

RAB Meeting No. 54 - Transcript of Proceedings - March 16, 1999

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 2 NAVAL STATION TREASURE ISLAND
 3 ENVIRONMENTAL RESTORATION ADVISORY BOARD MEETING
 4 16 MARCH 1999
 5 7:00 P.M.
 6 CASA DE LA VISTA
 7 TREASURE ISLAND
 8 MEETING NO. 54
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 13 TRANSCRIPT OF PROCEEDINGS
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 20 REPORTED BY: STEPHEN BALBONI, CSR NO. 7139

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1 COMMUNITY MEMBERS (Continued):
 2 PAUL HEHN (Community Co-Chair)
 3 ALICE LA PIERRE
 4 CLINTON LOFTMAN
 5 PATRICIA NELSON

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1 A T T E N D E E S
 2 U.S. NAVY:
 3 ERNIE GALANG (RPM)
 4 JAMES B. SULLIVAN (BEC and Navy Co-Chair)
 5 SAN FRANCISCO MAYOR'S OFFICE:
 6 MARTHA WALTERS (TI Facilities Manager)
 7 TETRA TECH EM, INC.:
 8 EDWARD HO
 9 RICHARD KNAPP
 10 MARCIE RASH
 11 CINDI ROSE
 12 JERRY WICKHAM
 13 REGULATORY AGENCY:
 14 DAVID RIST (DTSC)
 15 GUTIERREZ-PALMENBERG, INC. (GPI)
 16 BARRY ROBBINS
 17 MARIA VILLAFUERTE
 18 COMMUNITY MEMBERS:
 19 NATHAN BRENNAN
 20 RICHARD HANSEN

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1 CO-CHAIR SULLIVAN: Well, welcome to our
 2 March '99 Restoration Advisory Board meeting. In
 3 fact, I can remember last March's meeting. It just
 4 doesn't seem that long ago. I think it was St.
 5 Patrick's Day.
 6 There are copies of the agenda in the back,
 7 if you don't otherwise have them.
 8 So our first item, is there any discussion
 9 on tonight's agenda?
 10 We went through the draft of the agenda at
 11 the community member interim meeting two weeks ago,
 12 and then updated it to basically what you see tonight.
 13 So there being no comment on the agenda, we
 14 will move into the public comment period. And if
 15 there are members of the general public present, this
 16 would be an opportunity for them to speak on issues
 17 related to the cleanup program at Treasure Island.
 18 But I don't see any members of the general
 19 public here tonight.
 20 We also have kind of used this time for any

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1 announcements that people want to make up ahead of
2 time, but we also have an announcement period later in
3 the meeting. But if there was a need to have an
4 announcement early in the meeting, this would be an
5 opportunity to do that, too.

6 CO-CHAIR HEHN: I would like to make a
7 comment or statement on that.

8 I would just like you to know, back on the
9 back table, there are copies of the comments that I
10 made for the Site 12 removal action, both for the lead
11 contamination and the petroleum hydrocarbon
12 contamination, and a copy of a statement that I
13 presented in front of the Treasure Island
14 Redevelopment Authority last week just expressing our
15 interest in having a seat on the Citizens Advisory
16 Committee.

17 And also a draft version of the address list
18 with addresses, phone numbers, fax numbers, E-mails,
19 as up-to-date as I have it available at this point. I
20 would really appreciate it if everybody would take a

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1 copy of that, including members of the regulatory
2 community and people from the Navy, whatever, to look
3 at that and make any changes, additions, add an
4 address to that, E-mail, or any other phone number
5 change that you can. I would like to try to get that
6 up-to-date as much as possible before the next
7 meeting.

8 So thank you.

9 CO-CHAIR SULLIVAN: Yes. I would like to
10 put in a plug, too.

11 Paul put in quite a bit of work on this,
12 because he had to draw from several sources. So the
13 information he had was not all in one place.

14 So the only way we can have a good
15 up-to-date list is if people will look at it and
16 update it if they have changes.

17 So I think it will be very useful for
18 everyone to keep in contact with each other.

19 Also, I probably made light of the fact
20 there weren't many members of the general public here,

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1 and I really shouldn't have.

2 I want to point out, this is a public
3 meeting. However, we probably have had some
4 difficulty in spreading the word, and I think that's
5 something that we do need to keep in mind and how fast
6 we can put out the word about the Treasure Island RAB.

7 I think it will probably come easier once
8 there are residents on the island, but we shouldn't
9 just rely on that.

10 I know that there has been discussion at the
11 last one or two meetings concerning a RAB newsletter,
12 and that would be one way of putting out the word as
13 some other RABs have done.

14 But I think we do, both the Navy and other
15 members of the RAB, have an obligation to try to
16 spread the word about the Treasure Island RAB as best
17 we can, and, hopefully, encourage members of the
18 general public, in addition to the regular RAB members
19 to attend our meetings.

20 We certainly would like to see as many

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1 people here as possible. I don't think we will run
2 out of chairs in the near future, at least in this
3 building.

4 Our next item is discussion and approval of
5 the February '99 meeting minutes. There is also
6 additional copies of those meeting minutes out in the
7 back table, if you need them.

8 So I will open the floor to any comments
9 regarding the February, the draft February minutes.

10 Yes, David.

11 MR. RIST: On page 2, under the 19, January
12 1999 minutes, the last part of the first sentence
13 should read: Cal-EPA DTSC, instead of California.

14 And then on page 6, one, two, three, four,
15 the fourth paragraph, the third line, it's not clear.
16 It just says, "He added that cubic hundred yards would
17 be excavated." I don't know if that should have a
18 several hundred cubic yards, or how that should read.
19 but that should be changed.

20 CO-CHAIR SULLIVAN: Okay. We can check that

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1 against the transcript.
2 MR. RIST: And then the last one is on page
3 7, the third paragraph.
4 The third sentence that says: "Mr. Hoe
5 replied that roll out beds will be utilized," and I
6 think that should be "roll off bins."
7 (Laughter.)
8 CO-CHAIR SULLIVAN: We were just testing
9 you.
10 That's one of those things a spell checker
11 won't catch.
12 MS. WALTERS: That's right. It won't.
13 MR. RIST: That's all.
14 CO-CHAIR HEHN: I have a change on page 10.
15 Third paragraph down. Actually, two changes on that.
16 About the third sentence or second sentence
17 in, it says, instead of "bay marshes," that should be
18 "bay margin," on this section right here (indicating).
19 And just down below that, two lines down, it
20 should be "in a lower profile" instead of "in a less

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1 profile area."
2 And then on page 12 -- well, actually, never
3 mind.
4 CO-CHAIR SULLIVAN: Okay. Are there any
5 other comments?
6 (No response.)
7 CO-CHAIR SULLIVAN: There being no other
8 comments, is there a move to accept the February
9 minutes as amended?
10 MR. HANSEN: I so move.
11 CO-CHAIR SULLIVAN: Second?
12 CO-CHAIR HEHN: Second.
13 CO-CHAIR SULLIVAN: All in favor?
14 The February minutes are approved as
15 amended.
16 The next item, we offer time for a
17 representative from the City of San Francisco to
18 update us on city programs.
19 MS. WALTERS: Well, a couple of issues.
20 I just want to reiterate that the new marina

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1 developer is Treasure Island Enterprises. Some
2 members of the city staff, including myself, met with
3 Treasure Island Enterprises and their attorneys, I
4 guess it was, a week-and-a-half ago. We discussed
5 sort of the, actually, I gave them an overview of the
6 environmental conditions of the whole marina area.
7 They were very concerned about the timing of
8 the investigation and subsequent cleanup of the area.
9 So this is going to be an ongoing issue
10 concerning that area.
11 Also, yesterday afternoon, Jim was in
12 attendance with this meeting with myself, along with
13 Assistant Secretary Cassidy from the Navy. During
14 that meeting, it was announced that John Stewart
15 Company and the Navy have signed a lease agreement for
16 the housing area. That means that the whole area will
17 be available for housing.
18 Richard, I know, I didn't bring the Treasure
19 Island Development Authority minutes.
20 MR. HANSEN: You didn't?

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1 MS. WALTERS: My fault.
2 Do you have them?
3 CO-CHAIR HEHN: I brought some.
4 MS. WALTERS: Great.
5 MR. HANSEN: I was going to say thank you
6 for this.
7 MS. WALTERS: I spaced out. Thank Paul.
8 Also, I just want to let you guys know, I
9 will be leaving this position come June, probably, it
10 looks like the time I will be leaving my position with
11 Treasure Island.
12 John Chester, who is from the Department of
13 Public Works, will be my replacement. John is a very
14 able and competent person. I will be introducing him
15 at various meetings. Hopefully, he will be back here
16 at the April RAB meeting, and, ultimately, be able to
17 meet him. He's terrific.
18 So I want to start bringing him on board and
19 make the transition as smooth as possible.
20 So if you have any questions of John, feel

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1 free. He's a very friendly and open guy.
2 CO-CHAIR HEHN: Where was he from again?
3 MS. WALTERS: Department of Public Works.
4 He works for Steve Moledeck (phonetic).
5 MR. HANSEN: Can we ask where you're going?
6 MS. WALTERS: I will remain on the agency.
7 I'm just going to be working on other projects.
8 MR. HANSEN: So you will be around and
9 sharing?
10 MS. WALTERS: Sure.
11 I want to make this transition as smooth as
12 possible. That's why I want to make it a couple of
13 months in advance so it's really easy and, hopefully,
14 not cumbersome at all.
15 That's it.
16 CO-CHAIR SULLIVAN: Okay. Thank you.
17 MS. WALTERS: Yes.
18 CO-CHAIR SULLIVAN: As we move into the BRAC
19 cleanup process, our first item -- well, actually, I
20 spaced out.

