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1 SAN FRANCISCO, CALIFORNIA, THURSDAY, FEBRUARY 22, 2007
 2 6:02 P.M.
 3 ---oOo---
 4 MS. PENDERGRASS: All rightie, then,
 5 everybody. Let's call the Hunters Point Shipyard
 6 Restoration Advisory Board meeting for Thursday,
 7 February 22nd, to order. How's everybody today?
 8 MR. TISEDELL: Fine.
 9 MS. PENDERGRASS: Why does everybody always sit
 10 so far away?
 11 MR. TISEDELL: Might be scared of you.
 12 MS. PENDERGRASS: Come on, close -- let's --
 13 no, okay. That's not going to work.
 14 Well, welcome, everybody. So why don't we
 15 start with introducing folks so we can give the RAB
 16 members a time to gather a quorum. How about that?
 17 So let's start with me. I'm Marsha
 18 Pendergrass.
 19 MR. WORK: Michael Work, U.S. EPA.
 20 MR. VAN HOUTEN: Robert Van Houten, resident.
 21 MR. TISEDELL: Keith Tisdell, resident, RAB
 22 co-chair.
 23 MR. FORMAN: Keith Forman, Navy RAB c-chair and
 24 BRAC environmental coordinator for the Shipyard.
 25 MR. PEARCE: Ralph Pearce, Navy acting lead

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1 RPM.
 2 MR. WALDEN: Mark Walden, Navy.
 3 MR. DACUS: Charles L. Dacus, Sr., ROSES, RAB
 4 member, also affiliated with the Network for the Elders.
 5 THE COURT REPORTER: What was the network?
 6 What?
 7 MS. PENDERGRASS: Mr. Dacus --
 8 MR. DACUS: Network for the Elders.
 9 MS. PENDERGRASS: Mr. Dacus, do we still
 10 have a --? Do we still have ROSES?
 11 MR. DACUS: Well --
 12 MS. PENDERGRASS: I thought they -- I thought
 13 they went under.
 14 MR. DACUS: Well, we're trying to get it back.
 15 I don't know what's going to happen there.
 16 MS. PENDERGRASS: All right. Well, okay. I
 17 guess --
 18 MR. DACUS: We'll keep you informed.
 19 MS. PENDERGRASS: Thank you, sir.
 20 MR. DACUS: Okay.
 21 MS. PENDERGRASS: Thank you so much. Just
 22 trying to stay abreast.
 23 Got a couple more people over here.
 24 MR. LANPHAR: Good evening. Tom Lanphar,
 25 California Department of Toxic Substances Control.

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1 MS. BUSHNELL: Barbara Bushnell.
 2 MS. PENDERGRASS: All rightie, then. And we
 3 have quite a few people in the audience tonight. So
 4 this is the way it works. You're going to all introduce
 5 yourselves; and speak loudly, clearly, because our whole
 6 proceedings tonight will be recorded via a court
 7 reporter. Her name is Christine.
 8 Hi, Christine.
 9 THE COURT REPORTER: Hi.
 10 MS. PENDERGRASS: Okay. So we start over
 11 there. Oh, one more RAB member.
 12 Go ahead.
 13 MS. KITO: Melanie Kito, Navy remedial project
 14 manager.
 15 MS. KOPPEL: Sarah Koppel, Navy RPM.
 16 MS. PENDERGRASS: Go ahead.
 17 MR. MASON: Caught me there. Jesse Mason,
 18 resident.
 19 MS. PENDERGRASS: Thank you.
 20 MR. RAO: Sudeep Rao, Literacy for
 21 Environmental Justice.
 22 MS. PENDERGRASS: Can you go ahead and spell
 23 your name so we get it down right?
 24 MR. RAO: S, as in super, -u-d, as in David,
 25 -e, as in English, -e, as in English again, -p, as in

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1 Peter; last name Rao, R-a-o.
 2 MS. PENDERGRASS: Thank you so much. That was
 3 so kind.
 4 Yes, sir.
 5 MR. GRIST: Gregg Grist. I'm one of the TAG
 6 grantees, Tech Physics.
 7 MS. PENDERGRASS: Greg Risk, R-i-s-k?
 8 MR. GRIST: No. Grist, G-r-i-s-t, like a --
 9 MS. PENDERGRASS: Thank --
 10 MR. GRIST: -- gristmill.
 11 MS. PENDERGRASS: Thank you so much. Okay.
 12 MS. HUNTER: Want to go --?
 13 MS. PENDERGRASS: Yes, go back over there that
 14 way. Keep going. I thought we're in a wireless
 15 technology.
 16 MR. FRIAS: Larry Frias, resident, an employee
 17 in the neighborhood.
 18 MS. PENDERGRASS: Larry Free [sic]?
 19 MR. FRIAS: Yes.
 20 MS. PENDERGRASS: Thank you, sir.
 21 MS. BRYANT: Aleta Bryant, CamKal Industrial
 22 Transport.
 23 MS. PENDERGRASS: Melita, what's the last name?
 24 MS. BRYANT: Aleta Bryant, B-r-y-a-n-t.
 25 MS. PENDERGRASS: Thank you. Thank you, miss.

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1 Yes, sir, behind you.
 2 MR. TAYLOR: Jerrold Taylor, Bayview Rock.
 3 MS. PENDERGRASS: Jerrold Taylor. Thank you,
 4 sir.
 5 Let's see. Who do we got here.
 6 Right there in the yellow jacket.
 7 MR. MCGOWAN: Mike McGowan, Arc Ecology.
 8 MS. PENDERGRASS: Thank you, Mr. McGowan.
 9 If we can go to the back, way to the back
 10 there, and then we catch that corner over there.
 11 MR. LAWSON: Kevin Lawson, construction
 12 service.
 13 MS. PENDERGRASS: Thank you, Mr. Lawson.
 14 Gentleman right next to you.
 15 MR. MARTINI: Steve Martini, Eighteen
 16 Trucking.
 17 MS. PENDERGRASS: Steve Martini? Thank you,
 18 sir.
 19 MR. DE LEON: Gustavo De Leon, Eighteen
 20 trucking.
 21 MS. PENDERGRASS: Gus- -- Say it again.
 22 MR. DE LEON: Gustavo De Le- --
 23 MS. PENDERGRASS: Gustavo, okay. And say --
 24 spell your last name.
 25 MR. DE LEON: D-e L-e-o-n.

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1 MR. KILDUFF: K-i-l-d-u-f-f.
 2 MS. PENDERGRASS: Thank you.
 3 Okay. And then we have Patricia.
 4 MS. BROWN: Patricia Brown, Shipyard artist.
 5 MS. PENDERGRASS: Okay.
 6 And Dr. Tompkins.
 7 DR. TOMPKINS: Raymond Tompkins.
 8 MS. PENDERGRASS: Okay. Very good.
 9 MS. WILLIAMS: Angela Williams of Barajas &
 10 Associates.
 11 MR. HALL: Steve Hall, Tetra Tech EMI.
 12 MS. HUNTER: Carolyn Hunter, Tetra Tech EMI.
 13 MS. BEMIS: Tessa Bemis, Tetra Tech EMI.
 14 MS. PENDERGRASS: All rightie, then. Everybody
 15 here and accounted for? All right.
 16 So as we move forward, let me just kind of
 17 yield to the chair. Do we have a quorum?
 18 MR. TISELL: Yes, we do.
 19 MS. PENDERGRASS: And that might be how many
 20 out of how many?
 21 MR. TISELL: We have -- we . . . There's a
 22 total of nine, and I think we got seven out of nine?
 23 MS. PENDERGRASS: One, two, three, four, five,
 24 six, seven out of nine.
 25 MR. TISELL: Seven out of nine.

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1 MS. PENDERGRASS: Okay. Excellent. Thank you,
 2 sir. Glad to have you.
 3 Okay, right beside you there.
 4 MR. DENNIS: Michael Dennis from MCD Trucking.
 5 MS. PENDERGRASS: Thank you, Mr. Dennis. That
 6 was perfect.
 7 Yes, sir.
 8 MR. GALARZA: Miguel Galarza, Yerba Buena
 9 Engineering.
 10 MS. PENDERGRASS: What was the last name?
 11 MR. GALARZA: Galarza.
 12 MS. PENDERGRASS: Galarza. Okay. Thank you,
 13 sir.
 14 And Jackie Lane.
 15 MR. DOUGHERTY: Bill Dougherty, Tetra Tech.
 16 MS. PENDERGRASS: Okay, Bill. Thank you.
 17 MS. LANE: Jackie Lane, community involvement,
 18 EPA.
 19 MS. PENDERGRASS: Thank you.
 20 MR. STROGANOFF: Peter Stroganoff, Navy ROICC
 21 office.
 22 MS. PENDERGRASS: Thank you.
 23 MR. KILDUFF: Ed Kilduff, groundwater
 24 contractor with the Navy.
 25 MS. PENDERGRASS: Did you get that, Christine?

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1 MS. PENDERGRASS: Very good. Thank you so
 2 much.
 3 MR. TISELL: You're more than welcome.
 4 MS. PENDERGRASS: All rightie, then.
 5 Well, you know, we happen to have these
 6 fabulously typed minutes that come as a product of the
 7 verbatim transcript. They have these nice little
 8 numbers down the side. We get them a couple of weeks in
 9 advance. They kind of chronicle all the nonsense that
 10 we talk about here and the stuff that makes a lot of
 11 sense that we're talking about here.
 12 Has everybody had a chance to read them?
 13 DR. TOMPKINS: Mm-hmm.
 14 MS. BUSHNELL: Yes.
 15 MS. PENDERGRASS: There's extra copies
 16 outside. So has everybody had a chance to read them?
 17 MS. BUSHNELL: Yes.
 18 MS. PENDERGRASS: So what am I waiting for?
 19 MR. TISELL: I like to make a motion to pass
 20 the minutes for January 25th.
 21 MR. VAN HOUTEN: And I second it.
 22 MS. PENDERGRASS: All rightie, then. Any
 23 discussion on these minutes?
 24 All in favor of accepting the Hunters Point
 25 Shipyard Restoration Advisory Board meeting minutes of

1 January 25th as they are written with no changes?
 2 MR. VAN HOUTEN: Correction.
 3 MS. PENDERGRASS: I'm sorry. Is there more
 4 discussion?
 5 MR. VAN HOUTEN: Yes. I'm sorry.
 6 MS. PENDERGRASS: Okay. We'll take that motion
 7 back.
 8 MR. VAN HOUTEN: Sorry about that. I just
 9 remembered, reading them this afternoon there was a
 10 correction.
 11 MS. PENDERGRASS: Yes?
 12 MR. VAN HOUTEN: On page 12.
 13 MS. PENDERGRASS: Page 12, line what?
 14 MR. VAN HOUTEN: Line 14. I believe it's --
 15 reads: She and Mr. Tisdell wanted to make it convenient
 16 for RAB members to attend one meeting instead of --
 17 rather -- rather than two. I think that's supposed to
 18 be reversed. Probably should read ". . . RAB members to
 19 attend two meetings rather than one."
 20 MS. PENDERGRASS: "She and Mr. Tisdell wanted
 21 to make it convenient for RAB members to make --" [cell
 22 phone sounds].
 23 MR. VAN HOUTEN: Am I reading it wrong?
 24 MR. FORMAN: Yeah, because it was basically
 25 taking two meetings and making it more convenient by

1 making it one by putting the two together.
 2 MS. PENDERGRASS: Right. That was the TAG on
 3 the risk. So that is correct.
 4 MS. BUSHNELL: The Tech and a
 5 Membership/Bylaws.
 6 MS. PENDERGRASS: You're right. Okay. So
 7 barring no changes, all in favor of accepting the
 8 minutes as they are written with no changes, signify by
 9 saying, "Aye."
 10 THE BOARD: Aye.
 11 MS. PENDERGRASS: Anybody opposing that?
 12 Anybody abstaining from the vote?
 13 Okay. The ayes have it. So the minutes dated
 14 the 25th of January are now into the record.
 15 All rightie. We do have just a few action
 16 items. And, my goodness, it is just a few. We have
 17 two, as a matter of fact. The first one is the
 18 Environmental 101 class that we keep holding over.
 19 MR. FORMAN: True.
 20 MS. PENDERGRASS: Shall we just keep -- let it
 21 ride?
 22 MR. FORMAN: I believe it does ride until
 23 March, doesn't it?
 24 MS. PENDERGRASS: Excellent. Then No. 2 --
 25 MS. BROWN: It's supposed to be February in the

1 minutes.
 2 MS. PENDERGRASS: I'm sorry? Go ahead,
 3 Patricia.
 4 MS. BROWN: It says "February" in the minutes.
 5 MS. PENDERGRASS: It does? And where might
 6 that be?
 7 MS. BROWN: Carried forward items in the back
 8 on page 17.
 9 MS. PENDERGRASS: Yeah? It says, "This action
 10 item will be carried over to March."
 11 MS. BROWN: It does. Sorry.
 12 MS. PENDERGRASS: Okay. That's okay.
 13 All right. Action No. 2 is Dr. Tompkins --
 14 DR. TOMPKINS: Carry over, please.
 15 MS. PENDERGRASS: Won't even let me read it?
 16 DR. TOMPKINS: No. Just --
 17 MS. PENDERGRASS: All right.
 18 DR. TOMPKINS: -- save time.
 19 MS. PENDERGRASS: Just move right along. So
 20 we're going to carry this one over till March?
 21 DR. TOMPKINS: Yes.
 22 MS. PENDERGRASS: All right.
 23 Does everybody agree with that?
 24 MS. BUSHNELL: Yes.
 25 MS. PENDERGRASS: Anybody oppose that?

