we're going to be doing is we're going to be doing some follow-up sampling in the investigation area F1 come next week. And on the report you'll see on the other side that was really the only comments that we received back from the agencies this month was on that sampling of the variance for F1.

We didn't submit any new documents this month of October, and our BCT meeting will be held November 30th. That will be our next one. That's about it unless there are any other questions? No. Okay. Are there any additional announcements?

CO-CHAIR HAYES: I do. For those of you who are interested in the dates for the San Francisco Bay Flyaway Festival, the 11th annual will be February two through four. And that is a change from usually the last week in January, but our sister Flyaway Festival, the Space Coast Flyway Festival in Cape Canaveral took our date, so our optics vendors want to be in both places and they can't be at the same time, so we accommodated them by moving a week out.

MR. FARLEY: Michael, could I make one other announcement if that's okay?

CO-CHAIR BLOOM: Sure.

MR. FARLEY: This is indirectly related to Mare Island. Has anybody here heard of The Nocturnes? Does that ring a bell with anybody? Yeah. There's an unofficial group of folks, photographers, who call themselves the nocturnes, started by a fellow locally, and they—their whole mission is to take photographs at night. They have some absolutely beautiful photographs of Mare Island. So it's www.thenocturnes.com. They have beautiful photos, evening photos, night photos, all over the place. But in particular there are some absolutely beautiful photos of Mare Island that I thought I'd bring to everybody's attention.

CO-CHAIR BLOOM: Thank you. Any other public comment? If not, we will adjourn. Thank you. See everybody at the next meeting, November 30th.

LIST OF HANDOUTS:

The following handouts were provided during the RAB meeting:

- Presentation Handout – Defense Reutilization and Marketing Office (DRMO) Fenced Area Scrap-yard – Removal Action/ Fieldwork Update
- Presentation Handout – Western Magazine Area – Munitions Response Update
- CH2MHill/Lennar Mare Island Deliverables Schedule October 2006
- Navy Monthly Progress Report Former Mare Island Naval Shipyard October 2006

(Thereupon the foregoing was concluded at 8:58 p.m.)