13

1 We wanted to make a change to the order and
2 put the discussion of the presentation on the FSAP
3 first. One of our presenters has another commitment.
4 So with your indulgence, I would like to go
5 ahead and take the 8:20 item, "Draft Field Sampling
6 Analysis Plan," and go ahead and make a presentation
7 on that first.
8 And then we will follow that up with the
9 onshore or the offshore and then the draft fuel line.
10 MS. WALTERS: Great.
11 CO-CHAIR SULLIVAN: So with that, I will
12 introduce Tetrattech to make the presentation.
13 MS. RASH: So my name is Marcie Rash. I'm
14 with Tetrattech.
15 I have handouts for this presentation up on
16 the front table, if you didn't get them already.
17 Tell me if I'm not speaking loud enough,
18 because I feel very far away from you guys.
19 So I'm going to talk to you today about the
20 additional sampling that we're going to be doing at

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1 the Corrective Action Plan sites. These include
2 04/19, 06, 14/22, 15, 16, 20 and 25.
3 If you're not familiar with the locations of
4 these sites, they are pretty much on the perimeter of
5 the island, except for 20.
6 CO-CHAIR SULLIVAN: These were all IR sites
7 that we moved from the CERCLA program to the petroleum
8 program.
9 MS. RASH: A little bit of overview, if some
10 of you are not familiar -- most of you probably are --
11 the Corrective Action Plan sites are sites that have
12 petroleum contamination only.
13 There was a draft CAP report that was issued
14 on September 12, 1997. And in that draft CAP, it
15 identified areas of concern at each of these sites.
16 And, then, also, the reports have been
17 delayed because of further site characterization that
18 probably needs to be performed after each of these
19 sites.
20 So that is the purpose of this field

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1 sampling analysis plan and additional sampling.
2 We issued the draft FSAP on March 2, 1999.
3 So the objective: In general, the source
4 and type of contaminants and AOCs present at each of
5 the CAP sites have been identified in previous
6 investigations and/or further defined in the CAP.
7 So our sampling objective for the FSAP is,
8 for each of these sites, we want to address further
9 sampling, if it's required, to fulfill any data gaps
10 that currently exist for the sites, meaning vertical
11 or lateral extent of TPH in the soil or groundwater.
12 We are also incorporating, we are evaluating
13 the data according to close screening criteria, and
14 that is 447 milligrams per kilogram for soil, and 1.4
15 milligrams per liter for water.
16 So we did a data gap analysis on the CAP
17 report.
18 And we also kind of looked back at the
19 background information on historical operations;
20 hydrogeologic and geologic information; data from

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1 previous investigations; and then we will be
2 incorporating the data collected from the field effort
3 for additional sampling.

4 And we will compare all that data, the
5 analytical data, to the screening criteria that we
6 proposed.

7 And then we will also, for contaminants, TPH
8 related to contaminants that don't have a screening
9 criteria, we will, for example, MTBE and BTEX, we will
10 compare it to TPH extractables, if they are detected,
11 at a similar location, soil and groundwater.

12 So in our data gap analysis, we determined
13 further characterization required if:

14 TPH concentrations are greater than the
15 proposed screening criteria in soil or groundwater.

16 And then if TPH is not vertically or
17 laterally delineated at any one location.

18 So to give you an example of what we did at
19 a particular site -- we did this for every site -- we
20 chose Site 20 to give you an example of how we

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1 evaluated to determine where we need to do additional
2 sampling.

3 Site 20, if you aren't familiar with it
4 already, it is an auto hobby and transportation
5 center.

6 Waste fluids were generated from steam
7 cleaning and degreasing of vehicles. Storage of drums
8 containing hydraulic fluid, recycled oil, and other
9 fluids. It also operated as a gas station and four
10 USTs.

11 Those USTs were removed in 1998.

12 And they performed a soil excavation in a
13 former UST area in 1990.

14 Site specific example. Subsurface soil is
15 artificial fill composed predominantly of fine- to
16 course-grained silty sand.

17 Groundwater encountered is 0.76 and 3.21
18 feet below ground surface.

19 The groundwater flow is to the shoreline and
20 is not tidally influenced.

18

1 So the first AOC is the groundwater of
2 concern.

3 The data revealed from the CAP and previous
4 investigations:

5 TPH gas and diesel at concentrations above
6 the proposed screening criteria.

7 The higher concentrations are localized near
8 the northern portion of the site in the UST excavation
9 area.

10 Most of the sampling locations are
11 downgradient of the UST excavation area.

12 The contaminated soil in excavation area is
13 believed to be the source of the contamination of the
14 groundwater.

15 TPH concentrations as high as 30 and 100
16 milligrams per liter are found near the northern site
17 boundary.

18 The TPH is delineated by the lesser
19 concentrations to the west, east and south directions
20 but not to the north.

19

1 Here's the map of the site (indicating).

2 You will probably not see it too well.

3 But here's the boundary (indicating).

4 And this is the northern boundary I'm
5 talking about (indicating).

6 Right here is excavation (indicating).

7 Here's where they removed the USTs in the
8 soil (indicating).

9 So I said that most of the sampling points
10 are at a downgradient location predominantly here, and
11 they are at lesser concentrations than up in this area
12 (indicating).

13 Here's a high hit of TPH here (indicating).

14 So with that data gap analysis, we propose
15 to use some additional sampling, actually, the
16 installation of two monitoring wells in that northern
17 area.

18 We will collect groundwater samples and have
19 them analyzed for TPH purgeables and TPH extractables.

20 And then we also intend to do further

20

1 monitoring of the locations as part of the monitoring
2 program.
3 So to show you the site figure again, the
4 proposed locations are right here (indicating).
5 Moving onto the soil AOCs: Four of them
6 were identified in the CAP.
7 And then we identified a potential AOC
8 located in between the former USTs as part of the
9 analysis.
10 Here's a site map of the soil concentrations
11 and AOCs (indicating). This is AOC-1, AOC-2, AOC-3,
12 AOC-4.
13 And, again, here's the excavation area
14 (indicating).
15 And this is the potential AOC where we
16 collected data there (indicating).
17 So physical characteristics of this second
18 AOC with regard to the draft FSAP is that there is
19 shallow soil samples containing TPH up to 25,000
20 milligrams per kilogram.

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1 Most of the nearby subsurface sample
2 locations contain TPH concentrations below the
3 screening criteria.
4 So the lateral extent is delineated to the
5 east and west but not to the north and south. This is
6 just a surface problem.
7 So for the proposed data gap analysis for
8 sampling, we proposed two borings to determine the
9 lateral extent to the north and south.
10 We chose to sample intervals of 0.5 to 1 and
11 2.5 to 3.
12 (Overhead light burns out on projector.)
13 MS. RASH: And then TPH extractable
14 analysis.
15 So to wrap-up, basically, the basic sampling
16 procedures that we outlined in the draft FSAP, is that
17 we pretty much structured and addressed the DQOs
18 according to those.
19 All the sample collection handling and
20 analysis will follow documented guidance and standard

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1 procedures already performed through the CAP.
2 The decontamination procedures will follow
3 the standards as well.
4 And as well, the QA/QC procedures will
5 follow the documented standards in the FSAP and QAPP.
6 And conclusions: We are expecting to start
7 field work in mid May, providing all the review goes
8 through smoothly and quickly.
9 Once we get results and once we complete the
10 sampling, we will document the results in a technical
11 memorandum.
12 Those results will feed into the CAP. And
13 then the CAP will get from the draft final to the
14 final.
15 So the whole task is expected to be complete
16 by mid-October.
17 One thing I just realized I neglected to
18 say, we are going to do more sampling rounds at each
19 of these sites to be sure that we are stepping out to
20 get the vertical and lateral delineation.

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1 So we will perform the first round, look at
2 the results, and then evaluate whether we need to step
3 out again or not.
4 We propose to do that for about three rounds
5 for the characterization.
6 Any questions?
7 MR. BRENNAN: So the two borings could
8 really end up being more?
9 MS. RASH: I'm sorry, what?
10 MR. BRENNAN: You say you're going to do two
11 borings to determine the north and south lateral
12 extent.
13 MS. RASH: Yes.
14 MR. BRENNAN: But you will keep stepping out
15 until you find that --
16 MS. RASH: Yes. We couldn't quite
17 predict --
18 MR. BRENNAN: If you could determine two
19 borings that would do it, I mean, you don't have to
20 it if you're that good.

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1 So we will step out if the results show
2 that's not --
3 MS. RASH: Yes, in those two directions.
4 MS. NELSON: I don't recall you mentioning
5 the -- and I apologize for coming in late -- the BTEX,
6 wasn't it the volatiles, the concentration of
7 gasoline?
8 MS. RASH: Yes, the correlation. It's sort
9 of related. BTEX and MTBE, we don't have criteria for
10 right now.
11 MS. NELSON: Benzene is a carcinogen, so are
12 you going to evaluate, at least in the soil and
13 groundwater?
14 MS. RASH: We are. I'm sorry. I didn't
15 make that clear.
16 Some of the sites that have had BTEX or MTBE
17 at the site, as defined in the CAP, we will be
18 sampling for that, too.
19 MS. NELSON: Okay. I didn't hear that.
20 MS. RASH: That's a good question.