1 All right. Very good. Then we just will keep
 2 let it ride. If this is roulette or what is -- what's
 3 the game --? Never mind.
 4 Yes.
 5 DR. TOMPKINS: Approval of the agenda, do you
 6 plan to --? I'll ask for amendment on that, see
 7 further.
 8 MS. PENDERGRASS: Oh, I'm sorry. I had just
 9 moved right beyond that. Do you have any suggestions to
 10 the agenda?
 11 DR. TOMPKINS: Yes, I do.
 12 MS. PENDERGRASS: All right.
 13 DR. TOMPKINS: I'd like that the items be
 14 moved -- for example, for the two members that -- whose
 15 candidacy acceptance to the RAB board, I like that to be
 16 considered now. Since we are looking for members, I
 17 like them to feel a part and move this forward rather
 18 than have them sit in the audience and give their input
 19 in terms of our agenda.
 20 I'd like to make a motion that we move the
 21 items in terms of committees, reports at the beginning
 22 of this meeting so can have this be seated at the board,
 23 get their candidacy approved.
 24 MS. PENDERGRASS: You know, I think that will
 25 really throw us off. But they are welcome to come to

1 the table; and since we don't have anything else to vote
 2 on tonight, they are certainly welcome to come to the
 3 table, and we'll still vote them in at the regular time.
 4 Does that make sense?
 5 DR. TOMPKINS: I ask for a motion.
 6 MS. PENDERGRASS: All right.
 7 DR. TOMPKINS: I put it in form of the motion.
 8 MS. PENDERGRASS: All right.
 9 There's a motion on the floor, then, to bring
 10 the prospective RAB meeting -- members up to the table
 11 and move that the -- actually, we would be moving the
 12 entire Membership and Bylaws Committee report and so
 13 forth.
 14 MR. TISDELL: I second the motion.
 15 MS. PENDERGRASS: Okay.
 16 All right. Any discussion on that?
 17 Yes.
 18 MS. BUSHNELL: It's really out of order from
 19 the way we normally do things, and I really don't think
 20 it's appropriate because there should be some discussion
 21 and introduction, and there are other -- other business
 22 to be taken care of first. And so I think we should
 23 continue in the way we normally do things.
 24 MS. PENDERGRASS: Okay.
 25 Anybody else want to weigh in on that? Any

1 to maximize the time and take advantage of the full
 2 group's participation in the presentations around the
 3 cleanup. That's why we're all here. So the business
 4 has been moved to the latter part because of that very
 5 reason.
 6 But there's a motion on the floor from a RAB
 7 member, and we certainly can take up more time and
 8 discuss changing the order.
 9 Mr. Mason.
 10 MR. MASON: I'd like some clarification. Is
 11 that a motion to separate the tech meeting from the
 12 bylaw meeting?
 13 MS. PENDERGRASS: No. The motion on the floor
 14 is regarding moving up the community -- the Membership
 15 and Bylaws Subcommittee report to now basically is what
 16 it is because that's where the new member's information
 17 would be presented.
 18 MR. MASON: I have no comment. It doesn't
 19 matter to me one way or the other.
 20 MS. PENDERGRASS: Okay.
 21 Any other comments from the RAB or anybody on
 22 this board?
 23 All right. Then I'll call the question. All
 24 in favor of the motion as stated, which is to move that
 25 business from the membership and bylaws that would

1 other conversation or discussion?
 2 DR. TOMPKINS: The reason I put the motion
 3 before us, that, one, we are recruiting members; and if
 4 we want them to feel a part of this and participate in
 5 it, then we include them. It is very -- of all the
 6 committees and -- I've served on, that you put the
 7 business of the committee at the end of your meeting.
 8 Normal practice is that all business --
 9 organizational business done at the beginning, and then
 10 presentations are afterwards. This is -- never before.
 11 I'd ask that these members be welcomed to the
 12 family and sit at the table with us.
 13 MR. FORMAN: Well --
 14 MS. PENDERGRASS: All right. So we have more
 15 discussion.
 16 Yes.
 17 MR. FORMAN: Yes, Marsha.
 18 Well, Ray, why don't we let Marsha weigh in on
 19 that? She's a facilitator.
 20 Have you ever seen a meeting --? I haven't
 21 heard any comments before on the order that we proceed
 22 our meetings. What's your --?
 23 MS. PENDERGRASS: We have had lots of comments
 24 on the order that we proceeded on in the meetings as we
 25 all -- the meetings are -- and the agendas have been set

1 approve the new members and bring them to the table,
 2 signify by raising your hand.
 3 So we have 1, 2, 3, 4, 5, 6.
 4 All opposed?
 5 We have one.
 6 All -- Any abstentions?
 7 Okay. So we'll go ahead and change the order
 8 of the agenda right now, and I would invite
 9 Mr. Tisdell --
 10 Are you still Membership and Bylaws . . . ?
 11 MR. TISDELL: (Nods.)
 12 MS. PENDERGRASS: -- to go ahead and proceed
 13 with your subcommittee report.
 14 MR. TISDELL: Okay. Okay. The RAB members
 15 have -- RAB members have before them have a notice from
 16 Mr. Michael McGowan. Could . . . oh. Right there. And
 17 he came before Membership and Bylaws Subcommittee, and
 18 we approved -- we approved his application to become a
 19 full RAB member on the RAB board, and you all got to --
 20 [coughs] excuse me. And I would like to ask the RAB to
 21 vote him to approve his application for membership of
 22 the RAB.
 23 MS. PENDERGRASS: So the recommendation from
 24 the Membership and Bylaws Committee that we accept
 25 him --

1 MR. TISDELL: Yes.
 2 MS. PENDERGRASS: -- is that --?
 3 Okay. Any second to that motion?
 4 DR. TOMPKINS: I so second.
 5 MS. PENDERGRASS: Okay. So now that we've had
 6 the motion and the second, any discussion? I mean, any
 7 questions of that individual?
 8 Yes. Barbara.
 9 MS. BUSHNELL: Excuse me. I have a
 10 consideration. I did approve his member -- he's
 11 incredible applicant.
 12 MS. PENDERGRASS: Okay.
 13 MS. BUSHNELL: What I'd like to say about this
 14 is: When I spoke to Mr. McGowan, I was concerned about
 15 community interest, and one of the interests of RAB has
 16 had and devoted themselves to was trying to recruit
 17 members from 94124.
 18 Now, in his application, he lists a business
 19 address for Arc Ecology in 94124. I do not believe
 20 Mr. McGowan lives here.
 21 So my consideration is that we ask Mr. McGowan
 22 to attend a couple of RAB meetings, allow him to present
 23 himself, and then we would consider his -- that's my
 24 consideration. And then we would consider his
 25 membership.

1 We do not -- His application is absolutely
 2 fabulous, but we have not experienced his participation
 3 in a group or know how he can deal with community. It's
 4 a consideration.
 5 MS. PENDERGRASS: Dr. Tompkins?
 6 DR. TOMPKINS: On individual candidacies and in
 7 our bylaws and also with DoD, Department of Defense,
 8 that if he's a stakeholder, works here, residency is not
 9 criteria for membership for the Board. So, therefore,
 10 that's a moot point, should not be considered.
 11 MS. PENDERGRASS: All right.
 12 Any other discussion?
 13 Mr. Mason.
 14 MR. MASON: If you think about it, you know,
 15 the RAB has been around for a long time. Arc Ecology
 16 has had a seat on the RAB for quite some time.
 17 Mike McGowan is a scientist that's working with
 18 Arc Ecology that's in the community at 4634 Third
 19 Street, completely in the community, not a downtown
 20 address, 94124, that has represented the community on a
 21 number of things. So I think Mike should be allowed to
 22 sit on the RAB.
 23 MS. PENDERGRASS: Okay.
 24 Any other discussion before we call the
 25 question?

1 MR. TISDELL: I would be in favor of him coming
 2 on without a delay because with me working on the
 3 Shipyard, I have seen him take a active interest in
 4 finding out what's going on, you know, as came out there
 5 even though he can only go so far. But, you know, he
 6 have showed interest even with going finding out about
 7 Lennar, you know, and different things.
 8 MS. PENDERGRASS: Okay.
 9 All right. We've had some discussion,
 10 comments. So it's time to vote on bringing on
 11 Mr. Michael McGowan -- right? Correct?
 12 MR. TISDELL: Mm-hmm, yes.
 13 MS. PENDERGRASS: -- to the RAB board.
 14 I -- Just a little point, which is a little
 15 out of the ordinary: Perhaps we should have a statement
 16 from Mr. McGowan before we vote. That would make
 17 sense. Is he here?
 18 DR. TOMPKINS: Yes.
 19 MR. MASON: I didn't hear that.
 20 MS. PENDERGRASS: I said a statement or a
 21 comment from Mr. McGowan before we vote.
 22 MR. MASON: Okay, okay.
 23 MS. PENDERGRASS: It might make sense.
 24 MR. MCGOWAN: Hello. Thank you for considering
 25 my application for the RAB.

1 I am an employee, a staff scientist, at Arc
 2 Ecology, which is part of the Community Window on the
 3 Shipyard. I am a biologist. I am a former senior
 4 research scientist at San Francisco State. I'm
 5 retired. I'm an adjunct professor at San Francisco
 6 State and USF in biology.
 7 And I believe I could contribute to the RAB by
 8 providing another perspective on technical document
 9 review that would complement Dr. Tompkins' chemical
 10 knowledge. I'm a biologist, and I believe that I would
 11 be able to in turn communicate the technical information
 12 about the cleanup back to the community; and not only is
 13 it my specific job to do that at Arc Ecology, but I'm
 14 very interested in that.
 15 I've lived in the Bay Area for 35 years, and I
 16 consider anything that happens around the bay to be
 17 influence on me and my environment, and I see this as an
 18 opportunity to contribute.
 19 MS. PENDERGRASS: Thank you, sir.
 20 With that, ask the question: All in favor of
 21 admitting Mr. McGowan to the RAB board as of this
 22 meeting, please signify by raising your hand.
 23 One, two, three, four, five, six.
 24 All opposed? Abstaining?
 25 One. All right. The ayes have it. So welcome

1 Mr. McGowan to the table.
 2 (Applause.)
 3 MS. PENDERGRASS: All right. Mr. Tisdell, did
 4 you have any more to your --
 5 MR. TISDELL: Yes.
 6 MS. PENDERGRASS: -- report?
 7 Quickly.
 8 MR. TISDELL: RAB members, you have before you
 9 application from Mr. Larry Frias who is currently
 10 residing 100 Cargo Way, and he's interested in becoming
 11 a RAB member, and we approved his application come
 12 before the -- for RAB as a member.
 13 MS. PENDERGRASS: All right. Okay. So this is
 14 your motion?
 15 MR. TISDELL: Yes, ma'am.
 16 MS. PENDERGRASS: Okay.
 17 MR. TISDELL: Mr. Frias.
 18 MS. PENDERGRASS: Do we have a second?
 19 MR. VAN HOUTEN: I'll second.
 20 MS. PENDERGRASS: Okay. We have a second from
 21 Mr. Van Houten. Any discussion?
 22 Mr. Mason.
 23 MR. MASON: I do like Frias, and I have a great
 24 deal of respect for him. But the address that Larry
 25 Frias put down is 100 Cargo Way. 100 Cargo Way is a

1 contaminated -- first-class contaminated site by the
 2 railroad.
 3 I'm really not sure whether Larry lives there
 4 or not because that's a Class 1-contaminated site for
 5 taking Class 1 material from the Shipyard out by rail.
 6 He says he lives in that trailer, and I think it's kind
 7 of hard to live in that trailer behind -- on Cargo Way
 8 behind Evans Street.
 9 So I would have some great concern with the
 10 address that Larry put in there. I agree with Barbara
 11 on that issue. I think that maybe he should come -- be
 12 involved with some of our meetings, you know, to see how
 13 he ventures into working in the community. I know
 14 that's a job. That's a contaminated site down there.
 15 MS. PENDERGRASS: Dr. Tompkins and then
 16 Miss Bushnell.
 17 DR. TOMPKINS: I remember -- If I remember --
 18 my memory serves me correctly, that he said he was
 19 living in the trailer there; and I think, as we did with
 20 the other candidate, that when he's given an opportunity
 21 to speak, that he then in his discussion to the Board
 22 that he includes that information.
 23 MS. PENDERGRASS: Okay.
 24 Miss Bushnell.
 25 MS. BUSHNELL: Apparently, whether you live in

1 94124 or not is not a significant issue here.
 2 MS. PENDERGRASS: Any other comments? Any
 3 other discussion?
 4 All right, then. The motion that has been
 5 called and seconded. We have had --
 6 MR. TISDELL: Present --
 7 MS. PENDERGRASS: -- discussion on that.
 8 So I'm going to ask Mr. Frias if he would like
 9 to have a minute to address the Board. Yes, please.
 10 MR. FRIAS: Thank you. I really appreciate it
 11 to become a member of the RAB, and I really also
 12 appreciate Mr. Mason.
 13 Nevertheless, my interest is pretty much on the
 14 discussion that I mentioned before, that when we become
 15 a member in order to productively participate in the
 16 deliberation of issues affecting the community. So
 17 given the opportunity, then I would like to be part of
 18 that.
 19 Thank you very much.
 20 MS. PENDERGRASS: All right, then. As the
 21 question has been called to accept Mr. -- Frias, is it?
 22 MS. BROWN: Yes.
 23 MS. PENDERGRASS: -- Frias as a new RAB
 24 member. Anyone who'd like to have that happen, please
 25 signify by raising your hand.

1 We have 1, 2, 3, 4, Mr. Dacus, 5, 6, 7. All
 2 rightie.
 3 All opposed? Any abstaining?
 4 MR. MASON: (Raising his hand.)
 5 MS. PENDERGRASS: One abstention.
 6 All right, then. With that, welcome Mr. Frias
 7 to the table as a new RAB member.
 8 (Applause.)
 9 MS. PENDERGRASS: Okay. Mr. Tisdell, do you
 10 have any more to your report?
 11 MR. TISDELL: Oh. The minutes and everything
 12 is out in the -- in the lobby, a copy of the minutes.
 13 But we had a very good report. We had -- came up with
 14 some discussions on recruiting new members, and we're
 15 going to try to put that in progress.
 16 MS. PENDERGRASS: All right. So no other
 17 motions for the Board, and that concludes your report?
 18 MR. TISDELL: Yes, it does.
 19 MS. PENDERGRASS: Well, thank you so much.
 20 So we'll get back to our regular agenda at this
 21 time, and let's move on with the Navy announcements.
 22 MR. FORMAN: Okay. Couple of things I have.
 23 First thing in March I will -- you have your calendars
 24 out. I'll be gone on my Navy reserve duty for three
 25 weeks in March.

1 So the week of March 12th, 19th, and 26th I'll
2 be gone. But during that time, we're still in the
3 transition phase for the lead RPM. Ralph Pearce here
4 will remain the lead RPM for the team. And Melanie
5 Kito, who you were introduced to a while back but also
6 she was the lead RPM last RAB meeting, she will be the
7 temporary BEC, and she'll fill that -- this seat while
8 I'm gone.

9 So it will be Melanie Kito and Ralph Pearce
10 to -- experienced members of our team that will be here
11 for March some of the meetings.

12 Having said that, all the March meetings in the
13 first two weeks of the month -- I mean, I -- certainly,
14 I'm going to be here, and I'll attend all of those
15 meetings.

16 Also plan on I'll be here in -- at the base and
17 in the neighborhood the week of March 5th, and I'll be
18 attending a number of meetings but also entertain other
19 meetings as they come up in the community. Okay.
20 That's all for now.

21 MS. PENDERGRASS: All right. Thank you.

22 Mr. Tisdell, did you have anything from the
23 community co-chair?

24 MR. TISDELL: Yes, I do. I like -- I like to
25 put a motion before the RAB for a concern as far as

1 that's -- you know, that's a horse of another color.
2 But I would like -- because it's going to be a
3 concern out there when they start digging up Parcel D
4 and you have community -- community members out there
5 working, and they are doing this. Somebody's going to
6 get hurt. And a body against a car, body ain't going to
7 last.

8 MR. MASON: Can they write a ticket out there?

9 MR. TISDELL: The DoD can.

10 MS. PENDERGRASS: Mr. Dacus?

11 MR. DACUS: Well, do they have a speed limit
12 out there?

13 MR. TISDELL: Yes, they do.

14 MR. DACUS: Do they have --? They don't have
15 anyone out there to . . . ?

16 DR. TOMPKINS: Hmm-mm.

17 MS. PENDERGRASS: Monitor the police?

18 MR. DACUS: Monitor . . .

19 (Laughter.)

20 MS. PENDERGRASS: All rightie, then. More
21 conversation? Mr. Van Houten?

22 MR. VAN HOUTEN: I just got to add to that.
23 Just not on the Shipyard, but in the neighborhood. I
24 think it's funny that you're mentioning this because
25 I've been thinking the last couple of days how much the

1 going to the City to the Mayor's Office and San
2 Francisco Police Department and the commander of the
3 police department on the Shipyard as far as them running
4 stop signs and just, you know, barreling out of nowhere
5 with no consideration of other per- -- other people's
6 concern out there on the base.

7 MS. PENDERGRASS: All right.

8 MR. VAN HOUTEN: I second it big time.

9 MR. MASON: Where are they running stop signs?
10 On the base?

11 MR. TISDELL: Yes. Well, if --

12 MS. PENDERGRASS: Any discussion on that?

13 MR. TISDELL: If a letter comes for the RAB --
14 from the RAB going to the mayor -- to may- -- the
15 Navy -- the Navy been on them, even -- we didn't have
16 the superintendents go over there and talk to the police
17 department. They still do it.

18 But if we sent a letter of concern to the -- to
19 the mayor, chief of the police, and to the commander out
20 there, because today at 12 o'clock I stopped at a stop
21 sign and get ready to make a left turn going to lunch;
22 and out the corner of my eye, I see something moving.
23 If I wouldn't have stopped, I wouldn't be here. He was
24 going 55 miles an hour.

25 They don't -- they don't care, you know. But

1 police department needs to be the example in the
2 neighborhood, and they are not, and that's why nobody
3 else stops at the stop signs. Nobody else follows the
4 speed limit.

5 And they do travel down Innes like it's a
6 freeway, and there are kids that cross the street to get
7 on the bus in the mornings and the afternoons and during
8 the summer.

9 And so I think it's a big issue that needs to
10 be dealt with in general with the police department in
11 the neighborhood and on the Shipyard. I herald the
12 letter --

13 MS. PENDERGRASS: Okay.

14 MR. VAN HOUTEN: -- and I'd like to -- like to
15 adjoin that with a couple of the neighborhood
16 organizations as well if we can.

17 MS. PENDERGRASS: Well, we have a motion on the
18 floor.

19 Mr. Mason, you have something to add to that?

20 MR. MASON: Yes. I just want to say that we
21 can't stop them from running stop signs unless on the
22 street, because when we get to the stop sign, they turn
23 on their siren.

24 MR. TISDELL: With no sirens, no lights, come
25 barreling. That's a difference. There's a big

1 difference.
 2 MR. MASON: I can't see -- I don't see anybody
 3 monitoring them, so I don't see what the difference is.
 4 But I think that we should send a letter.
 5 MS. PENDERGRASS: Okay.
 6 All right. Miss Bushnell, you have something
 7 you need to add to this conversation?
 8 MS. BUSHNELL: Just a consideration. The
 9 letter should go to the mayor and to Chief Heather
 10 Fong --
 11 MS. PENDERGRASS: That's --
 12 MS. BUSHNELL: -- jointly.
 13 MS. PENDERGRASS: That's what was said.
 14 MS. BUSHNELL: It's not a cc. It's to and
 15 both.
 16 MS. PENDERGRASS: Oh, I see.
 17 MS. BUSHNELL: Okay. Thank you.
 18 MS. PENDERGRASS: All right. With that, in
 19 fact, we can talk about the in forming the letter in
 20 just a moment.
 21 Dr. Tompkins, you have something new to add to
 22 that?
 23 DR. TOMPKINS: Only -- Yeah.
 24 Barbara, would that not also go to the police
 25 commission as well, since they are oversight committee,

35
 1 Mr. Tisdell, I'm sure you will provide a copy
 2 for everyone --
 3 MR. TISDELL: Yes.
 4 MS. PENDERGRASS: -- after you've submitted
 5 that letter.
 6 MR. TISDELL: Yes.
 7 MS. PENDERGRASS: Okay. Very good. And I
 8 think the comments from Ms. Bushnell and Dr. Tompkins
 9 and Mr. Mason is that it goes to the mayor and as a --
 10 and --
 11 MR. TISDELL: Yeah, not a cc.
 12 MS. PENDERGRASS: Not a cc, but jointly to the
 13 police --
 14 DR. TOMPKINS: Chief of police.
 15 MS. PENDERGRASS: Heather Fong.
 16 MR. TISDELL: Yes.
 17 MS. PENDERGRASS: And I guess no cc.
 18 MR. TISDELL: Yes.
 19 MS. PENDERGRASS: Okay. Really good.
 20 Okay. And you have more to your report?
 21 MR. TISDELL: Yes. There's one other issue
 22 that I notice. I don't know if anyone else has.
 23 There was about three explosions yesterday
 24 by -- over by the police department; and when Keith
 25 Forman and Ralph Pearce was out there, I talked to them

1 so that we politically touch all those who are in charge
 2 and the supervisor too?
 3 MS. PENDERGRASS: So we are amending the
 4 motion --?
 5 DR. TOMPKINS: I'm asking what would
 6 politically be the astute. I don't know. That's what
 7 I'm asking, other colleagues' opinion.
 8 MS. BUSHNELL: Directly applied to the mayor
 9 and the chief of police. The rest of those people will
 10 be informed appropriately by the officers. That's the
 11 political nature of the beast.
 12 MS. PENDERGRASS: Okay.
 13 DR. TOMPKINS: Okay.
 14 MR. MASON: Just write them a ticket.
 15 MS. PENDERGRASS: All right. So let's move on
 16 to -- the motion is on the floor. It's been seconded.
 17 We've had discussion.
 18 All in favor of writing a letter signed by the
 19 RAB, basically the RAB chair, co-chair, saying --
 20 talking about the running of stop signs and so forth,
 21 all in favor, signify by raising your hand.
 22 So we have the majority.
 23 Any opposed?
 24 Okay. Anybody abstain from that?
 25 Okay. Real good.

1 about it.
 2 And I just like to know what -- what was the
 3 explosions concerning? Was it on ground? above ground?
 4 in their tank or anything? You know, because we had a
 5 sensitive issue last year where they exploded -- buried
 6 a grenade and exploded it.
 7 MS. PENDERGRASS: Isn't that the same thing
 8 that happened last time? The police department -- I
 9 mean, has the police department detonated a --
 10 DR. TOMPKINS: -- explosive device on the base
 11 and had no authority to do so.
 12 MS. PENDERGRASS: I'm just saying, that's what
 13 happened --
 14 DR. TOMPKINS: Yeah.
 15 MS. PENDERGRASS: -- right? This time?
 16 DR. TOMPKINS: I don't know.
 17 MR. FORMAN: Just -- What Mr. Tisdell said is
 18 correct. He told Mr. Pearce about it. He heard, you
 19 know, three noises. We're going to go ahead and
 20 investigate and see what the police department says
 21 about that.
 22 MS. PENDERGRASS: Okay. It was in the
 23 Chronicle three days ago.
 24 MR. TISDELL: Three days ago?
 25 MR. FORMAN: No, no. It just happened

1 yesterday.
 2 MR. TISELL: Yesterday.
 3 MS. PENDERGRASS: There was something in the
 4 paper that they detonated something out at the
 5 Shipyard --
 6 MS. BUSHNELL: Yeah.
 7 MS. PENDERGRASS: -- two days ago. I'm just
 8 telling what --
 9 MR. FORMAN: That was a -- Just to avoid
 10 confusion, that was a separate incident.
 11 MS. BUSHNELL: It was actually five days ago,
 12 but it got in the Chronicle three.
 13 MS. PENDERGRASS: All right. I mean, so I'm
 14 just letting you all know that that's what was in the
 15 paper, but --
 16 MR. FORMAN: And we did -- we did -- Actually,
 17 I believe a community notification message went out on
 18 that.
 19 MS. BUSHNELL: Correct.
 20 MS. PENDERGRASS: And just a reminder just
 21 for -- one is that the -- that was an action item that
 22 needs to be followed up on in terms of the letter. So
 23 that needs to be marked as an action item, and then the
 24 follow-up is the second action item. I just want to
 25 make sure, the follow-up to the explosion.

1 MR. FORMAN: Yes.
 2 MS. PENDERGRASS: And you'll be reporting on
 3 that?
 4 MR. FORMAN: I will be reporting to that. In
 5 fact, the way -- I won't wait until the next RAB
 6 meeting. We will send out a CNP message when we find
 7 out --
 8 MS. PENDERGRASS: Excellent.
 9 MR. FORMAN: -- what happens.
 10 MS. PENDERGRASS: Excellent.
 11 Yes, Dr. Tompkins.
 12 DR. TOMPKINS: Keith Forman, how does the --
 13 how does the lease there --? I guess it's a lease
 14 agreement between the Navy and the -- and the police
 15 department --
 16 MR. FORMAN: It's actually between SFRA and the
 17 police department.
 18 MS. PENDERGRASS: Right. We went through this
 19 before.
 20 DR. TOMPKINS: Oh. There on that agreement, is
 21 it not --? They are not committed on the discussion on
 22 the Board to do any explosion or anything being buried
 23 exploded. If they so detonate a stick of dynamite, is
 24 that not a breach of contract in terms of the lease
 25 agreement, and what are the consequences then if they

1 continue --
 2 MR. FORMAN: Right.
 3 DR. TOMPKINS: -- to set off these explosive
 4 devices in contaminated soil? What are the consequences
 5 of the statute --
 6 MR. FORMAN: Okay.
 7 DR. TOMPKINS: -- as you investigate?
 8 MR. FORMAN: Our understanding is -- and I
 9 believe this was cited in the CNP messages -- that the
 10 portion of the stick of dynamite that was found at
 11 the -- actually at the police station was taken off of
 12 the police station and off of Hunters Point when it was
 13 actually detonated. It wasn't detonated there, okay.
 14 Now, what I will investigate is what
 15 Mr. Tisdell indicated, the three explosions, noises,
 16 yesterday and see if they were associated with the
 17 police department; and if so, what happened.
 18 DR. TOMPKINS: And could you as point of
 19 information if there is so -- what the consequences --
 20 if they violated the lease and are exploding devices on
 21 the facility, what are the consequences? Do they
 22 violate? Are they removed from the facility or what?
 23 MR. FORMAN: Well --
 24 DR. TOMPKINS: Investigate.
 25 MS. PENDERGRASS: You don't have any authority