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1 MS. NELSON: It wasn't specified.
2 MS. RASH: I focused on TPH, but some of the
3 sites, we will sample for BTEX and MTBE.
4 MS. NELSON: And the sampling plan, have you
5 addressed the RAB comments that we submitted 18 months
6 or so ago?
7 CO-CHAIR HEHN: Or more.
8 MS. NELSON: Yes, I think it was more.
9 MS. RASH: On the CAP?
10 MS. NELSON: Yes, the CAP site.
11 CO-CHAIR HEHN: A lot of them were in the IR
12 program.
13 MS. NELSON: A lot of them were in the IR.
14 MR. HO: Pat, those should be addressed, all
15 those comments, with the gathering of the additional
16 information.
17 MS. NELSON: So do you have that tabulated
18 in writing how they address the RAB comments?
19 MR. HO: No, but the information gathered
20 from this investigative effort will be incorporated

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1 into the draft final CAP.
2 At that time, we will be addressing the
3 comments comprehensively and making the necessary
4 modifications to the CAP in the draft final version.
5 MS. NELSON: It seems to me that we had
6 submitted comments on the CAP report, and I haven't
7 seen how those have been responded to.
8 It would be nice to know how they have been
9 reflected in the sampling plan.
10 MR. HO: Well, as I said, this will address
11 the ones related to the gathering of additional data.
12 CO-CHAIR SULLIVAN: And I think what we need
13 to do is take the RAB comments and both the CAP and
14 the RI and pull out the synopsized comments, to pull
15 out the comments and then address how we will document
16 them.
17 MR. HO: Okay.
18 CO-CHAIR SULLIVAN: So that would just be
19 another additional exercise, but it would help the RAB
20 members see more clearly where their comments have

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1 been evaluated.
2 MS. NELSON: And where you're sampling for
3 other constituents.
4 MS. RASH: Petroleum.
5 MS. NELSON: Other comments address the lack
6 of analysis of further chemicals.
7 CO-CHAIR SULLIVAN: Correct me on this,
8 Ernie, but because we are out of the CERCLA realm and
9 into the petroleum realm, there isn't the necessarily
10 formal response to comments that you had in the CERCLA
11 program, right or wrong?
12 MR. GALANG: Yes, but to try to respond in
13 the draft final CAP.
14 This investigation is part of developing the
15 draft final CAP, so that will be the one that's due in
16 October.
17 CO-CHAIR SULLIVAN: But I think the comments
18 have been made to such an extent over a period of time
19 in two different forms of the RI and the draft CAP,
20 that I think it would be worthwhile for everybody to

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1 pull out those comments and see how we incorporated
2 them.

3 MS. NELSON: I think it would be helpful
4 because I think some of our comments related to the
5 fact that some of these now CAP sites should not have
6 been pulled in the CERCLA program and, probably,
7 additional analysis should be evaluated at various
8 sites.

9 CO-CHAIR HEHN: I'm ready to go back and
10 look at comments now, because I don't recall Site 20.
11 It's been a long time.

12 MS. NELSON: It's been a while.

13 CO-CHAIR SULLIVAN: Let's go ahead and do
14 that because that will be helpful to everybody, both
15 the RAB members and the other -- both the community
16 members and the other RAB members to see how the RAB
17 comments have been addressed.

18 MS. NELSON: The only other comment, for
19 instance, is lead in fuels for the petroleum sites.
20 Are we analyzing for that?

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1 MS. RASH: The current plan, no.

2 CO-CHAIR HEHN: Same concern about BTE
3 sampling on the same sites. There wasn't a sampling
4 on these sites for BTE, partly because of the way they
5 were sampled, too.

6 I have a couple of questions about a couple
7 of your slides, too:

8 There was one where you talked about the
9 USTs that were removed. Was the soil excavation in
10 '90 and the USTs were removed in '98? Or was it the
11 other way around? That was confusing.

12 MS. RASH: I thought the USTs were removed
13 first and then the soil excavation came later.

14 CO-CHAIR HEHN: That's what I was wondering
15 about.

16 MS. RASH: Oh, I'm sorry.

17 CO-CHAIR HEHN: Were they reversed?

18 MS. RASH: I don't know if you have the
19 dates completely wrong.

20 I think it was. I think it was 1988.

30

1 Sorry about that.

2 CO-CHAIR HEHN: Okay. They talk about the
3 additional sampling later on. I have the same
4 concerns as Pat, to include BTEX and MTBE, because of
5 the nature of it. It was fairly long. There could be
6 MTBE issues at that time.

7 MS. RASH: Right.

8 CO-CHAIR HEHN: Part of the sampling would
9 suggest --

10 MS. RASH: Well, it is part of the sampling
11 program or plan for some of the sites that have
12 already been sampled for those two.

13 CO-CHAIR HEHN: Well, has it already been
14 sampled?

15 MS. RASH: It was. It had a previous
16 history.

17 CO-CHAIR HEHN: I guess what I'm saying is,
18 have we eliminated that from possible problems at some
19 of these sites because we sampled them previously, or
20 there is no history of it so we haven't sampled?

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1 MS. RASH: The latter.

2 CO-CHAIR HEHN: I would suggest that you
3 might want to do at least a few spot checks on that,
4 because over the history of time, there could be a
5 variety of things at the sites, MTBE or whatever.

6 The last thing I had a question about, how
7 will you do the sampling in rounds? Are you going to
8 send the stuff into the lab?

9 MS. RASH: Actually, we were going to
10 procure a quick turnaround analysis. I think we have
11 an estimated 48-hour turn.

12 But in the schedule that I briefly discussed
13 at the end, it's pretty much a five-day turnaround, as
14 far as the analysis and getting it into the database
15 and evaluating it.

16 So there will be a week window of going out
17 there, or going out to the second round; does that
18 answer your question?

19 CO-CHAIR HEHN: Yes.

20 Have you considered mobile outfits?

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1 MS. RASH: No. We didn't do that in our
2 planning stages.
3 Originally, we didn't think it was going to
4 be a lot of sampling at the sites, and we are still
5 not sure if we are going to have second and third
6 rounds.
7 CO-CHAIR HEHN: How many samplings are you
8 anticipating?
9 MS. RASH: Good question.
10 Actually, here. I have the report here. So
11 let me look at the table real quick.
12 I think it's about 200 soil samples, I
13 believe. I could get you the specific numbers.
14 The totals are tabulated for site. The
15 total numbers of samples in soil and groundwater are
16 tabulated per site.
17 CO-CHAIR HEHN: Thank you.
18 MS. RASH: Anyone else? Thanks.
19 CO-CHAIR SULLIVAN: Thank you.
20 Our next item is actually a two-parter on

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1 the offshore RI report.
2 We have the draft final offshore operable
3 unit report, which is going to be sent out later this
4 week or the beginning of next week, and then also
5 where we've begun working on the draft FS. And so we
6 wanted to brief you on the draft final RI, which will
7 be coming out shortly, and where we are going with the
8 FS.
9 So we have Cindi Rose here tonight, who is
10 the project manager.
11 MS. ROSE: I put some handouts in the back.
12 Well, I'm Cindi Rose. I'm the project
13 manager for offshore sediments operable unit, and
14 tonight I'm going to be talking to you about the draft
15 final report and what's new in the draft final report.
16 The focus of the talk will be on the food
17 chain modeling that we conducted to assess the risk to
18 avian receptors.
19 However, I did want to touch briefly that we
20 did do additional statistical evaluation to help

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1 determine the relationship between the amphipod
2 toxicity and the chemical and physical factors,
3 because we did observe some amphipod toxicity which
4 was discussed in the draft report.
5 So, basically, we did additional
6 correlations using the Spearman rank.
7 We looked at individual metals compared to
8 toxicity, and individual metals and brain size.
9 And then we also did a discriminate
10 functional analysis to determine if amphipod, if
11 toxicity would be grouped into a toxic group and a
12 nontoxic group. What we used was 68 percent survival
13 to try to group them.
14 And, secondly, the discriminant functional
15 analysis was to try to determine what contributed most
16 to toxicity.
17 So overall, the results of this
18 evaluation -- I'm discussing all of this in this one
19 slide, all of this additional evaluation -- but
20 overall, the results supported what we found, the

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1 conclusion that we presented in the draft RI, that
2 there is a strong relationship between brain size and
3 toxicity, and also that there is a relationship
4 between metals and toxicity.
5 However, the metals that contributed the
6 most to this toxicity were copper, nickel, chromium
7 and arsenic, and of those, the concentrations only
8 exceeded ambient, at ambient sediment concentrations
9 at two locations, and that was for nickel.
10 So metals that are below ambient San
11 Francisco Bay ambient concentrations appear to be
12 contributing some to the toxicity.
13 So the rest of the talk will be on the food
14 chain modeling.
15 And so how did we do the food chain
16 modeling? What we did is compare the toxicity
17 reference value, which is a reference value to a site
18 specific and calculated hazard quotient.
19 The hazard quotient allow us to estimate the
20 risk to specific receptors at TI.

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1 So the equation is HQ equals dose over TRV.
2 So the site specific chemicals and
3 receptors, based on the evaluation of the data in the
4 draft report, we came up with, we did food chain
5 modeling in Areas C, D and E, and these areas were
6 selected because that's where there appeared to be a
7 complete pathway.
8 We had shallow water habitat and beach
9 areas.
10 Areas A -- let's see -- A, B and G are
11 deeper water, and there is not a complete pathway for
12 the sediment to your avian receptors.
13 We modeled all chemicals for which the
14 toxicity reference values are available, which
15 included metals, pesticides, PCBs and TPHs.
16 And then we selected representative species,
17 which were chosen to represent the different feeding.
18 The black crested cormorant is a piscivorous bird. It
19 feeds on fish.
20 The willet, it feeds from the sediment on

1 the beach areas.
2 And then the Peregrine falcon, which is a
3 threatened and endangered species, and a higher
4 trophic level than the other two.
5 So the Peregrine feeds on the shorebirds.
6 So it will feed on the land.
7 So the next slide, just to briefly explain,
8 what is a TRV. A TRV is a reference value that
9 represents a chemical concentration when ingested by a
10 bird or a mammal in the laboratory causing an adverse
11 effect. So it's just TRV.
12 And so TRV and their receptor and chemicals,
13 who are specific, so we have a TRV or birds, and birds
14 and lead.
15 And then we have two types of TRVs. We have
16 a high TRV and a low TRV.
17 The high TRV is a level at which some
18 adverse effects have been observed to occur in
19 laboratory studies.
20 In a low TRV, it's a level at which no

1 adverse effect has occurred in any of the studies that
2 we looked at.
3 So then we calculated site specific dose. I
4 guess it's probably, if you look at your handout, it
5 would probably be the easiest, but the dose equals --
6 I'm using lead and the willet as an example in this
7 slide -- so the dose equals the amount of lead in the
8 prey; times the amount of prey that the willet eats
9 per day; plus the amount of lead in the sediment;
10 times the amount of lead that the willet would have
11 incidental ingestion of sediment, the amount of
12 sediment that the willet would ingest while feeding;
13 times the amount of time the willet spends eating at
14 the site. And all of this is over the willet body
15 weight.
16 So we did that for each of the three
17 receptors for each chemical of ecological concern, for
18 which a TRV was available.
19 Okay. So then we calculated two types of
20 doses, the high dose and a low dose.