1 in that regard.
 2 MR. FORMAN: Correct. So let's see what I can
 3 find out about that; and if indeed they did something
 4 that is in breach of their contract, then I push it up
 5 our chain of command, and we'll be -- we'll be talking
 6 to them, of course, with SFRA, the San Francisco
 7 Redevelopment Agency; and then they would have to sort
 8 out. And I don't know what the clauses in their
 9 contract say about that, but there would be some course
 10 of action that would take place.
 11 DR. TOMPKINS: Okay.
 12 MR. FORMAN: But until then, I know I want to
 13 find out all the information and give that to you before
 14 I make any assertion.
 15 MS. PENDERGRASS: All right. Mr. Tisdell, are
 16 you completed with your --
 17 MR. TISELL: Yes, ma'am.
 18 MS. PENDERGRASS: -- community co-chair report?
 19 Thank you so much.
 20 MR. TISELL: You're more than welcome.
 21 MS. PENDERGRASS: At this point, we are
 22 expecting to hear a presentation from Mr. Walden on
 23 Shipyard groundwater and --
 24 MR. WALDEN: Yes.
 25 MS. PENDERGRASS: -- is that still going to

1 happen?
 2 MR. FORMAN: It is.
 3 MS. PENDERGRASS: And let's see. So it's about
 4 a 20-minute presentation?
 5 MR. WALDEN: Yeah.
 6 MR. FORMAN: It is.
 7 MS. PENDERGRASS: Let's do that. Let's try to
 8 keep it right to 20 minutes if you can.
 9 MR. FORMAN: Okay. So our first presentation
 10 is on Hunters Point Shipyard groundwater. There's two
 11 parts to the presentation, and a number of us will be
 12 given portions of the presentation tonight.
 13 First person to talk with you is Mark Walden,
 14 Mark Walden's on the Navy team. He is the program
 15 manager for the basewide groundwater monitoring program,
 16 and our goal tonight is to teach a little about the
 17 program and a little bit about the groundwater at
 18 Hunters Point.
 19 And what we would like to have at the end of
 20 the meeting is a little bit of feedback to see -- for
 21 you to tell us how good of a job we did at trying to
 22 take a technical subject and make it more easy to
 23 understand if you don't do this day in and day out like
 24 we do.
 25 So we would like to see some feedback after the

1 presentations tonight to see how we could improve and
 2 how good of a job we did in presenting this type of
 3 material for you. We think it's important for you to
 4 know; but it is -- it's difficult for us to present
 5 technical material sometimes, and our goal is always for
 6 you to understand that and to learn a little bit more
 7 about the program.
 8 So with that, Mr. Walden.
 9 MR. WALDEN: Well, my name is Mark Walden. I'm
 10 a geologist with the Navy. I've been working on the
 11 Shipyard project for, oh, approximately four years or
 12 less. And I've been project manager for the
 13 groundwater -- basewide groundwater program for
 14 almost -- excuse me -- almost a year now.
 15 Okay. Next slide.
 16 What will -- What I'll be talking about a
 17 little bit today is some basic groundwater principles
 18 and some -- just a few terms. Let's see. We'll talk
 19 about the hydrogeology of the Shipyard.
 20 And hydrogeology, if you break the word down,
 21 hydro just means water; geology is the study of the
 22 earth or material. So hydrogeology is the study of
 23 water and the substance outflows, right of flows, and
 24 where it flows.
 25 First thing I like to talk about is the

1 groundwater aquifers, what is an aquifer. What an
 2 aquifer is basically a unit of geologic material,
 3 usually sand, silts, clays, gravel, rock, or a
 4 combination of one or more of these or all of them. And
 5 this unit has -- contains water in it, and it has the
 6 ability to transmit this water from one place to
 7 another.
 8 Okay. I'll talk a little bit about flow, talk
 9 a little bit about the high -- the water cycle, the
 10 rates at which water can flow through an aquifer, where
 11 it goes, and how it gets there.
 12 Talk a little bit also about the contaminants
 13 that we find on the Shipyard. Basically, the
 14 contaminants we're finding now are solvents, some
 15 metals, oils, petroleum products such as oils. Those
 16 are basically now.
 17 Next slide.
 18 This is just a simple diagram of water cycle,
 19 and it's -- it does represent Hunters Point area -- the
 20 Shipyard area. As water evaporates from the ocean, it
 21 leaves the salt behind, and vapor forms clouds in the
 22 form of rain; and this water will hit the surface and
 23 run from -- run from this area [indicating]. Where it
 24 hits, it will collect in rivers and lakes and eventually
 25 run from the surface into the ocean or in the bay.

1 What doesn't run off will soak into the -- into
 2 the soil, into the ground, and eventually make its way
 3 to an off -- aquifer of the water table.
 4 The water table is simply the first water you
 5 encounter as you start going down in the soil column.
 6 Now, this water will make its way through the aquifer to
 7 the soil and eventually hit -- this is salt water, fresh
 8 water interface. Fresh water is less dense than the
 9 salt water and will actually float above -- above the
 10 salt water, but eventually it will go into the bay.
 11 Okay. This is -- This shows a generalized
 12 cross section of the Shipyard and the water-bearing
 13 zones that's contained there.
 14 This slide here is the ground surface. This is
 15 the soil -- this is the soil here. It's not saturated
 16 with water, but it is moist. There's some water in
 17 there. It doesn't move. And this is the water table.
 18 This is where the water collects and will start
 19 flowing.
 20 After the water-bearing -- call it
 21 Water-Bearing Zone A, or the A aquifer. You may hear
 22 that occasionally. This is -- This zone is about -- it
 23 varies in depth in the ground surface from -- anywhere
 24 from 10 to 20 feet below ground surface. This
 25 water-bearing zone is basically where the vast majority

1 of contaminants are found in the Shipyard.
 2 Below the Water-Bearing Zone A, or the
 3 A-aquifer, is a layer that's called the bay mud, and
 4 this acts as -- it's not exactly a barrier, but it does
 5 retard the movement of water in the groundwater -- in
 6 the subsurface. It's not found everywhere on the base.
 7 The majority of the base has it. But it is found -- it
 8 is found the majority of the places on the base.
 9 Below -- below this is the B water-bearing
 10 zone, or the B-aquifer, sometimes we call it, sometimes
 11 refer to it as the B-aquifer. And this aquifer also is
 12 not -- is not continuous throughout the Shipyard. It's
 13 found in some scattered locations throughout the
 14 Shipyard.
 15 And below that is bedrock. And there is
 16 some -- Sometimes the water will enter the bedrock in
 17 fractures, and it's very localized also.
 18 Now, this slide shows the way groundwater flows
 19 on the Shipyard. Basically, the water comes into the
 20 Shipyard and flows slowly towards the bay. See here.
 21 And these lines may be hard to see. I can't read the
 22 numbers. I'll use this.
 23 This -- These lines are basically representing
 24 areas along this line. If you were to dig a hole from
 25 anywhere along this line, the first place you hit

1 here [indicating] on this map. And this area here is
 2 the area of -- greatest area of contamination. That's
 3 about this area.
 4 The contaminants parcel -- on Parcel B are
 5 basically solvents. Solvents were used to clean metal
 6 parts or clean any parts. And they were -- The
 7 solvents were contained in tanks, vats, and various
 8 areas throughout the -- throughout the parcel. Mostly
 9 these two areas were concentrated areas.
 10 The concentration of solvents in here range
 11 from, well, most -- this one -- this map shows the
 12 highest here [indicating] at about 400 parts per
 13 million. Excuse me. Parts per billion.
 14 I have a hard time with understanding the
 15 difference between million and billion. The way I like
 16 to think about it is put it in the context of time where
 17 a million seconds is roughly three weeks; a billion
 18 seconds is roughly 11 years. Just gives you a -- gives
 19 me a little understanding of the difference between
 20 that. So I won't try to use it.
 21 MS. PENDERGRASS: You have about ten minutes,
 22 ten minutes.
 23 MR. WALDEN: Thank you.
 24 Okay. Next slide, please.
 25 This is Parcel C, this area here [indicating].

1 groundwater will be, for example, on this line is 5. So
 2 5 feet an elevation relative to the average sea
 3 elevation you will find the first encounter of
 4 groundwater.
 5 The next one down here is represented by a 4.
 6 That means that 4 feet below the -- or elevation of
 7 4 feet you will find the first groundwater. Between
 8 these two lines the groundwater is less than 5 feet in
 9 elevation and -- but more than 4.
 10 And just like on the surface, these other
 11 lines are 5, 4, 3, 2, 1. And just like on the surface,
 12 groundwater flows from a high to low. And this is a
 13 elevation of 5 feet, and it flows -- the water will flow
 14 from the 5 downhill to the -- to the lower elevations
 15 and eventually into the -- into the bay.
 16 Now, the rates at which these flow, it's very
 17 slow. As -- Its average, just maybe in some areas an
 18 inch or less than an inch per day and translates to
 19 maybe a couple of feet per year. That's just average.
 20 Some places are a little faster and some are a little
 21 slower. But the average is about 1 to 2 feet per year.
 22 Okay. I'll let you -- talk a little bit now
 23 about where we find contamination on the base. We'll go
 24 through each parcel, identify these areas.
 25 Okay. This is Parcel B. That's located right

1 And Parcel C was where the majority of industrial
 2 activities took place from the Shipyard. And this also
 3 contains solvents and basically the same in other -- in
 4 tanks and vats and some piping that would transfer
 5 solvents possibly from a waste solvent to another -- to
 6 another tank or something. And it's this area, which is
 7 right here.
 8 Okay, next slide.
 9 Now, in Parcel D; which is this parcel
 10 [indicating], there are really two areas showing some
 11 contamination. This area contains solvents, and it's
 12 also the metal chrome sits -- or hexavalent chromium is
 13 in this area. And this is here [indicating].
 14 The hexavalent chromium is used with -- in
 15 association with electroplating, and solvents are used
 16 to clean parts also, and there is a vat here
 17 [indicating] that was -- that leaked like the others and
 18 contaminated its way to the groundwater.
 19 In this area, we find solvents in here also
 20 [indicating], and that's -- basically are kept in tanks
 21 and vats and much the same as the others.
 22 This is Parcels E-2 and E, which are located
 23 here. This is E-2 and E. And what we find here is
 24 solvents again, both areas. And they were there for
 25 basically the same purpose, stored in the same way.

1 But the difference in Parcel E is that we have
 2 here an area with oil. This oil is -- There was a pit
 3 dug here, and oil was brought in. Oil and water was
 4 brought in, and it would separate out. Oil would rise
 5 to the top, and the oil was removed and recycled. And
 6 this area has been -- has been capped now. There's soil
 7 over it. It's no longer open.

8 Next slide.

9 This just -- may hear the term nonaqueous-phase
 10 liquids, which simply means liquids that have -- or
 11 contaminants that have not dissolved in the groundwater
 12 during their -- like oil. Oil and water separates. Oil
 13 floats on the surface. And that's an example of a
 14 nonaqueous-phase liquid.

15 There are two types. There are floaters, like
 16 oil, which is called light NAPL, or light
 17 nonaqueous-phase liquid. And then there are sinkers,
 18 like chlorinated solvents that will -- that will sink.
 19 If they are dense in the water, they will sink. At the
 20 Shipyard, we have some areas of this LNAPL.

21 If you go back to the previous slide.

22 Again, I'll show you, that's this area here
 23 [indicating].

24 And we have not identified any dense -- any
 25 DNAPLs out there. This is based on the latest round of

1 monitoring the -- each area to see if it's changing. We
 2 monitor every three months.

3 We are evaluating remedies to -- We are
 4 currently evaluating remedies to address the groundwater
 5 contamination to clean it up. We're trying to find the
 6 best way to do that.

7 The groundwater of the Shipyard's not used for
 8 drinking, household purposes, agricultural, or
 9 industry. And we sample the groundwater and analyze it
 10 every -- every three months.

11 MS. PENDERGRASS: Okay. Thank you very much.

12 MR. WALDEN: Any questions?

13 MS. PENDERGRASS: I'll tell you what we're
 14 going to do is, we're going to stop, and then we will
 15 take questions after the break.

16 MR. WALDEN: Sure.

17 MS. PENDERGRASS: So will give our person's
 18 fingers a rest. So we're going to take ten minutes, so
 19 ten minutes after.

20 (Whereupon, a recess is taken from
 21 6:57 p.m. to 7:09 p.m.)

22 MS. PENDERGRASS: All rightie, then. Does
 23 anybody have any questions about the very fine subject
 24 of groundwater in San Francisco?

25 MS. BROWN: I do.

1 measurement, which we'll talk about after the break, and
 2 was -- it's measured once a year, and we just haven't
 3 seen any of that out there.

4 Use at the Shipyard, groundwater use. The City
 5 of San Francisco imports the water that they use for
 6 drinking water, industrial uses, all uses. And it's
 7 imported from the Hetch Hetchy watershed system east of
 8 here, and the City -- there's -- the City of San
 9 Francisco does not allow groundwater to be used within
 10 city limits for drinking water purposes or any -- or
 11 agricultural or industrial purposes.

12 Okay. The reason it's not used at the Shipyard
 13 is, there was a very high natural salt content of the
 14 water being close to the bay. Salt water can intrude
 15 into -- under the surface; and if we -- if there was a
 16 well there that was pumping water, this would tend to
 17 draw salt water in -- farther into the bay -- I'm
 18 sorry -- into the -- into the Shipyard.