1 The high dose, it uses conservative
2 assumptions. We use the highest ingestion rate and
3 the lowest body rate found in the literature.
4 The low dose uses more an average for lower
5 ingestion rates and higher body weight.
6 So, for instance, the high dose would be a
7 small willet that eats at only one sample location
8 with the highest concentration of lead.
9 And the low dose would be an average size
10 willet that doesn't necessarily eat the whole time at
11 the site, or at the high concentration area. It
12 doesn't get such a high dose.
13 Now we have two types of TRVs and two doses.
14 We are going to calculate some hazard quotients now.
15 The HQ1 is a low dose over a high TRV. This
16 is the worst case scenario, so you have your low dose
17 and the high TRV. That indicates risk.
18 And then HQ2 is a more conservative
19 assumption. It's a more conservative calculation.
20 It's a high dose over your low TRV.

1 And this is your best case. You want to
2 have an HQ2 less than 1, an HQ1 less than 1.
3 So, okay. This next slide, I tried to
4 indicate that the high dose over the low dose, if you
5 have an HQ2 less than 1, you're in the safe zone.
6 If you have an HQ2 greater than 1, you're in
7 the uncertainty zone.
8 And then for the low dose, if your HQ1 is
9 greater than 1, you're in the risk zone. Less than 1,
10 you're in the uncertainty zone.
11 And where we felt at TI was the safe zone
12 and in the uncertainty zone, nothing fell into the
13 risk zone at all.
14 So, now, we need to refine the uncertainty
15 zone. And we calculated the HQ3 to do this. We have
16 at which is a high dose over a high TRV. So an HQ3
17 greater than 1 indicates that, well, there is probable
18 risk. HQ3 less than 1 indicates there is a potential
19 for risk, but it is not probable.
20 So, now, the results of the food chain

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1 analysis, based on the conservative assumptions, the
2 high dose with low TRV, there is a potential but not
3 probable risk to the commorant and the willet from
4 copper, lead and nickel.
5 Given the results of that, we went and we
6 looked at our concentrations in sediment.
7 For copper and nickel, everything was, we
8 are below ambient in sediment.
9 For lead, we were just a little bit above
10 ambient in Area E; in Areas C and D, we were also
11 below ambient.
12 So if you're below ambient sediment
13 concentrations, it means that your receptor is not
14 getting any incremental risk from feeding at your site
15 that it would from just feeding in the bay in general.
16 There is no risk to that receptor from activities that
17 were conducted at Treasure Island.
18 And then another thing is that copper, it
19 was below ambient as well, but, also, it naturally
20 bioaccumulates in crab tissue as an essential

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1 nutrient.
2 So the concentrations of copper in tissue
3 were due primarily to it being an essential nutrient,
4 and it was within the range of what would be expected
5 in tissue.
6 So the incremental risk to the Peregrine
7 resulting from exposure to lead and mercury in Area E
8 sediment may exist if the conservative assumptions are
9 true.
10 We did see HQ3 greater than 1 for lead and
11 mercury in two locations for the Peregrine.
12 However, we didn't have shorebird tissue for
13 the Peregrine, so this is even more of a conservative
14 estimate of risk just because we are modeling from, we
15 are not modeling directly to the Peregrine. We are
16 using the food chain model for the willet preying on
17 the invertebrates to come up with our daily dose.
18 It's a pretty conservative estimate. The
19 dose is calculated from the sample location with the
20 highest sediment concentration and multiplied by an

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1 exposure time of 180 days to come up with the daily
2 dose. So it's pretty conservative.
3 The overall conclusions of the RI based on
4 this information that was evaluated, chemical
5 concentrations do not pose enough of a risk to aquatic
6 and avian receptors to require action. Therefore, no
7 further investigation or action is recommended for any
8 of the offshore areas at TI.
9 That's it.
10 Any questions?
11 MR. BRENNAN: I think when we originally had
12 the study, we questioned whether the ambient was a --
13 how was that selected?
14 MS. ROSE: The ambient is, the Water Board
15 came out with these ambient values in April of 1990.
16 MR. BRENNAN: This isn't that, whatever port
17 that was?
18 MS. NELSON: BTAG or the . . .
19 CO-CHAIR SULLIVAN: Paradise Cove.
20 MS. ROSE: That was used as a reference by

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1 the Paradise Cove.
2 MR. BRENNAN: Okay. So that's the reference
3 site. That's not the ambient.
4 MS. ROSE: That's not the ambient sediment,
5 no.
6 MR. BRENNAN: So you guys came up with the
7 ambient?
8 MR. RIST: No. The Water Board.
9 MS. WALTERS: The Water Board did.
10 MR. BRENNAN: Okay.
11 MS. NELSON: Somebody did.
12 MR. BRENNAN: Somebody did.
13 MR. RIST: The Water Board.
14 MS. WALTERS: The Water Board.
15 CO-CHAIR HEHN: So it's bay wide.
16 MS. ROSE: Bay wide.
17 CO-CHAIR HEHN: It's not TI specific.
18 MS. ROSE: No, bay wide.
19 CO-CHAIR HEHN: One question: One of the
20 things that was originally questioned in the original

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1 offshore was the mortality rates of . . .
2 MS. ROSE: The amphipods?
3 CO-CHAIR HEHN: The amphipods? Was it the
4 sea urchins, also?
5 MS. ROSE: Those were due to laboratory
6 problems with ammonia then.
7 CO-CHAIR HEHN: They were not sampled again?
8 MS. ROSE: They were not sampled again.
9 That's a problem, A recurring problem with
10 that type of bioassay.
11 So to run them again, to have the same type
12 of problem, the method is not really refined for that
13 to occur then.
14 CO-CHAIR HEHN: The survival rate you got
15 this time for the amphipods was acceptable to the
16 regional board.
17 MS. ROSE: We didn't do amphipods.
18 We did more statistical evaluation to try to
19 come up with just a link between the toxicity and
20 either sediment or physical factors.

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1 CO-CHAIR HEHN: So the survivability of the
2 amphipod was the same as originally?
3 MS. ROSE: Yes.
4 MS. NELSON: There was some comprehensive
5 problems in the offshore. I will give Chris Shirley a
6 call.
7 MS. ROSE: Well, I think we addressed all of
8 the comments that we received, and they will also be
9 included as part of the RAP.
10 MS. NELSON: To include the comments such as
11 this?
12 MS. ROSE: Yes. They would be the written
13 comments that were responded to.
14 MS. NELSON: I recall making comments at
15 meetings such as this and asking them to be
16 transcribed.
17 MS. ROSE: Uh-huh.
18 MS. NELSON: In addition to doing the
19 sampling.
20 MS. LA PIERRE: In your equation that you

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1 gave, the hazard quotient, I didn't notice any
2 indication of how this was calculated over time. And
3 then you said the exposure time was carried out over
4 180 days?
5 MS. ROSE: It's milligrams per kilogram per
6 day.
7 MS. LA PIERRE: Per day, okay.
8 MS. ROSE: And then we estimated the willet
9 body weight based on a feeding time of 180 days at the
10 site, because we didn't have willet tissue. So we had
11 to come up with, we had to model. We had to come up
12 with an estimate of the concentration in the shorebird
13 to model up to the Peregrine.
14 MS. LA PIERRE: All right. So you had no
15 actual willets to sample from?
16 MS. ROSE: No. What we had for tissue, we
17 had clams, crabs, fish.
18 MS. LA PIERRE: So rather than the actual
19 willet, you chose what they would feed off of?
20 MS. ROSE: Yes.

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1 MS. LA PIERRE: Okay.
2 MS. ROSE: We didn't have any willet fish.
3 So we modeled up from the invertebrates.
4 MS. LA PIERRE: Okay. Got it. Thank you.
5 CO-CHAIR SULLIVAN: You started some work,
6 but I think we need to be clear to the RAB how our
7 work in the FS dovetails with the fact that we are
8 reaching the conclusion in the draft final offshore.
9 MS. ROSE: Yes. Ed is working on the FS, I
10 think.
11 Do you want to address that, Ed?
12 MR. HO: Yes.
13 There is the preliminary draft version of
14 the FS being prepared currently. It's a little too
15 early to say what the recommendation will be at this
16 point, but it will probably be in harmony with the RI.
17 CO-CHAIR SULLIVAN: Okay. Well, thank you
18 very much.
19 So the document should be either . . .
20 MS. ROSE: Friday.