19 Okay. So in summary, I would just like to say
 20 that the groundwater flows through the Shipyard to the
 21 bay, flows into the Shipyard, flows into the Shipyard
 22 down and out through this at fairly slow rates.

23 The areas of contamination have been identified
 24 at each -- at each parcel. These contaminated areas are
 25 decades old. They are relatively stable. We are

1 MS. PENDERGRASS: Ms. Brown. I know you have a
 2 burning issue. Is it going to boil the water? Ha-ha.

3 MS. BROWN: Have the tanks of solvents been
 4 removed?

5 MR. WALDEN: The tanks of solvents -- they've
 6 been removed in some areas; and honestly, I can't tell
 7 you if they've all been removed.

8 In the areas I showed you in Parcel C in this
 9 area here [indicating], we are doing some studies right
 10 now, how -- we are doing some treatability studies to
 11 see how we can actually treat it, and it seems to be
 12 working fairly well.

13 MS. BROWN: So were the tanks under the soil?

14 MR. WALDEN: Some were under the soil, and some
 15 vats were concrete-lined pits, basically.

16 MS. BROWN: Thank you.

17 MS. PENDERGRASS: All right.

18 Yes, sir. What was your name, sir?

19 MR. POWELL: My name is -- my name is Harrell
 20 Powell. I'm a resident.

21 MS. PENDERGRASS: Mr. Powell, thank you so
 22 much.

23 MR. POWELL: And my question is, gentleman
 24 speaking about the -- I think it was Site E and talking
 25 about the --

1 MR. WALDEN: Parcel E?
 2 MR. POWELL: Parcel E. Thank you. And it is
 3 talking about the oil.
 4 MR. WALDEN: Yes.
 5 MR. POWELL: Was that you just you dug a
 6 ground -- dug a hole in the ground and just poured oil
 7 in there, oil and water and was separated?
 8 MR. WALDEN: That's correct.
 9 MR. POWELL: And then wasn't some of the
 10 remains of the oil be -- still remain in there?
 11 MR. WALDEN: It is still there.
 12 MR. POWELL: Wouldn't that trickle into the
 13 bay?
 14 MR. WALDEN: It's a possibility.
 15 MR. FORMAN: Yeah, that's a -- that's a huge
 16 site too. It's about -- what, 5 acres?
 17 MR. WALDEN: It's 5 acres.
 18 MR. FORMAN: Where they use the oil in waste
 19 spots. So that's a lot of stuff that we're going to
 20 have to take care of. That's going to be a big project
 21 in the future here.
 22 MS. PENDERGRASS: Yes, sir. First back there
 23 and then we'll come back to you. Mr. --
 24 MR. RAO: Hi. Sudeep Rao. The question is
 25 sort of a follow-up question that was asked with regard

1 to the removal of the tanks. Even if we have not
 2 removed the tanks, are there any -- is there any liquid
 3 in the tanks?
 4 MR. WALDEN: No. The tanks were drained.
 5 MR. RAO: Okay. The second question is, you
 6 mentioned that -- the dense nonaqueous-phase liquids.
 7 Can you give an example? You mentioned chlorinated
 8 solvents.
 9 MR. WALDEN: Chlorinated solvents: TCE, PCE.
 10 MR. RAO: And what --? Those solvents are
 11 found anywhere --?
 12 MR. WALDEN: No. The solvent TCE is found --
 13 we do find it there, but it's not -- we haven't found
 14 the actual DNAPL, the actual product itself.
 15 MR. RAO: Okay.
 16 MR. WALDEN: We do look -- We do measure oils
 17 periodically looking for it.
 18 MR. RAO: Thank you.
 19 MS. PENDERGRASS: Okay. Mr. McGowan.
 20 MR. McGOWAN: Mike McGowan, RAB board member.
 21 Thank you, Mark, for that presentation. That
 22 was very interesting. I had a couple of questions.
 23 First, how well defined are the boundaries of
 24 those contaminated areas?
 25 MR. WALDEN: Okay. The -- They are fairly

1 well defined. We have these areas -- defined areas
 2 here, and we do have monitoring wells around these areas
 3 and all throughout the base that we do monitor
 4 periodically. We check to see any migration of the --
 5 of the plume.
 6 MR. McGOWAN: Thank you.
 7 And the second question: Do you have estimates
 8 of the quantities of solvents that you could put
 9 together with your estimates of flow rates, for example,
 10 to calculate how long it would take for all those things
 11 to flow out naturally?
 12 MR. WALDEN: I don't have calculations, but I
 13 can give you my opinion. The -- In this area, if it
 14 flows for, say, 3 feet per year -- and I think that's
 15 high. But if it flows 3 feet per year -- these plumes
 16 have been there for decades, let's say, 50 years -- then
 17 it would move 150 feet in those years.
 18 So this distance, it's pretty far, so I don't
 19 think it's reached the bay yet, and I think our
 20 monitoring has shown that.
 21 MR. FORMAN: I just -- If I could just add
 22 something. I think I know why Mike's asking that
 23 question. On all of these, you see how they have nice
 24 little neat circles and shapes and everything? That was
 25 just for the purposes of the presentation. That is not

1 the exact shape of the groundwater contaminants or the
 2 area that we call the groundwater plume.
 3 Obviously, that would be -- it would -- it
 4 would not be regular shaped like that. And those would
 5 be found in the groundwater documents.
 6 The reason why we put it out like this is just
 7 for him to be able to point to you to general areas
 8 where we -- you can see where we have all those points.
 9 Those are where the wells are, and it makes sense that
 10 the wells are where the contaminants are.
 11 So those are just general areas. They are not
 12 meant to represent the actual shape of the groundwater
 13 plume.
 14 MS. PENDERGRASS: Excellent.
 15 MR. McGOWAN: Thanks.
 16 MS. PENDERGRASS: All right. Do we have any
 17 more questions before we move on to our next
 18 presentation?
 19 All rightie, then. With great anticipation,
 20 Mr. Forman, are you going to do this one?
 21 MR. FORMAN: Well, Mr. Walden's starting off, I
 22 believe.
 23 MS. PENDERGRASS: All right. Very fine.
 24 MR. FORMAN: Yeah.
 25 Right or --?

1 MR. WALDEN: That's correct.
 2 MR. FORMAN: Okay.
 3 MS. PENDERGRASS: And you all are doing a
 4 fabulous job. But Mr. Walden, would you please give us
 5 a break with the little red pointer?
 6 MR. WALDEN: My pointer?
 7 MS. PENDERGRASS: Yes.
 8 MR. WALDEN: Oh, I'm sorry.
 9 MS. PENDERGRASS: You're a little bit -- Use
 10 it sparingly.
 11 MR. WALDEN: I will hand it to him.
 12 MS. PENDERGRASS: Okay. Thank you.
 13 MR. WALDEN: Okay. This next part of the
 14 presentation will cover the quarterly monitoring that we
 15 perform on the base regularly, and we'll also talk about
 16 remediation that has been done at the base and studies
 17 that have been done and some of our plans to be done in
 18 the near future.
 19 And at this point, I'd like to introduce Ed
 20 Kilduff of CE2 Corporation. He's the contractor that is
 21 actually performing the quarterly monitoring.
 22 MR. KILDUFF: Thanks, Mark.
 23 I want to go over the type of monitoring that
 24 we do out there every three months so you get an idea of
 25 how we do our jobs and the scope of what we do after

1 regulators.
 2 You can see here in these pictures an example
 3 of some of our staff and how they -- how they take
 4 water-level measurements. In this, John is taking a
 5 water-level measurement, using a water-level meter, to
 6 find the depth of the water.
 7 And you can see some of the dug-up areas that
 8 we've coordinated with Bill and other contractors on the
 9 site to make sure that we continue to gain access to the
 10 wells even though that there's a lot of activity at the
 11 site.
 12 I don't know about you, but, you know, I've
 13 been in business for a long time. When I think of a
 14 well, I still think of the old-fashioned well with a
 15 wooden bucket that goes down a big hole. And our wells
 16 look very difficult.
 17 This is an example of what a well looks like
 18 from the surface. It consists basically of a well pad
 19 and a locking well vault with a bolt that secures it.
 20 Now, if you were to open up that vault and look inside,
 21 essentially what you'd see is a pipe running into the
 22 ground. We have to dig a hole in order to insert that
 23 pipe in the ground.
 24 And this just shows a couple of examples of
 25 drill rigs drilling a couple of wells at Hunters Point.

1 three months.
 2 Next slide, please.
 3 So these are the presentation topics. I'll be
 4 covering the groundwater monitoring portion, an overview
 5 of our field techniques and how much data we collect;
 6 and also I'll include how we involve the community and
 7 YCD in our groundwater-monitoring program.
 8 This is an example, by the way, right here of
 9 two of our staff members taking a water-level
 10 measurement in one of the wells.
 11 Next slide.
 12 Hunters Point, the Shipyard, covers 420 acres,
 13 and in those 420 acres we measure groundwater levels in
 14 about 432 wells -- or exactly 432 wells. Now, measuring
 15 groundwater level tells us something about the flow,
 16 'cause groundwater will differ in various wells.
 17 So water will flow from areas of high water
 18 level to areas of low water level. We take samples in
 19 238 wells. That gives us an idea of the types of
 20 contaminants that we have. And we take other
 21 measurements as needed as well.
 22 We submit reports to the regulators every three
 23 months. So we take samples, and we take water-level
 24 measurements every three months; and when we assemble
 25 that data, we present that information to the

1 And this is a drill rig drilling outside, and this is a
 2 drill rig drilling in a building. So wells are
 3 scattered throughout the site both in buildings and in
 4 open areas.
 5 This is an example of what the well looks like
 6 if you were to look at a cross section. So this is the
 7 pipe in the ground. And the well basically consists of
 8 a pipe; and that has slots on the bottom, openings on
 9 the bottom, so that water can run into it.
 10 So water flows into the well through those
 11 slots, and we're able to take measurements and samples
 12 by accessing the pipe from the surface.
 13 Now, our goal in sampling a well is to obtain a
 14 fresh groundwater sample. We don't want to collect
 15 water that's sat in the well for a period of time. We
 16 want something that's representative of what's in the
 17 ground.
 18 So in order to get a fresh sample, we purge the
 19 well. That is, we take water and we pump some water out
 20 of the well in order to make sure we get water flowing
 21 in; and we get an example of the actual groundwater.
 22 When we are sure that we have got the
 23 representative -- aquifer water representative of water
 24 from the groundwater, we fill sample bottles, and we
 25 send the samples to a EPA-certified laboratory.

1 After we've done all that, secure the well, we
2 lock it back up again. We put the well vault on top.
3 Before we do that, we have a separate locking cap in the
4 well vault; so it's secured in two ways.

5 And then we decontaminate between wells. And
6 we have a process for measuring the level of the
7 groundwater as well.

8 I want to show you something. I brought a
9 little show-and-tell and actually want to get Keith and
10 Mark to help me with this. I'll show you how we -- an
11 instrument that we use in order to measure the
12 groundwater.

13 So here we have what's called a flow pipe, a
14 water-level meter. And what it has is: On the tip of
15 it, it has a sensor.

16 MS. PENDERGRASS: Can we turn the lights on? I
17 can't see a thing.

18 MR. WALDEN: Let me put this down for a second,
19 and I'll speak louder.

20 So we insert this down the well.

21 MR. MASON: Somebody hold the mic for him.

22 MR. KILDUFF: Thank you.

23 We insert this down the well, and on here
24 you're invited to come up and take a look at this
25 afterwards. We have a tape measure. And you know when

1 it hits the water because when it hits the water, this
2 thing beeps because this is in a little -- a little
3 electrical sensor.

4 So -- thank you, Mark -- here we have a well
5 and then turned on the meter, and I'm sticking it down
6 the well, and you can hear a beep. So I know that this
7 well is, oh, 100 feet deep definitely. It's more or
8 less. But that's how we tell -- that's how we take
9 water-level measurements.

10 MS. PENDERGRASS: Oh, that was fun.

11 MR. KILDUFF: I appreciate it. Thank you.

12 MS. PENDERGRASS: Fun. Fun. We like
13 show-and-tell.

14 MR. KILDUFF: Thanks a lot.

15 Now, I mention that we collect a lot of data.
16 We collect water-level measurements from 400-some-odd
17 wells. We collect samples for chemical analysis in
18 200-something wells.

19 Now, those 200-something wells result in
20 40,000 pieces of data that we collect every quarter and
21 that we report to the regulators every quarter.

22 And this is how the information flows:

23 So we take samples at the Shipyard.

24 We send those samples to the laboratory.

25 Now, after they come from the laboratory, they

1 go to a third-party data checker. They go to somebody
2 basically who looks at the laboratory data to make sure
3 that all the information coming back was analyzed
4 correctly.

5 After the data checker looks at it and confirms
6 that everything's right, he comes to us, and we write
7 our reports.

8 So the maps that you see over here, feel free
9 to come up and take a look at this afterwards as well,
10 which is a groundwater map showing the groundwater
11 levels and the flow. Those are part of our reports that
12 we submit. And we take those reports after they are
13 done, and we submit them to the regulators.

14 So this is the flow of information coming out
15 of our process, and that's the amount of data that we do
16 every quarter.

17 Next slide.

18 And the community is a really important part of
19 our field trip. They are an integral part of our field
20 trip. We use YCD staff; and frankly, they've just been
21 tremendous for us.

22 This is an example of some of our field crews
23 working and taking samples. This is Patsy who's from
24 YCD with Dan. This is an example of a crew's drilling a
25 rig inside a building. Again, there's Patsy, one of our

1 geologists, and again folks taking samples at one of the
2 wells; and that's Harry, I believe, and I think that's
3 an employee in the back.

4 But you can see the lab equipment that we use
5 to pump water out of the well, and they're sitting there
6 taking measurements as water's coming out of the well
7 from some of the real-time information that we get from
8 meters that are collected to.

9 But the point here is that the community and
10 YCD is a really important part of our field crew, and
11 they do a very good job.

12 Next.

13 And with that, I believe I'm turning this over
14 to Keith --

15 MR. FORMAN: Okay.

16 MR. KILDUFF: -- to discuss the remediation
17 that we do out of the Shipyard.

18 Thank you.

19 MR. FORMAN: Thank you. Great job. Thank you.

20 (Applause.)

21 MR. FORMAN: Okay. So next part of what we're
22 going to talk about is: When we monitor for
23 groundwater, in most of the places we monitor, it makes
24 sense that we wouldn't just be monitoring groundwater
25 that doesn't have contaminants. We know -- We have a

1 real good idea where the contaminants are in the
 2 groundwater.
 3 So the wells that we put in that you saw the
 4 pictures that he gave you of, those wells tend to be
 5 around the areas where we know that there's
 6 contaminants. That makes sense to -- so that we can
 7 measure them. Okay.
 8 So why are we measuring them? Well, for a
 9 couple of different reasons. We want to see with the
 10 groundwater flow if they are moving anywhere, and we
 11 call this migration, if they are migrating anywhere.
 12 They are contaminants.
 13 But we also want to check from quarter to
 14 quarter, every three months, what the concentration
 15 levels are.
 16 We also want to get a good handle on ultimately
 17 doing something about it, right? Because when we
 18 monitor, we're taking out -- we're making observations.
 19 The next step in that process is to actually
 20 clean up -- to figure out what we're going to do to
 21 clean up the contaminants that are at certain levels in
 22 the groundwater.
 23 Okay. Now, we call cleanup -- we give it a
 24 fancy name. It's called remediation. And some of the
 25 things that we do to remediate, we have tried different

1 know where there's contamination in a certain area, we
 2 will put in a new type of well called an injection
 3 well.
 4 Okay. So we have wells that we put in to
 5 monitor the groundwater, both the level of the
 6 groundwater and to be able to take samples to know what
 7 the levels of contaminants are.
 8 But we also put in special wells when we go out
 9 and do a study that could be, for instance, in this
 10 case, an injection well, okay, that we'll put in down to
 11 the depth where the contaminants are.
 12 And then we will inject things. We'll inject
 13 either special chemicals, or we'll inject certain other
 14 liquids that are meant to do things. Some of the things
 15 that we inject are meant to chemically break down a
 16 contaminant.
 17 Some of the things that we inject into the
 18 groundwater contaminants are things like lactic acid
 19 that the naturally occurring bacteria will feed on,
 20 okay, and then the population of the bacteria grow.
 21 And then when we cut off their food supply in
 22 the lactic acid, this big population of bacteria will
 23 eat the contaminants that are there on site.
 24 So you have naturally occurring bacteria
 25 naturally digesting the contaminants and breaking them

1 technologies on Hunters Point. And there's quite a
 2 variety of different ways to attack a contaminant
 3 depending on what the contaminant is and where it is and
 4 what the concentration levels of it are.
 5 What you don't know sometimes with these
 6 new-fangled technologies that have come around in the
 7 last 10, 15 years is: Sometimes they work very well on
 8 a site, and sometimes they don't. And a lot of that has
 9 to do with things like what is the nature of the rock
 10 beneath the ground surface? How fast does the
 11 groundwater flow? And how does the geology --
 12 right? -- the formations, interact with the groundwater
 13 itself at the site?
 14 So there's different characteristics to that,
 15 and that affects how well a certain technology may work
 16 on a contaminant.
 17 Also, some technologies work really, really
 18 fast, and some work very slowly. So at Hunters Point,
 19 we do things called treatability studies.
 20 And a treatability study is just going to a
 21 site and picking out a technology and then working with
 22 the regulators. We figure out what we want to do to see
 23 how effective a certain technology is on contaminants
 24 that are already in the groundwater. Okay?
 25 Some of the things we do is: We -- When we

1 down into less harmful chemicals. So we use kind of
 2 both approaches.
 3 Now, this is kind of a generalized figure
 4 here. You can see here's the surface. Here's the water
 5 table.
 6 Remember, the water table is the upper limit of
 7 where the groundwater is. So you've got -- and
 8 generally speaking, on Hunters Point, it will be about
 9 10 feet down below ground surface, okay, it'll hit the
 10 groundwater table. We'll put the injection well not
 11 right where the water table is but down into where the
 12 contaminants are.
 13 And then we will -- we will inject something.
 14 This could be -- this could be zero-valent iron that we
 15 use, little granules of iron.
 16 And we would mix it with something, a liquid or
 17 a gas, under pressure to form a slurry.
 18 And then we punch it down under pressure into
 19 the injection well and push it out into where the
 20 contaminants are.
 21 Now, this is known -- these kind of approaches
 22 are known as treating the contaminants when they are in
 23 place; and sometimes you hear that called in situ, which
 24 is the Latin for that, in situ cleanup, or remediation.
 25 And on our treatability studies, I'm going to

1 show you in different places across the base we have
 2 used different things and measured how effective they
 3 are at cleaning up the contaminants in place.

4 Next slide.

5 Okay. So here's some of the things again that
 6 we have done. We use something -- and if you've been on
 7 the RAB for very long and you've come to many RAB
 8 meetings, we've talked a lot -- in 2005 and 2006, we
 9 talked a lot about something called zero-valent iron
 10 injection.

11 And basically, it's these granules, these very,
 12 very fine granules, of iron, okay, that are mixed with a
 13 solution and then are put down into the ground. And
 14 what that iron does is, it very quickly breaks down the
 15 contaminants that we may have in a certain place.

16 Now, in our case, we have solvents that are in
 17 the groundwater that have -- that have spilled or leaked
 18 there, and a lot of those solvents have a lot of
 19 chlorine in them, chlorine atoms that are part of the
 20 solvent.

21 What this zero-valent iron does is, it's an
 22 expert at very quickly breaking down those solvents into
 23 other compounds that are a lot less toxic. And the way
 24 it does that is, it grabs certain molecules off -- or
 25 certain atoms off of the contaminate molecule and

1 changes it into a different compound and does this
 2 pretty quickly.

3 In most cases, we're treating things like TCE,
 4 which is just a chemical abbreviation for a type of
 5 solvent that we have out at the base a lot. And it also
 6 works on certain metals, such as chromium.

7 Now, another thing that we do is called
 8 bioremediation. And again, "remediation" being cleanup
 9 and "bio" meaning using a biological or a life source to
 10 do that. And again, when we do -- when we do this is,
 11 we feed.

12 We find a location on the base that has
 13 contaminants. We look at a picture of what it looks
 14 like under -- under the ground, the hydrogeology. We
 15 then determine, okay, there's a certain type of bacteria
 16 that lives there in this location.

17 What we plan to do is give it a supply to
 18 enhance the living environment under the ground. The
 19 bacteria will just grow great leaps and bounds. And
 20 when that bacteria grows in great leaps and bounds, it
 21 naturally finds things to eat under the ground. It eats
 22 certain chemicals.

23 When it does that, it breaks down these
 24 chemicals. It digests them and leaves other chemicals
 25 that are much less harmful in its place.

1 And this whole process is called
 2 bioremediation. It's been used across the country in
 3 many, many sites. And a lot of times it's very good.
 4 It works well. In some locations, it doesn't work
 5 well.

6 And what we try and do is -- you can think of
 7 these as little science experiments. These treatability
 8 studies we do help us determine how well this type of
 9 technology works. Okay.

10 Another thing we do, the third one that we
 11 won't dwell on tonight because it's pretty
 12 straightforward is just we remove things.

13 For instance, let's say you're underground; you
 14 hit the groundwater table, and there's groundwater,
 15 right, in a certain water-bearing zone. Sometimes
 16 you'll have a chemical, like Mark described, that floats
 17 on top of that water. The whole -- The oil may spill,
 18 but it's going to ride right on top of the groundwater.

19 We have certain sites at Hunters Point that are
 20 a lot like that. One of our obligations when we find
 21 that is -- is to remove that product up off of the water
 22 table, and that's what we do. We pump it and remove --
 23 remove the oil from the top of the groundwater.

24 Now, sometimes when you do that, the
 25 contaminants, the oil around that area, will move

1 slightly back into position. So you can come back to a
 2 well month after month after month and continue to
 3 remove the product off of the groundwater table.

4 Okay. Next slide.

5 Okay. On Parcel B, we've got a couple of
 6 different sites. And one of our sites is Site 10 here
 7 [indicating], and we inject a zero-valent iron.

8 In September 2003, we injected zero-valent iron
 9 into a plume. We had taken our groundwater measurements
 10 that Mark had talked about, and we had a certain
 11 contaminant, okay, certain solvent; and that solvent was
 12 at 610. This is -- this is a measurement of the
 13 concentration, was 610 parts per billion, okay?

14 We can't -- We injected several rounds of iron
 15 into that body of water. And then we measured it again
 16 this time in March of 2004, and it had -- it had come
 17 down to 123 parts per billion.

18 So you can see what happens. The levels of the
 19 contaminants come way down when you inject -- when you
 20 inject chemicals into the groundwater. And it's our job
 21 to then monitor that over time to see what happens and
 22 then to use the lessons that we learned from that on a
 23 larger scale on the base to do more cleanup.

24 Now, here's another unit -- here's another
 25 project. These sometimes have fancy names. This one's

1 called RU-C5, and that just means remedial unit in
 2 Parcel C, No. 5. And there we used bioremediation:
 3 again, the lactic acid I told you about that we push
 4 down into where the contaminants are in order to feed
 5 the bacteria that will then digest the compounds, the
 6 contaminants.

7 And here we can see again, and we did initially
 8 that in March of 2004. We had 32,600 parts per
 9 billion. And then by May of 2005, it had been reduced
 10 at that location down to 5,220 parts per billion.

11 And with many of these technologies, you'll
 12 tend to get a lot more improvement up front rather than
 13 over time, for these two in particular. But you still
 14 want to continue to monitor because you want to be able
 15 to see how effective that was at the site, and that
 16 takes time to know what levels you will eventually reach
 17 with that technology.

18 Okay. Next slide.

19 Okay. Now, a future field trip for the RAB
 20 members is going to be to Remedial Unit C -- in
 21 Parcel C, C1, where we're going to do some
 22 bioremediation, push some lactic acid down to where the
 23 bacteria are at and help them grow and digest the
 24 contaminants.

25 They have started building that whole setup:

1 always have that. You know, there's no 100 percent
 2 success rate. It's clear to say that that's been --
 3 that is a success story of ours, and that is what we are
 4 hoping to be able to duplicate at other sites on the
 5 base.

6 Okay. Next slide.

7 Okay. Now, there are some more future studies
 8 that we hope to do. This -- Those letters up there,
 9 "ZVI," again, is zero-valent iron, the iron that we use
 10 to push down into the contaminated area. There's a
 11 couple of different sites on the base.

12 This is in Parcel D where we have Site 9. And
 13 again, we have that TCE chlorinated solvents. And we
 14 have chromium, a metal; and zero-valent iron works very
 15 well on chromium as well. And we hope to -- we hope to
 16 study that at Site 9.

17 And then at Site 71, we have more chlorinated
 18 solvents in this area, and we hope to inject ZVI there.
 19 Now, when will that happen? Either later in 2007 or
 20 2000 -- early part of 2008 that will happen.

21 Okay. Next.

22 All right. So I want to summarize just a
 23 little bit of the program. The samples we collect are
 24 every three months on the base for the
 25 groundwater-monitoring program. It's a -- it's a

1 the piping system, the injection wells and everything.
 2 They started building that.

3 And when it is underway when we begin actually
 4 injecting it and are able to take measurements and see
 5 that actually something's happening down under the
 6 ground, this will be a good little site to visit. So
 7 we'll do a field trip sometime -- oh, probably late
 8 spring or summer -- out on the base. We'll get together
 9 and go on site, and you can actually talk to our
 10 contractor and see the site.

11 Another site, Remedial Unit C4, we used the
 12 zero-valent iron again. This one's one of our earlier
 13 attempts; and this is out, I believe, near
 14 Building 272.

15 In December we had 78,000 parts per billion.
 16 That was one of the highest levels we had on the base in
 17 a plume. And by September 2005, it actually had fallen
 18 down to 5 parts billion.

19 So you can see here a little more time has
 20 lapsed. We've injected the iron for multiple rounds of
 21 it. But you can see how that huge number has been
 22 brought down to something that's very manageable.

23 Okay. Now -- oh. One thing before I leave
 24 this slide. You can -- The takeaway from this, you can
 25 say, is: This has been very successful. And you won't

1 relatively large program where we collect 230 samples
 2 each quarter.

3 And that's a lot of data for everybody to pour
 4 over, and that's one of the jobs that the regulators and
 5 the Navy have is to take all this data in, to look at it
 6 and to make some sense of it. Young Community
 7 Developers, YCD, that -- the folks that we have hired
 8 from YCD have become a really important part of the team
 9 that we use for the groundwater monitoring that we do on
 10 the base.

11 We have done a lot of treatability studies,
 12 these experiments that -- where we use these types of
 13 technologies in Parcels B and C that I showed you; and
 14 we have some planned for Parcel D.