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1 CO-CHAIR SULLIVAN: Friday.
2 MS. ROSE: Yes.
3 CO-CHAIR SULLIVAN: So the members of the
4 technical review committee should be receiving it
5 sometime in the early part of next week.
6 MR. BRENNAN: Can I get a copy of that? I
7 would like to see the follow-up on that.
8 CO-CHAIR SULLIVAN: You would like to get a
9 copy of it?
10 MR. BRENNAN: Of this one.
11 CO-CHAIR SULLIVAN: Yes.
12 Cindi, we need to make sure that Nathan's
13 name is on the shipping list.
14 MS. ROSE: For a total copy?
15 MR. BRENNAN: Yes. Thank you.
16 MS. ROSE: Okay.
17 CO-CHAIR SULLIVAN: And for now that's just
18 the offshore.
19 MR. BRENNAN: Just for this one.
20 MS. ROSE: Okay.

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1 CO-CHAIR SULLIVAN: Not for all the
2 documents.
3 And, of course, we always have a standing
4 offer for any RAB member who would like to receive any
5 document is welcome to do so, but we automatically
6 send copies to the technical subcommittee, and then,
7 like Nathan has pointed out, they can also have a
8 copy, too.
9 CO-CHAIR SULLIVAN: All right. We are
10 actually right on schedule. It's almost precisely
11 8:00.
12 So we can take a short break and we will do
13 our final cleanup process on the draft fuel line work
14 plan.
15 (Short break)
16 CO-CHAIR SULLIVAN: Okay. I think we are
17 ready to get going again.
18 Actually, once again, we are about right on
19 time, so I would like to introduce Ed Ho.
20 We kind of went a little bit out of order in

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1 the original agenda, but now that we have done the
2 additional field sampling for the CAP sites and the
3 draft offshore reports, now Ed is going to discuss the
4 fuel line investigation work plan.
5 MR. HO: The fuel line program is basically
6 moving in parallel with the CAP program. There are a
7 lot of TPH related activities going on at TI right
8 now, and this is sort of a parallel track to the CAP.
9 But I will get into that more when we get into the
10 presentation.
11 CO-CHAIR SULLIVAN: Maybe I will just
12 mention briefly, the fuel line was not originally part
13 of the RI program.
14 It started, we did the removals of the fuel
15 line a couple of years after the time that we had
16 started the remedial investigation on the IR sites,
17 and we do have some cases where the fuel lines are
18 going through IR sites. In that case, we are
19 generally incorporating those as part of that IR site.
20 So the focus here is more on sections of the

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1 fuel line which lie outside of sites that we had
2 previously, that we were investigating under other
3 programs.

4 MR. HO: Right. Thank you.

5 The first slide, I left handouts on your
6 desk, discuss the project scope, where this fits into
7 all the TPH programs going on at TI right now.

8 The first bullet, there is the background
9 and previous actions. Back in '94, there was an
10 investigation done by subsurface consultants on the
11 fuel line specifically.

12 The data gathered during that investigation
13 led the Navy to the removal action which was conducted
14 between '97 and '98, and that was performed by Cal,
15 Inc.

16 There is a report in draft form on that
17 removal, and the data from both of those efforts
18 provide the foundation for this investigative effort.

19 The purpose of the fuel line remedial
20 investigation is, essentially, to complete the

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1 characterization of the fuel line contamination,
2 because, again, the first two actions listed there
3 didn't completely characterize the contamination
4 associated with the fuel lines. This endeavors to do
5 just that.

6 And once it's completed, the data generated
7 from this investigation will be used in the fuel line
8 CAP, which is, again, similar to the CAP being
9 prepared at the CAP sites, and then that will be used
10 to perform remedial actions for the fuel line sites.

11 And methodology is the next slide. For
12 doing this, it's again similar to that which Marcie
13 described earlier this evening:

14 First, we identify data gaps. These -- you
15 probably can't really see this -- but it shows the
16 fuel lines that were removed back in '97 and '98.

17 In process of this removal, whenever the
18 trenches were open, they looked for any staining on
19 the trench walls, and that information is incorporated
20 into this.

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1 And, also, there was sampling performed at
2 regular intervals along the fuel line. In any
3 location where the concentration exceeded 447,
4 additional investigation will be performed.

5 MS. NELSON: Is that drawing available to
6 the RAB or can it be made available?

7 MR. HO: It will be made available.

8 CO-CHAIR SULLIVAN: As part of the work
9 plan.

10 MR. HO: Yes, yes.

11 When it goes to your review, you will see
12 this is a preliminary version. That's all.

13 And the SCAPS. SCAPS is sort of an
14 innovative characterization tool. Information from
15 those studies will also be used to identify locations
16 where further information is necessary.

17 So the initial round of sampling as part of
18 this investigation will include, approximately,
19 somewhere between 70 and 90 separate borings.

20 Samples will be collected in the smear zone,

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1 which is, basically, where a lot of these sites are
2 tidally influenced. Between the high and low tide is
3 the so-called smear zone. Samples will be taken in
4 that zone.

5 And similar to the CAP, again, stepouts will
6 be performed until, basically, a clean boundary is
7 encountered, that is, the concentrations are below the
8 screening levels.

9 The previous investigations do not include
10 groundwater data, so groundwater samples will be
11 collected at each of the boring locations.

12 And where it's determined, expedient wells
13 will be installed to allow for data gathering in the
14 future.

15 Now, the sampling procedures will follow
16 standard guidelines, and they will be geoprobe
17 samples.

18 And in the case of the groundwater samples,
19 they will be analyzed for natural attenuation
20 parameters. Now, what that means is, we will be

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1 looking for signs of natural attenuation, things like
2 dissolved oxygen and things like oxidation of metals
3 and things like that.

4 We will also be following standard QA/QC
5 procedures and health and safety procedures.

6 So after this investigation is completed,
7 the next steps will be to incorporate the data into
8 the CAP, the fuel line CAP, again, they are parallel
9 tracks. And then we will move ultimately into
10 remedial actions, where necessary, at the fuel line
11 sites.

12 That's just a brief overview.

13 I will take any questions.

14 MS. NELSON: I have a question and a
15 comment.

16 First, the comment is, it seems to me that
17 there are two investigations going on, the CAP that
18 had been presented earlier and now this one, fuel
19 lines.

20 To the extent possible to make sure, it

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1 makes sense, excuse me, to be sure that the field work
2 is coordinated and where the fuel lines connect with
3 some of the CAP sites, that information be shared with
4 the CAP program.

5 In addition, those analytes, in addition to
6 the TPH suite, including BTEX, the lead, the MTBE,
7 should also be addressed here.

8 I noticed in your few slides, you really
9 didn't identify which analytes you evaluate in the
10 fuel lines for, but I think there is a direct
11 relationship between the fuel lines and some of these
12 sites. And they connect with perhaps other CERCLA
13 sites, connect CERCLA and CAP sites.

14 MR. HO: Right.

15 MS. NELSON: And where it makes sense, and I
16 think where those connections occur, those capped fuel
17 lines and CERCLA sites be looked at systemically
18 rather than individually in three separate programs.

19 That's my comment.

20 The question is: What is the schedule for

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1 this, and is it going to occur at the same time as the
2 other CAP work?

3 MR. HO: I will address your comment first.
4 It is a good one. We are certainly doing so.

5 Where the fuel line crosses the CAP site,
6 and it does in several locations, the fuel line
7 segment is essentially incorporated into the CAP zone.

8 MS. NELSON: Not the fuel line CAP.

9 MR. HO: That's correct.

10 So, for instance, at Site 15 here, this is a
11 CAP site, the fuel line crosses it, and Marcie Rash --
12 who presented earlier this evening -- her sampling
13 effort is going to characterize any, essentially, AOCs
14 that are a result of the fuel line program.

15 MS. NELSON: Okay. But you also have CERCLA
16 Site 24.

17 MR. HO: I will get into that next.

18 Where the fuel line cross CERCLA sites, the
19 investigation will remain part of the fuel line
20 program.

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1 However, the characterization will include
2 CERCLA contaminants, including chlorinated solvents
3 and metals, in addition to the TPH.

4 MS. NELSON: And that's clearly specified in
5 the work plan?

6 MR. HO: It is.

7 MS. NELSON: And those constituents have
8 been identified in both the fuel line, the CAP, and
9 the other CAP work plan?

10 MR. HO: The other CAP work plan does not
11 deal with the CERCLA sites.

12 MS. NELSON: So, then, I guess in response
13 to the comment I gave earlier, addressing the RAB
14 comments on the CERCLA and the CAP sites, is that
15 particular comment which has been made, and others,
16 has not been addressed.

17 So it would be very helpful, the comment
18 specifically was coordinated in looking at the CERCLA
19 CAP and other sites systemically.

20 MR. HO: Well, I hope I have shown that we

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1 are looking at it systemically.

2 MS. NELSON: Maybe I misunderstood your
3 response, but I thought I heard you say that the
4 results would not be reflected in the CERCLA RI
5 program generated from the CAP sites.

6 MR. HO: Well, there is a distinction there.
7 The CAP program data generated through that will not
8 be part of the CERCLA program.

9 MS. NELSON: Even where a CAP fuel line or
10 otherwise crosses or --

11 MR. HO: With the distinction that --

12 MS. NELSON: -- otherwise bisects a CERCLA
13 site?

14 MR. HO: With the distinction that the fuel
15 line CAP, governing fuel lines that cross CERCLA
16 sites, will include CERCLA contaminant analysis.

17 MS. NELSON: So if the results are positive
18 in the CAP site, whether fuel line or otherwise, it
19 will then be put back in the CERCLA program?

20 MR. HO: Well, it already, by definition, it

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1 is in the CERCLA program.

2 CO-CHAIR SULLIVAN: I think maybe . . .

3 MS. NELSON: Maybe with the exception of
4 those CAP sites, there might be migration along the
5 fuel line with the CAP site.

6 As I recall, some of the CERCLA constituents
7 were not fully investigated at those CERCLA sites that
8 were not part of the CAP program.