15 And eventually too we're going to look into
 16 using different technologies on Parcel E. The oily
 17 waste ponds that Mark told you about, that large site,
 18 that's going to be a very interesting site that we can
 19 all talk about this year into next year.

20 We've got to figure out how we're going to deal
 21 with that, and that turns out to be an interesting site
 22 in that there's no one technology that's screams out to
 23 anybody as the solution to the site. So we're going to
 24 have to look into maybe having an experiment, or a
 25 treatability study, that uses maybe more than one

1 technology; and we'll see how each of them works on
 2 different parts of the 5-acre site.
 3 And we may combine that with doing some
 4 excavations as well. We may have to just dig down and
 5 remove some of the product in some of the areas and then
 6 dispose of that -- of that oily waste and soil mixture.
 7 So stay tuned for that. That's going to be
 8 more and more interesting sites to work through.
 9 Okay? That should conclude my presentation.
 10 Very good.
 11 (Applause.)
 12 MS. PENDERGRASS: We have time for maybe one or
 13 two questions.
 14 MR. FORMAN: Sure.
 15 MS. PENDERGRASS: Yes, sir. We have one from
 16 the audience tonight and then Mr. McGowan.
 17 MR. RAO: Sudeep Rao.
 18 You mentioned about the treatability --
 19 treatability studies. Do we select from a preexisting
 20 list of technologies that are tested in the lab or
 21 pilot -- pilot studies, like such as EPA, or are these
 22 being done for the first time?
 23 MR. FORMAN: Oh, no. Good questions. There's
 24 different places you go to find out about these things.
 25 You go to industry fairs and conferences that they

1 have. The U.S. EPA has a great Web site. In fact, they
 2 have actually a study group for innovative technologies
 3 that are used. And we look at those, and then we try
 4 and figure out what is a good fit to the site.
 5 But the list -- it's interesting: These
 6 technologies, I -- you know, we call them innovative;
 7 and some people say, "Wow, cutting-edge technologies!"
 8 Well, the zero-valent iron and the bioremediation, using
 9 the lactic acid, those have been around 10 to 15 years;
 10 and there's many, many sites across the country that
 11 have used them.
 12 So we really haven't used a technology where we
 13 are anything like a guinea pig, you know, to see if it's
 14 going to work in the first place. We're just -- We're
 15 using technologies that in other places of the country
 16 seem to show good promise, and then we try and apply
 17 them to the base to see if they'll work here.
 18 MS. PENDERGRASS: Okay. Mr. Van Houten.
 19 MR. VAN HOUTEN: Yeah, just a basic question.
 20 It's probably answered many times.
 21 MR. FORMAN: Sure, Robert.
 22 MR. VAN HOUTEN: On -- We are talking about
 23 groundwater, and the concern for everybody is it going
 24 into the bay.
 25 What are --? Are there wells right along the

1 shoreline that you're testing, or how do you test that
 2 you don't -- that we know that it's not going into the
 3 bay, or is there a way of doing that?
 4 MR. FORMAN: Sure. There's two things. There
 5 are -- On Parcel B, we have a Record of Decision, and
 6 so we are further along in Parcel B. In Parcel B, we
 7 have a whole series of sentinel wells that are placed
 8 between the leading edge of a contaminant and the bay in
 9 various locations. In other places of the base, we
 10 either have that, or we have wells that bound where the
 11 contaminants are.
 12 So during investigations we found where the
 13 contaminants are, and then the idea is to strategically
 14 place wells around the leading edge of the contaminant.
 15 We call that bounding it. And the location that you
 16 most want to bound a contaminant is downstream, right,
 17 where the groundwater's flowing, which, as you know now,
 18 is to the bay.
 19 So you want to catch that leading edge, and you
 20 ideally want to have wells that are somewhere between
 21 that edge and the shore.
 22 And that is one of your -- You hit on a good
 23 point. That's one of the -- most important things
 24 that -- where we need to protect. It's not the only
 25 thing because the contaminants in the groundwater also

1 have to undergo risk assessments for people that may one
 2 day occupy a building on top of that contaminant or
 3 where the contaminant used to be. So that's a concern
 4 too.
 5 But one of our primary concerns is indeed
 6 tracking, monitoring a contaminant, and figuring out
 7 where it is between, you know, the source and the bay
 8 itself.
 9 MS. PENDERGRASS: I have to stop questions now
 10 so we can move on because we do have a couple things
 11 that we need to cover before we are over today.
 12 So Mr. Tompkins --
 13 DR. TOMPKINS: Quick --
 14 MS. PENDERGRASS: Dr. Tompkins --
 15 DR. TOMPKINS: -- clarity.
 16 MS. PENDERGRASS: -- just --
 17 DR. TOMPKINS: Quick.
 18 MS. PENDERGRASS: "Quick."
 19 DR. TOMPKINS: Keith --
 20 MR. FORMAN: Yes.
 21 DR. TOMPKINS: -- in the Tech Committee dealing
 22 with the process that you talked about from Australia,
 23 that is something that you are doing on this scale for
 24 the first time, in terms of modifying your response to
 25 the other gentleman's question. Isn't that a first time

1 here in the U.S. for the PCBs?

2 MR. FORMAN: Oh. Yeah. That's -- There is
3 something that we've talked about, that's right -- very
4 good -- called MCD, mechanochemical destruction. That
5 isn't with groundwater, though. That's on a soil site.
6 That's with -- There's these chemicals called PCBs,
7 right, which are heat exchangers that are used in
8 industry a lot.

9 PCBs in soil samples, we have worked with a New
10 Zealand company that has developed a technology that has
11 proven very successful in New Zealand. Hasn't been used
12 much in the United States, if at all, yet.

13 And -- But that's -- Ray, thanks for bringing
14 it up. That's on a different scale. That's really more
15 of a bench scale test where we have taken very small
16 samples of that PCB soil and taken it into a room and
17 use their technology on it for that company to figure
18 out more about how effective that would be. Yeah.

19 So that is -- and that is -- you're right, that
20 is an example where we truly are using cutting-edge
21 technology, but we've got a long way to go before we
22 could really use that to clean up the base anywhere.

23 MS. PENDERGRASS: Thank you -- thank you so
24 much with that.

25 MR. FORMAN: Sure.

1 hope to be in the Bay View newspaper -- to set up an
2 article ranging from 800 to 1,000 words.

3 Once we do our testing -- our first experiment
4 in detect -- technicalization of material that we are
5 working at in reviewing, we hope, then, to approach the
6 Asian newspaper as well, be culturally sensitive, as we
7 address -- as we write our articles so that we could
8 have everybody understand what it is we're trying to do
9 to review what the Navy is doing and our opinion, is it
10 the best technology available as well, and be objective
11 in the whole process.

12 I'm very confident and very pleased to have
13 such a scholar retained and have another colleague as
14 well on the Board that has different perspectives on the
15 issues. Nobody knows it all. And the more working at
16 it, all we can do is come up with a better product.

17 And my passion and concern -- I'm not here to
18 run a popularity contest or to win it. My objective is
19 to see that the best science is practiced and we do the
20 best job possible here for Bayview and so nobody's short
21 in the process. My interest is in environmental justice
22 for this community and for the City and County of San
23 Francisco.

24 We would like very much to, one, with the TAG
25 grant as well to get the information that we need

1 MS. PENDERGRASS: We need to move on,
2 Dr. Tompkins, to your TAG grant update; and if you could
3 be brief on that, great.

4 Can you give him the microphone? Thank you.

5 DR. TOMPKINS: Thank you.

6 To the Board members, fortunately, a lot of our
7 members have left, and this is a prime example of why I
8 want the business report -- these committee reports to
9 be done at the beginning of the meeting 'cause chair of
10 the Tech Committee is absent. Our community chair,
11 other co-chair, is absent.

12 I understand people have other lives. I'm
13 sick, hanging in here. But it would be a better
14 practice -- this is example -- if we would have done our
15 business at the beginning of this meeting rather than
16 defer it 'cause some issues cannot be addressed at this
17 time.

18 As to an update for the TAG grant, one, we are
19 moving along. I'm -- We have three -- Three of my
20 colleagues are a part. We also have African-American
21 female, a geologist; she is former department chair of
22 geology Dr. Lisa White. You haven't met. She's also
23 the associate dean of graduate studies at San Francisco
24 State University.

25 We are going forward -- in the next month, we

1 readily available. One, we want to work on the
2 amendment of the ROD, get the material. Get it in CD
3 form, Keith, rather than going to the library so that it
4 will be a little easier on the -- Dr. Palmer and the
5 team.

6 Also, I'd like information concerning dust
7 control. I'd like -- For example, on the different
8 sites on the base where the monitor was in place, I'd
9 like to get the data and the print-outs of that so we
10 can review that as well as we look at dust remediation.

11 Also, one other update. In March we haven't
12 set the date yet, but we would be working on doing a
13 community outreach with the community with Arc Ecology
14 and -- CFC and Arc Ecology. We are trying to work out
15 and coordinate the dates.

16 Also, Arc Ecology will be holding a meeting, I
17 believe, on the tentative date 10th of March at their
18 office dealing with dust control, but that will only be
19 on Parcel A, not parcel -- the other part. And we'll be
20 there.

21 But our TAG grant and people and their time, if
22 they attend, will be totally free, 'cause our grant,
23 again, must only deal with the remediation and the
24 property of -- naval property and not the City and
25 County. But some of us as concerned citizens, these --

1 the gentlemen, men and women have already done it in
 2 several hours of their own personal time in looking at
 3 issues of the community, 'cause it is interrelated, and
 4 you just can't separate it, but yet because of the
 5 purposes of the grant we do.

6 I'll end that at this point.

7 Gregg, is there any other information you'd
 8 like to . . . ?

9 MR. GRIST: I'm Gregg Grist. I'm one of the
 10 technical advisers of the TAG grant. And actually,
 11 there was something in the minutes; I noticed I was
 12 addressed as Dr. Gregg Grist, and I appreciate that.
 13 Thank you very much. However, I have not received a
 14 Ph.D. I'm not a doctor, although some may think I play
 15 one at times. B.S. physicist, and I have a master's
 16 degree in environmental engineering. I teach physics.

17 But I just wanted to clarify that and just to
 18 report that Dr. Palmer and I have now with the
 19 assistance of Mr. Forman and two different site visits
 20 where we've been going and looking at the Shipyard and
 21 toured around and looked at a variety of the sites and
 22 getting a good lay of the land so that we understand
 23 what we're looking at as we go through the
 24 documentation, and we are in the process of obtaining
 25 and we're doing documentation as well.

1 But I just kind of wanted you guys to know
 2 where we're at in this, and it's a bit of a slow process
 3 for us to start. But, you know, we are hitting
 4 milestones here, and we are getting assistance.

5 Thank you.

6 MS. PENDERGRASS: All right, then. If we can
 7 move on to our subcommittee reports for the Economic
 8 Subcommittee.

9 Mr. Mason, did you . . . ?

10 MR. MASON: If you -- If you've got the
 11 economic report, you could see how -- you know, we had
 12 an excellent crowd. We had an excellent crowd. It was
 13 really awesome. We had quite a few truckers down
 14 there. But at the same time, we had some very good
 15 information that came down the line too.

16 It looks like the community is going to get
 17 involved with some of the projects that are coming up.
 18 Very excited about that. ITSI is in the Shipyard
 19 again. Miguel Galarza is going to be working with the
 20 community. Tetra Tech Rob -- Bob -- Bill Dougherty is
 21 going to be working with the community. We are very
 22 excited about that.

23 And the test is how we are going to react. Are
 24 we going to do a good job? Yes, we are.

25 So we're really excited about this. But at the

1 same time, we did have some comments too about some of
 2 the contractors need to start looking at some other
 3 areas, you know, sponsoring some of the people in the
 4 community about technical jobs, and we see that Tetra
 5 Tech is doing that already. You know, we got some --
 6 we're watching these people down on the job. I think
 7 James Morrison added that in.

8 And we had some issues about the dust control.
 9 Ray just mentioned that Arc Ecology is having a workshop
 10 on March the 10th about Parcel A's dust control. So --

11 MS. PENDERGRASS: Okay.

12 MR. MASON: -- if you can make it there, please
 13 do.

14 MS. PENDERGRASS: All right.

15 MR. MASON: We will provide lunch for people
 16 also, you know.

17 We had a workshop on the part -- pollution of
 18 the parklands, and I didn't see anybody from the Navy
 19 there. I didn't see anybody from some of the other
 20 organizations. They didn't come. We built up the
 21 auditorium with fliers when the mayor was here. So I
 22 thought that we would have some people there. But all
 23 in all, we had a good economic meeting.

24 The next one is going to be on the 15th of
 25 March at 6 p.m., and we are excited about it. Maybe we

1 can talk about something else other than trucking if you
 2 come and decide to bring some other information --

3 MS. PENDERGRASS: All right.

4 MR. MASON: -- or some other concerns.

5 MS. PENDERGRASS: Thank you --

6 MR. MASON: Thank you.

7 MS. PENDERGRASS: -- sir.

8 All right. The Technical Committee?

9 MR. MASON: Oh, can I say one thing else?

10 MS. PENDERGRASS: Hmm-mm. Of course.

11 MR. MASON: And if you look at the sheet, you
 12 can see that I sent in my report in September. It was
 13 on line. I sent it to Carolyn.

14 So those that thought that I wasn't doing my
 15 reports and my minutes and keeping up with the agenda,
 16 well, you see I did.

17 MS. PENDERGRASS: Mr. Mason, thank you so much
 18 for those written reports.

19 Technical Committee. So is Barbara --?

20 MR. FORMAN: Barbara was feeling ill, and she
 21 needed to leave.

22 MS. PENDERGRASS: Well, we'll have to vote on
 23 that --

24 DR. TOMPKINS: Hold on. I do have a minority.

25 MS. PENDERGRASS: Do you have a written --?

1 Her reports are submitted written? Yes.
 2 DR. TOMPKINS: No. I have an issue to address
 3 on the -- dealing with the Technical Committee. And I
 4 regret that Barbara's not here, but I like to go on the
 5 record expressing my concerns.
 6 As I passed out to the members of the RAB
 7 board, this is document that the Navy has put forth a
 8 while back before I hired the TA.s in terms of what are
 9 the documents.
 10 And I do have a problem with our presentations
 11 in the agenda items that are being selected for the
 12 Technical Committee and for the general RAB as well in
 13 that we have a responsibility as a board to make public
 14 recommendations to the Navy on issues, for example, the
 15 amendment to the ROD on Parcel B.
 16 When I was acting as a chair during Barbara's
 17 illness, and -- there's a public comment period, and we
 18 haven't addressed that in any in-depth analysis here at
 19 the Tech Committee nor here at the Board. And I'd like
 20 that a closer coordination between the documents that
 21 have scheduled and if the Navy could please update, make
 22 amendments in terms of where it's coming up in 2007 so
 23 that our items that we have on the Board and the Tech
 24 Committee are related to the public opinion times that
 25 we have to present, our opinions and our views, so that

1 the Tech Committee can make recommendations.
 2 It's been past practice with Shirley and with
 3 Lea and myself as the former chairs of the Tech
 4 Committee that we presented written documents and our
 5 recommendations to the Board, and either the Board voted
 6 on that and then took public in terms of our view.
 7 That hasn't occurred. I'd like that
 8 coordination of this so that our -- that we can be on
 9 record in terms of community's opinion on what these
 10 particular issues where we stand on the amendment of the
 11 ROD. I've seen Tom's; we've seen Mr. Kein Chao [sic]
 12 from Arc Ecology. But yet none has come from the
 13 Board. We have not --
 14 It's been past practice that this board reviews
 15 the material, evaluates it, and then go on record and
 16 makes a recommendation to the Navy. That's why I'm
 17 asking for a coordination of this.
 18 Some of these things may be off a while before
 19 it comes up, and we need to prioritize these, and that's
 20 what I'm asking for a full coordination of these,
 21 because sometimes --
 22 For example, the PCB, we have had that twice
 23 presented at the Tech Committee and that that is a
 24 feasibility study. We have not addressed the amendment
 25 to the ROD. We had not had enough time really to

1 discuss dust control issues. I'm very concerned.
 2 I'm glad that I attended Jesse's Technical
 3 Committee -- I mean the Economic Committee. There's a
 4 contract coming up. They are going to be moving
 5 several --
 6 Mr. Keith, how many tons will they be moving of
 7 dirt that is scheduled in six-month period by the
 8 truckers? Rough estimate just for Board's knowledge.
 9 MR. PEARCE: Just about 35,000 yards, under the
 10 latest contract coming up.
 11 DR. TOMPKINS: And how many --? Convert that
 12 into tons so I can get an idea of --
 13 MR. FORMAN: Okay. There's roughly 15 cubic
 14 yards to a truckload.
 15 MS. PENDERGRASS: But your point -- your
 16 point --?
 17 DR. TOMPKINS: My point is, there's going to be
 18 a lot of dust being kicked up by this action that hadn't
 19 come up if I wasn't in the economic session. I'm
 20 concerned about dust control as to present to the
 21 Board.
 22 When Dr. Palmer and I did air studies back in
 23 '89, the children at Carver Elementary School, the
 24 first-graders, 55 percent of the babies were asthmatic.
 25 Now it's up to 85 percent. By stricter and stronger

1 dust-control regulations, we don't have to see the
 2 children suffer.
 3 MS. PENDERGRASS: Right.
 4 DR. TOMPKINS: And it's like -- hold on. It --
 5 Let me finish. That's why I wanted this earlier.
 6 That the same standards -- when they have the
 7 earthquake in '89 and they had to use the marina, those
 8 trucks weren't filthy. They were washed. They were
 9 clean. I want the same standards here in
 10 Bayview-Hunters Point.
 11 I don't need to drive on that base or see the
 12 bus with a cloud of dust coming behind. I want the same
 13 standards as they have on the marina here for Bayview.
 14 And we have truckers; we have companies that can clean
 15 them, wash them, and do a better job.
 16 And I'd like them to close coordination again
 17 on the men -- on these issues that we need to address
 18 and with the Board.
 19 MS. PENDERGRASS: With that, I just want to
 20 add, before we close, I have just a couple comments to
 21 address to Dr. Tompkins and the rest of the Board.
 22 One is the -- I commend the passion that's
 23 being exhibited here because I know that the intention
 24 here is to do the best job that we possibly can in
 25 making sure that our governmental agencies and

1 regulators do their job in cleaning up Hunters Point
2 Shipyard so that the rest of our generations to come
3 will have a safe place to be. That's the goal here.
4 That's why we have been sitting here for the number of
5 years that we are.

6 But to that point, just for civility, the way
7 we conduct the RAB meetings is that we do have a
8 once-a-month two-hour meeting where we conduct the
9 business of the RAB in presenting the findings;
10 presenting the actual activities that are going on to
11 the larger community during that two-hour session.

12 Now, the rest of the time the subcommittee
13 structure is in place to talk about, review, understand
14 better, and make recommendations that are brought up to
15 the full board. This is not the meeting to discuss and
16 fact-find during this two-hour session.

17 So with that, your comment around that having
18 the business or subcommittee reports moved earlier is
19 not in the interest of this particular body in that what
20 it does do is takes up the time that we need to be
21 focusing on the activities and reporting -- reports from
22 the Navy on what they are actually doing.

23 We need to -- and I'm saying we as a
24 community need to take that information back, digest it,
25 talk about it, and make recommendations to the Navy in

1 advance about what you'd like to see.

2 Now, for example, this part about the members
3 being inducted first and all of that, that could have
4 easily been handled without the 15-minute delay by
5 asking our co-chair, who is the -- on the RAB board, to
6 move that up yesterday. This is no big deal. But to do
7 it at the meeting causes a vote and all of that which
8 takes up valuable time.

9 And I'm just trying to respect the people who
10 take the two hours out of their day and the audience to
11 come in and hear about the cleanup. So I just want to
12 make sure that we're all playing by the same rules so
13 that everyone has the opportunity to provide their
14 input.

15 The input in terms of the TAG grant,
16 Dr. Tompkins, you're absolutely right, we need some
17 technical digesting and deciphering of all of these
18 documents; and you all are doing a great job of that.

19 And we look forward to having reports on what
20 your overall summaries are. And if you could get those
21 in writing so people can read them in plain English will
22 make the world much better for us, I think the newspaper
23 articles and all of that.

24 Now, I don't need a comment or a rebuttal to
25 that. Really, all we need to do now is make sure that

1 we're -- we are moving on in a timely fashion here
2 tonight. I know you're going to have to have something
3 to say. Go ahead, Dr. Tompkins.

4 DR. TOMPKINS: It's nothing negative. No --

5 MS. PENDERGRASS: I'm not trying to be
6 negative, and I'm not trying to be defensive. I'm just
7 trying to make sure that everyone else understands
8 what's going on in how we operate because it sounds like
9 we are trying to not answer you, and that's indeed not
10 the case.

11 DR. TOMPKINS: What I -- The thrust of my
12 emphasis on this matter is that, one, I need
13 presentations and at the -- here and at the Technical
14 Committee coincide with our responsibilities to review
15 this [indicating], as you said, in a timely manner and
16 coordinate it. It's disjointed at this point.

17 MS. PENDERGRASS: You are in control of that
18 with your --

19 DR. TOMPKINS: No, I'm not.

20 MS. PENDERGRASS: -- co-chair as well as the
21 Technical Committee chair.

22 DR. TOMPKINS: That's why --

23 MS. PENDERGRASS: That's something you need to
24 work out. You need to work that out off line. That's
25 not full board business.

1 Anything else at this point? We are running
2 long, but we have people in the audience that would like
3 to say something, and Carolyn is just dying.

4 MS. HUNTER: Barbara and Keith wanted me to
5 mention that our next Membership and Technical
6 Subcommittee is going to be on March 8th; and if you are
7 interested, the meeting minutes from the January meeting
8 and the February meeting are out there.

9 So that's it.

10 MS. PENDERGRASS: Any questions from the
11 audience maybe that didn't get answered here tonight?

12 Yes, sir.

13 MR. POWELL: Moving right along. Questions for
14 the gentleman from the Navy. Talking about the meeting,
15 bio- -- bioremediation?

16 MR. FORMAN: Yes, sir, yes.

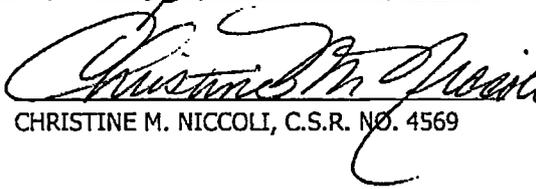
17 MR. POWELL: Bacteria goes into the wells and I
18 believe you said also about iron going in the wells?

19 MR. FORMAN: Well, yeah, the stuff that the
20 bacteria loves to eat and then grows really quickly goes
21 into the injection wells. The bacteria is actually down
22 in the soil. It's naturally occurring in the -- in
23 the --

24 MR. POWELL: Okay. Then what happens to the
25 bacteria injected into the soil afterwards? Does that

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1 remain in the soil or what?
 2 MR. FORMAN: The back -- okay. The bacteria --
 3 the bacteria is fed and clumped up, and the population
 4 grows big from the -- from what's injected there.
 5 MR. POWELL: Yeah.
 6 MR. FORMAN: Okay? And then all of those have
 7 to continue to eat, and then we cut off the supply of
 8 that lactic acid.
 9 MR. POWELL: Okay.
 10 MR. FORMAN: So instead of eating the lactic
 11 acid, which is like sugar to it, it eats the
 12 contaminants. And then after it eats and continues to
 13 grow for a while and after it's finished digesting the
 14 contaminants, that colony of bacteria then dies. So
 15 it's --
 16 MS. PENDERGRASS: So then we have dead bacteria
 17 land.
 18 MR. FORMAN: We do, indeed.
 19 MS. PENDERGRASS: Well, with that, thank you so
 20 much for that question. We are adjourned tonight.
 21 DR. TOMPKINS: Oh, excuse me. He asked also
 22 about the iron.
 23 MS. PENDERGRASS: Talking about --
 24 DR. TOMPKINS: He asked about the iron as well
 25 as the bacteria. That was only one part.

1 CERTIFICATE OF REPORTER
 2
 3 I, CHRISTINE M. NICCOLI, Certified Shorthand
 4 Reporter of the State of California, do hereby certify
 5 that the foregoing meeting was reported by me
 6 stenographically to the best of my ability at the time
 7 and place aforementioned.
 8 IN WITNESS WHEREOF, I have hereunto set my hand
 9 this 10th day of April, 2007.
 10
 11 
 12 CHRISTINE M. NICCOLI, C.S.R. NO. 4569
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1 MR. FORMAN: Oh, okay. The iron? When the
 2 iron goes into the ground, chemical reactions result;
 3 and it takes the chlorinated solvents, the cleaning --
 4 the solvents, the contaminants that have chlorine atoms,
 5 and it strips the chlorine atoms off the contaminants,
 6 making a new contaminant or a new compound, and it
 7 continues down this process in a transition. It takes
 8 time to do that.
 9 And eventually you end up with a pretty
 10 harmless compound, ethane and with some oxygen and some
 11 more water.
 12 MR. PEARCE: And the iron.
 13 MR. FORMAN: And the iron stays resident to the
 14 ground.
 15 MS. PENDERGRASS: Okay. Thank you so much.
 16 We are adjourned tonight.
 17 (Off record at 8:07 p.m., 2/22/07.)
 18 ---oOo---
 19
 20
 21
 22
 23
 24
 25

April 11, 2007

Diane Silva
SWDIV Records Manager
Administrative Record (Code EVR)
NAVFACENGCOM Southwest
1220 Pacific Highway
San Diego, CA 92132

Subject: Hunters Point Shipyard Information Repository/Administrative Record
Submittals – Contract No. N68711-03-D-5106, CTO-016

Dear Ms. Silva,

Enclosed are three copies of the following documents for submittal to the Hunters Point Shipyard Information Repository/Administrative Record:

- Final September 28, 2006 Restoration Advisory Board Meeting Minutes
- Final September 28, 2006 Restoration Advisory Board Meeting Transcript
- Final October 26, 2006 Restoration Advisory Board Meeting Minutes
- Final October 26, 2006 Restoration Advisory Board Meeting Transcript
- Final December 7, 2006 Restoration Advisory Board Meeting Minutes
- Final December 7, 2006 Restoration Advisory Board Meeting Transcript
- Final January 25, 2007 Restoration Advisory Board Meeting Minutes
- Final January 25, 2007 Restoration Advisory Board Meeting Transcript
- Final February 22, 2007 Restoration Advisory Board Meeting Minutes
- Final February 22, 2007 Restoration Advisory Board Meeting Transcript

Please feel free to contact me or Angela Williams (Community Relations Specialist – angelawilliams@bai.cc) if you have any questions.

Thank you,



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