9 I could be wrong on that, but I do recall
10 specifically comments with regard to Sites 4 and 19
11 and 24.

12 MR. KNAPP: If I could add, just as far as
13 your groundwater monitoring program, throughout the
14 installation, we are looking at CERCLA contaminants
15 within what are the CAP sites, even though the nine
16 sites are transferred into the CAP program. It
17 doesn't mean we are excluding CERCLA contaminants as
18 far as the monitoring program.

19 CO-CHAIR SULLIVAN: Maybe to make sure that
20 it's clear to everything, I think if you look at it in

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1 terms of multiple scenarios, one scenario is fuel
2 line, no other site that is influencing it. In that
3 case, who is handling it purely within the fuel line
4 CAP?

5 And the second condition would be fuel line
6 crossing another CAP site, like IR 15. In that case,
7 that portion of the fuel line is just absorbed into
8 that CAP site because it's all petroleum.

9 And then the third case is fuel line
10 crossing a CERCLA IR site, in which case we are
11 treating the, unlike the second case, we are treating
12 the fuel line separately from the rest of the CERCLA
13 site, but we are including the CERCLA contaminants of
14 concern are evaluation of the fuel line.

15 MR. HO: Precisely.

16 CO-CHAIR SULLIVAN: And that would be the
17 only three cases, right?

18 MR. HO: Yes.

19 CO-CHAIR HEHN: How will that data, when you
20 have data from three separate programs, how are you

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1 going to present that data in a holistic view so there
2 isn't something lost in the translation?

3 MR. HO: Well, as Jim said, in case two, the
4 fuel line that crosses the CAP site will essentially
5 be absorbed in the CAP. That information will be
6 integral to the CAP.

7 In the case where it crosses a CERCLA site,
8 it will be incorporated into the FS, the IR program
9 for the CERCLA site.

10 In the first case outside of any IR program
11 site, it's purely addressed in the fuel line program.

12 MS. NELSON: Even though it might be a
13 conduit between the CERCLA and CAP sites, such as the
14 perimeter pipeline that actually crosses into other
15 CERCLA?

16 MR. HO: There are a multitude of utility
17 lines crisscrossing TI.

18 It's not really considered conduit between
19 the CERCLA site and the CAP site.

20 MS. NELSON: Well, that remains to be seen.

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1 CO-CHAIR HEHN: Is there going to be one
2 overall -- so we have three programs going on.

3 Are we going to get to the point where we
4 have a map that shows these three programs blended
5 together?

6 MS. NELSON: That would be ideal.

7 CO-CHAIR HEHN: We have been trying to get
8 that for a couple of years now.

9 MS. NELSON: I know. We tried to dice this
10 so many ways. It only makes sense to put all the
11 puzzle pieces back together.

12 CO-CHAIR HEHN: What concerns me, too, Pat,
13 I think at the last BCT meeting, trying to split out
14 or change the designation of the boundaries between
15 Sites 24 and 17.

16 So that's kind of splitting those two sites
17 away from each other. It's two separate programs.
18 Pretty soon, there is no correlation between the two,
19 and that's what we are really concerned about, making
20 sure that those cross over.

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1 As you see, this site, also, has CERCLA
2 contaminants, basically, in the fuel line program, for
3 instance.

4 MS. NELSON: Which makes you wonder, doesn't
5 it? It has CERCLA contaminants.

6 CO-CHAIR HEHN: Yes. So that's kind of one
7 of the points we have to grapple with continually,
8 because we are trying to blend these pictures
9 together, and there is no consistency between the
10 pictures.

11 MR. HO: It's a concern.

12 CO-CHAIR SULLIVAN: Well, the concern, if I
13 understand it, would be where one site is in proximity
14 to another.

15 So we are really, what's really being said
16 is, we want to make sure that we are being careful
17 enough at the interface or where one site is
18 approximate to another, as opposed to, you know, being
19 on one side on one end of the base, and being on the
20 other side on the other end of the base.

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1 I think everybody is agreed, it does not
2 influence each other.

3 But drawing the distinction between soil and
4 groundwater, because at least for groundwater, we do,
5 through the groundwater program, have a more
6 comprehensive picture of the whole base, regardless of
7 site.

8 MS. NELSON: You have a picture of the
9 entire base as a site, if you plot up all the
10 groundwater data; but, you know, Site 6 is a very high
11 benzene, once upon a time, and then it was decided not
12 to sample for benzene in Site 6, which is adjacent to
13 Site 12.

14 So it's always comprehensive as you're
15 sampling plan or results, and I don't, you know, it's
16 been my impression that there has been a lack of
17 diligence there as we slice and dice these various
18 sites and keep them separate.

19 6 and 12 probably should still be looked at
20 even though they might have had different land uses

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1 for industrial uses. They are adjacent to each other,
2 you know?

3 The groundwater is a carrier and might
4 explain a migration pathway that you might not see in
5 the soil.

6 But to take these individual sites, split
7 off 4 and 19 and 24, you have a fuel line dissecting
8 them. It doesn't make any sense either, you know, and
9 you will get more groundwater data through the
10 additional sampling and, hopefully, through the
11 vertical extent sampling, you can get a different
12 picture.

13 But until all that data are in, it's really
14 hard to say what's going on on the base because nobody
15 has looked at it as a whole.

16 And data, in itself, has been limited in
17 scope to separate out the serious sites from the
18 nonserious sites before enough data was in in my
19 opinion to do so with any diligence.

20 CO-CHAIR HEHN: Well, I guess, Pat, we

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1 really still are battling that same nemesis that we
2 have had all along of trying to put this picture
3 together. It's up to us to combine these things.

4 MS. NELSON: Right.

5 I think we should get a TAPP grant and hire
6 some consultants to do it, because Tetrattech isn't
7 doing it, the Navy isn't doing it, the agencies are
8 not in a position to do so, but I think it's time.
9 It's time.

10 MR. KNAPP: I can add, we have Site 12 OU RI
11 report coming up probably at the end of April.

12 One comment of the RAB was, along these
13 lines, for example, present what's going on at Site 6
14 with regard to Site 12, and also Site 20 with regard
15 to Site 12. So this report is coming out.

16 MS. NELSON: That's only a piece, though.
17 That's only a piece.

18 It's three sites out of how many, about 30
19 we started out with? I mean, It's progress, but it's
20 taken almost five years to get there.

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1 Now is the time to put it back together.

2 CO-CHAIR SULLIVAN: Well, I guess I'm still
3 trying to get a better handle on what sites are
4 approximate to each other, because TI is the same size
5 as a good chunk of downtown San Francisco. If you
6 translate it into city blocks, it's a pretty big area.
7 At what point, you know, at what points do sites need
8 to be evaluated to each other?

9 I agree with you, especially when they are
10 obviously bordering on each other, there is a
11 potential for interaction or maybe even some proximity
12 to each other.

13 But at some point, you have sites at the
14 south end of the base and the north end of the base.
15 Is it worth the effort to try to correlate between
16 those sites?

17 I'm just trying to get a better handle on
18 what, how we can address the issue of sites proximate
19 to each other without pulling everything into one
20 giant package.

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1 MS. NELSON: I think we need to run some
2 cross sections -- north, south, east and west --
3 through your CERCLA sites, through your CAP
4 just straight; through these sites and on Yerba Buen...
5 as well.

6 Once you have a picture of what the
7 cartography is, across a particular area, where the
8 groundwater is, you will have a better clue.

9 Certainly, where the heavy base uses were,
10 really, I think, shall we just say the eastshore where
11 the piers were, you know, that might be considered one
12 operable unit.

13 You would have to construct a cross section
14 and be able to determine whether or not there is a
15 north half and a south half, as an example.

16 It could have been done years ago, but with
17 additional sampling that's going on, if you're going
18 to be defining vertical extent greater than 3 or
19 whatever feet most of the sampling depths were, now is
20 the time to plot it up, you know, get those borings in

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1 down to 20 or so feet. Plot it up.

2 That would be my recommendation.

3 CO-CHAIR HEHN: I think, Jim, what we are
4 trying to really do, we are trying to get an overall
5 picture of what kind of issues that really we are
6 faced with; and to have three separate programs going
7 on concurrently in different directions, and trying to
8 blend that picture back together again, whether it be
9 in any one of those sites, is what we are really
10 trying to grapple with, is trying to get our hands
11 around this whole problem.

12 Right now, I still feel like it is three
13 problems skirting around out there. One pops up here,
14 another one pops up right here. It's still not a
15 cohesive whole as far as how the data is presented.
16 That's what I'm kind of grappling with, as far as what
17 the picture looks like.

18 MS. NELSON: The other part is, we want to
19 be a benefit to the community with our comments

20 We are at a point where we have some raw

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1 data and more data is going to be collected, and we
2 don't seem to be out of square one yet on, you know,
3 an idea how the whole, all the pieces fit together in
4 the whole.

5 CO-CHAIR SULLIVAN: Well, maybe we are
6 actually kind of coming back to something -- actually,
7 this map, I think, reflected these investigation areas
8 (indicating).

9 Maybe this is not -- well, maybe this is not
10 a good example over here, but over here might be
11 (indicating). This goes back probably three or four
12 years ago with Sherry Tobiason. We never got far with
13 it, but it was an attempt to look at this whole area,
14 area DD, and this whole area is CC (indicating).

15 But at some point, I guess, the question is,
16 is there enough reason to think that there is a
17 relationship between these two areas, or are they
18 significantly separate geographically that it's okay
19 to treat them as two areas?

20 MS. NELSON: You know what I would suggest?

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1 I would suggest we have a special interim meeting, if
2 there is one coming up, or we could convene one after
3 that or before that.

4 We should just sit down and brainstorm just
5 how to do what your scheme is, with the amount of the
6 information we have, because none of us, I think, are
7 looking forward to getting the draft final RIs and
8 CAPS and reinstating comments that we made, I can
9 almost say years ago.

10 We want to move forward. We want to say:
11 Gee, it looks like what you really have a problem with
12 is in this area, because we can plot up the cross
13 sections and the concentrations of contaminants in
14 soil and develop a concept of, you know, just what the
15 next step is for a feasibility study, rather than
16 taking the individual pieces and saying: Well, we may
17 have to dig up 11 yards of soil here and 300 here, and
18 then we will call it a day.

19 Once you get into the digging, once you get
20 into a groundwater remedy, you might find you started

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1 with 9 yards or 20 yards and you're digging up the
2 entire eastern seaboard of the island, because you're
3 chasing a cleanup level and you haven't done the work
4 to connect the dots.

5 MR. HO: Well, we are trying to do that
6 work. That's what the investigation is about.

7 MS. NELSON: I know, and that's a good step.
8 But I think we need to start getting all the
9 edge pieces out of the puzzle, putting them together,
10 and then filling them in.

11 I think we could brainstorm that at one of
12 the meetings. I think we could figure that out.

13 I would like to propose that we do that.

14 CO-CHAIR HEHN: You want to make that our
15 priority for the next interim meeting?

16 CO-CHAIR SULLIVAN: I agree.

17 For the next one, on the 5th -- excuse me --
18 the 7th.

19 MR. BRENNAN: I think Mare Island got a TAPP
20 grant and got a computer with all the data.

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1 MS. NELSON: GIS would be a wonderful
2 resource.

3 MR. BRENNAN: Are you still going to get a
4 GIS, Jim?

5 CO-CHAIR SULLIVAN: Well, actually, we have
6 a work plan that's in draft stage, and Tetrattech went
7 ahead and did their part to draft the work plan to
8 incorporate all of the data from both the CERCLA and
9 the CAP programs, and then they submitted that draft
10 to the Navy. We are currently evaluating it.

11 CO-CHAIR HEHN: That would essentially solve
12 the problem.

13 I mean, if you have all that data on a GIS
14 system, where you pull out various layers for a
15 particular site on a computer, literally, you can sit
16 down and look at all the data that's there. It really
17 would put all those pieces together so that you could
18 say: Okay, I'm going to look at Site 6 here. Now,
19 what do we have on the RI data? What do we have on
20 the CAP data? What do we have on the groundwater

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1 data, soil data?
2 You could pull up any of that that you want
3 to do, and you can then look at that and then you can
4 look at the sites next to it and bring it in. You can
5 say, do we see an interaction here?
6 So it really is something that -- that is a
7 way to do it. It's certainly a way to do it, and
8 probably the most proactive way to do it, because as
9 you add new data, you just add it to the database and
10 can use it.
11 MS. NELSON: And you can translate it into
12 drawings.
13 CO-CHAIR HEHN: Have it on another map is
14 nice, but, fortunately, it's hard to use.
15 So, I'm sorry. I agree. I think that's
16 really what it would do.
17 MS. NELSON: Yes, and we need to identify
18 the data that are not there. That's just as important
19 as the data that are there -- MTBE and lead in these
20 areas for the CAP.

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1 CO-CHAIR HEHN: And granted that's a huge
2 task, a huge task trying to pull all that data
3 together now, but I don't see the problem going away.
4 MS. NELSON: It's time to put together a
5 plan to bring it all together. And I think we can do
6 that.
7 I think, Jim, you're absolutely key.
8 And, Richard, you know where all this data
9 are.
10 You have it and I have it in six different
11 boxes in my office and some at home.
12 CO-CHAIR SULLIVAN: Well, I think Pat's
13 suggestion is good.
14 I think this would also help us, since we
15 are, since I have the draft data management plan from
16 Tetratex, and if we do a brainstorm, that may help in
17 the comments on that draft data management plan.
18 And then following the Navy review, we are
19 going to submit it to the, it doesn't fit anywhere
20 into the formal CERCLA program, but if we can submit

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1 it as an informational, to be reviewed as desired item.
2 to the RAB.
3 But, actually, I think the timing would work
4 out good if we have a brainstorm meeting at the
5 Wednesday 7 April interim meeting.
6 CO-CHAIR HEHN: I have one more quick
7 question.
8 I just wanted to know about the sampling
9 that you're planning to do: You say that you're
10 sampling only in the smear zones.
11 What depth do you anticipate that to be and
12 why are you only sampling at that point?
13 MR. HO: The depth will vary. That's why we
14 are using that, the bottom of the sampling, I should
15 say. That is, we want to get the vertical extent of
16 the contamination of the soil.
17 CO-CHAIR HEHN: What was the depth of the
18 fuel lines?
19 MR. HO: It varied.
20 MS. NELSON: Between what?

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1 MR. HO: Between zero and --
2 CO-CHAIR HEHN: And so is there going to be
3 soil above that that also has some impact with
4 petroleum hydrocarbons and not only in the smear zone?
5 MR. HO: Well, soil above the pipeline.
6 CO-CHAIR HEHN: Well, not above the pipeline
7 but above the smear zone, essentially.
8 If your pipeline is zero feet and your smear
9 zone is at five feet, do you sample in between?
10 MR. HO: Yes. Actually, there is that
11 subtlety.
12 In the locations where the fuel line was
13 very shallow and groundwater was relatively deep,
14 there will be two samples in the boring. One near the
15 surface, approximately near the level of the pipeline;
16 and one again at the smear zone.
17 But in most cases, that's not the case.
18 CO-CHAIR HEHN: Is that a predetermined
19 sample depth? You are doing geoprobe tests when
20 you're doing the bore.

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1 MR. HO: That's right.
2 CO-CHAIR HEHN: So does the field tech also
3 have an option?
4 MR. HO: Yes. They will be doing PID.
5 CO-CHAIR HEHN: I don't want to get to the
6 point where we only sample 1 and only sample in 5 and
7 everything in between is not part of the program.
8 So there is some variability in the program
9 as needed.
10 MR. HO: Yes.
11 CO-CHAIR SULLIVAN: Okay. Thanks a lot, Ed.
12 That moves us into program updates and our
13 general updates.
14 Our first item is announcements. Are there
15 any other announcements that we haven't otherwise
16 covered earlier in the meeting?
17 (No response.)
18 CO-CHAIR SULLIVAN: Okay. Then the next
19 update is on our last RPM/BCT meeting, which we held
20 on the 1st of March at Geomatrix's offices, the city's

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1 consultant, and both Paul and Chris were there.
2 CO-CHAIR HEHN: Yes.
3 CO-CHAIR SULLIVAN: And we are currently
4 reviewing the draft minutes, and so pending comments
5 in the draft, we should send out meeting minutes in
6 the next two to three weeks or so.
7 Some of the highlights of the meeting: We
8 discussed our removals at Site 12 for the lead in the
9 building 1207-1209 area, and the TPH in the 1300 area.
10 And that's basically it.
11 And then we discussed the status of the
12 onshore RI report and Corrective Action Plans.
13 The key issue with regard to the onshore
14 report is resolving the TPH screening levels, which is
15 our next update item. So we had kind of an extended
16 discussion on that.
17 But we also discussed vertical extent, and
18 also groundwater and potential institutional controls
19 for groundwater.
20 And then we reviewed the current schedule

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1 and document status, and we had an update on leasing
2 and transfer issues. We are working on completion of
3 the Zone 5 FOSL, and that's the last of our big area
4 FOSLs.
5 We may be coming out with a little mini FOSL
6 to cover one building, Building 62, in the northeast
7 end of the base to be used in a like condition as a
8 warehouse.
9 So you may see something in the next couple
10 of weeks that will be a pretty short document that
11 would ask for comments in about a week.
12 And then we prepared for tonight's meeting
13 by looking at the draft agenda. Although the BCT
14 meeting occurs now, the way things are scheduled,
15 usually a couple of days before the interim meeting,
16 so we started some discussion of the RAB meeting at
17 the BCT meeting and then continued that discussion at
18 the interim meeting.
19 And then under other items in the meeting,
20 we talked about free product. And the Water Board

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1 asked us what actions we were planning to take on free
2 product. We agreed that we would generate a list of
3 sites where we have identified free product in the
4 groundwater. We agreed to provide that by the end of
5 this week, so we are still working on that.
6 And then we discussed the appropriate
7 boundary provision for Site 24.
8 And then we reviewed our list of outstanding
9 items and new items.
10 Is there anything you would like to add,
11 Paul?
12 CO-CHAIR HEHN: No. You pretty well covered
13 it.
14 CO-CHAIR SULLIVAN: Great.
15 Our next BCT meeting is on Monday, the 5th
16 of April, and that's going to be at Tetrattech's
17 offices in San Francisco.
18 The next item is talking about a progress
19 report on where we are with TPH screening and cleanup
20 levels.

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1 We are not as far along as we would like to
2 be, but, basically, the path that we are embarked on
3 is, this whole issue of TPH screening levels started
4 when the Navy did ecotoxicological testing and
5 presented the results in a draft report.
6 We had consequently gotten comments from the
7 state to the effect that they felt that we needed to
8 test an additional species and, consequently, the
9 state developed a mathematical factor to factor our
10 proposed screening number into a number that they
11 proposed, and they used the factor of 8 to account for
12 the fact that we didn't test one of the species, an
13 additional factor of 2 to account for the acute to
14 chronic effects.
15 So the end result was that our number in the
16 ecotoxicological testing was reduced by 16. That's
17 where the 1.4 number comes from.
18 So we have been continuing that discussion
19 for about a year and a half now.
20 TI, interestingly, has really been the first

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1 base to have been affected by that issue. So TI sites
2 have kind of been used as the samples of the models.
3 The Navy and the agencies formed the TPH
4 working group that's been meeting about every quarter
5 or so, and the Navy has also brought in Patel Labs.
6 Patel developed a methodology to use in place of eco
7 testing.
8 What it does is, in place of site specific
9 eco testing, it looks at the mass of literature in
10 order to equate toxicities to fractions of TPH.
11 And, so, then, rather than rely on limited
12 site specific testing, it relies on a much larger body
13 of information on petroleum toxicity.
14 And then the task becomes to look at the
15 fractions that make up the TPH at each specific site,
16 and then evaluate those fractions against these
17 toxicity values.
18 So that had been a draft that Patel provided
19 to the TPH working group.
20 And at our November issues resolution

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1 meeting, the Navy and the regulatory managers asked
2 the BCT to take this Patel methodology and evaluate it
3 for our site.
4 We worked to do that, but we were, the
5 methodology is still in the draft form, and, also, the
6 fractions, petroleum fractions that it uses to
7 evaluate the toxicity doesn't equate directly to the
8 TPH gasoline, TPH diesel, TPH motor oil that most of
9 our previous data has been collected in.
10 So our data, our historical site data didn't
11 quite match up with the fractions that Patel
12 methodology was looking for.
13 So we felt we couldn't go any further with
14 it. So that's the point that we are at now, although
15 the Navy is taking a renewed effort in working with or
16 starting to work with Tetrtech and Patel and taking
17 another shot at it.
18 I think maybe it was a little, I think there
19 was an assumption that the Patel methodology was far
20 enough along that we could kind of use it as a

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1 cookbook.
2 But I think we found it more difficult to
3 apply to our site, and so I think we need more
4 resources beyond the BCT.
5 So we are going to take another shot at it
6 with our consultants and be able to use it enough, to
7 try it out enough to the point where we can evaluate
8 whether or not we think it's a path we want to
9 continue down or not.
10 We have another, potentially have another
11 issues resolution meeting scheduled for April. We
12 hope to make enough progress in evaluating Patel
13 methodology that we can present that at the April
14 issues resolution meeting and, hopefully, have our
15 regulatory and Navy managers recommend a further
16 course of action for us.
17 MS. NELSON: I think that's the most
18 comprehensive description of what's going on that I
19 have heard.
20 CO-CHAIR SULLIVAN: So I think it kind

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1 boils down to whether or not we continue down this
2 path of looking at TPH fractions and evaluating it
3 against toxicity literature; or whether we go back to
4 the site specific eco sampling that we had started
5 with, that we felt, that the Navy felt had a potential
6 to, with the small site specific sampling, be
7 influenced by environmental factors outside of
8 petroleum.

9 CO-CHAIR HEHN: So what happens if after all
10 of this you come back to something close to the
11 original number with the receptor of Site 12? They
12 have been reluctant to accept those numbers for the
13 entire base, even though they are site specific
14 numbers; where would that put us?

15 CO-CHAIR SULLIVAN: Well, I think our
16 assumption is, if the Navy and the regulators can
17 agree on a methodology, if they can agree on the
18 science of the methodology, then we would apply that
19 to our site and use the numbers that come out of that
20 method.

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1 that deal with petroleum hydrocarbons, 1.4 and 4.7.
2 So I think that, I think the difficulty
3 comes not because it's a level or a number that is
4 neither nonattainable or a difficult number for this
5 particular site, but that concern is that number would
6 get spread over a much larger area on other bases,
7 because, normally, for other sites where you deal with
8 petroleum hydrocarbons, it is on a very site specific
9 basis. Whatever you establish for your site may not
10 be the same for the site next door.

11 So it's unfortunate they can't get that same
12 point for Treasure Island saying, this is a site
13 specific number. Over at Hunter's Point, you will
14 need some other number, because that's the site
15 specific difference, each time will be different.

16 So it doesn't seem to be a case where it is
17 a broad number that can be applied to all bases, but,
18 rather, for this particular base and the conditions
19 present here.

20 That's what we deal with all the time on

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1 There is some indication, although the
2 methodology is still evolving, that that number might
3 be greater than 1.4.

4 MS. NELSON: You will keep us apprised?

5 CO-CHAIR SULLIVAN: Yes.

6 And, interestingly, we have done some
7 historical searches in looking at the cleanup
8 screening levels at other locations. The numbers vary
9 pretty widely from site to site.

10 It is actually kind of amazing to me that
11 the petroleum, the art and science of screening and
12 cleanup numbers doesn't seem to be as far along as
13 with nonpetroleum constituents.

14 MS. NELSON: If you understood the oil
15 industry, I think you would understand why.

16 I won't say any more on that.

17 CO-CHAIR HEHN: I think, also, part of that
18 has to do with site specific requirements. I mean,
19 from my own personal viewpoint, my experience, that's
20 a fairly generous cleanup level for a lot of sites,

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1 other sites. You don't take that number and try to
2 apply it somewhere else because it doesn't work
3 because there is different conditions.

4 So it's unfortunate that they can't get to
5 that point where they accept the site specific number
6 and move forwards, because it's really hanging up a
7 lot of stuff here.

8 I think I will get off my soap box now.

9 CO-CHAIR SULLIVAN: Our next item is
10 environmental document status.

11 And, Richard, you have a new addition of the
12 document status sheet?

13 MR. KNAPP: They are on the back table.

14 There are two additions. One is kind of
15 type of program, onshore RI or the CAP sites, and so
16 forth; and the other is just a chronological sort of
17 all the documents, documents that have already been
18 submitted. So there is a couple of different ways to
19 look at the same information.

20 MS. NELSON: I think at the last interim

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1 meeting, I asked Jim in this agenda to identify those
2 documents that would be issued in the next calendar
3 month and when comments were due, so that we would,
4 and it didn't happen.

5 CO-CHAIR SULLIVAN: And I didn't.

6 MS. NELSON: Can it happen next month?

7 CO-CHAIR SULLIVAN: Yes.

8 MS. NELSON: Because this is our crib sheet,
9 not that we don't appreciate the full picture, but we
10 need to assign our priorities.

11 CO-CHAIR SULLIVAN: I think what I will need
12 help with, Richard, then, between you and Ernie, is to
13 help me flag the documents that are current so that we
14 can insert them into the agenda.

15 Any other comments or questions concerning
16 the document?

17 Admittedly, it's getting more and more
18 challenging, as there is more and more documents out
19 there floating. So it's something we are all
20 challenged with, including the Navy and the

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1 regulators, I would imagine.

2 MS. NELSON: Well, I would like to thank
3 Paul for preparing the comments on the two documents
4 for which comments are due, I think, on the 19th, I
5 think, which is a Friday.

6 CO-CHAIR HEHN: Yes.

7 MS. NELSON: And I would hope that if any of
8 us present at the meeting that have comments on the
9 two documents, that the comments that we give at the
10 meeting would be incorporated in the transcripts, and
11 those portions that contain the comments on the
12 documents, that those would be incorporated in a
13 memorandum so that they can be addressed in final
14 editions of the documents.

15 I think that's been our policy in the past.
16 I certainly haven't been aware that that has changed.

17 But my comment earlier this evening with
18 regard to the CAP comments and the IR comments and the
19 offshore IR comments leads me to believe that that has
20 not happened. I think we need to be clear about that.

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1 CO-CHAIR SULLIVAN: Yes.

2 I think you hit upon, I think that the issue
3 of comments has maybe come back to the forefront
4 again. I think it's something that we need to focus
5 more on that.

6 Quite frankly, I get lost in the comments.
7 We need to have them and make sure that we have an
8 adequate system for making sure that they are all
9 collected and addressed.

10 I don't think we have ever been able to have
11 a real methodology for the verbal comments at the
12 meetings.

13 I think they get captured in the minutes and
14 the transcript, but I don't think we have been able to
15 take an adequate step in pulling them from the minutes
16 and the transcript and actually into a list of
17 comments.

18 MS. NELSON: I would like to propose that
19 that's an action item for either Tetratex or the Navy
20 to go back through the transcripts, since the

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1 beginning of the RAB, and pull those comments. I
2 have to be on disk.

3 If not, they are in documents that can be
4 cut and pasted. But I think it's the time to do that.

5 A lot of members aren't here tonight, but I
6 know that they gave comments in good faith in the
7 meeting. They are not part of the technical
8 subcommittee meeting, and the technical subcommittee
9 have given their comments formally in writing, but
10 their comments are valuable nonetheless.

11 CO-CHAIR HEHN: I think that's very true and
12 something that probably has gotten lost.

13 However, I think the comments that are
14 brought up at this particular meeting are very
15 important and very valid.

16 But in responding to some of these
17 documents, the surest way to get that is in writing,
18 because then you have some documentation yourself that
19 went out, and because it does seem like these things
20 come back around with some regularity to be able to

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1 back.

2 I don't keep all of the old RAB minutes, and
3 so I don't have all that earlier documentation. But I
4 do keep copies of all the comments that I put in so I
5 can go back and bring those up again, comments
6 previously.

7 So whenever possible, it's better to have it
8 in writing if you can.

9 But we think we really need to try to make
10 an effort to try to capture those comments that show
11 up in the RAB minutes.

12 CO-CHAIR SULLIVAN: Maybe what we need to
13 do, Barry, is somehow figure out how to make some
14 style change to the minutes that would flag those
15 comments.

16 MS. NELSON: That's easily enough done, just
17 capture the comments in the reports where the
18 discussion occurs.

19 CO-CHAIR SULLIVAN: I guess we just have to
20 be careful to distinguish which parts of the meeting

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1 we are discussing documents under review, and then
2 those would be comments.

3 MS. NELSON: I think the purpose of the
4 meeting is to have this interaction with the Navy and
5 their consultants and the regulatory agencies, so that
6 we are giving valuable insight to where our priorities
7 are for the environmental program.

8 If we didn't have a dialogue, you wouldn't
9 have that information; but some procedural issues,
10 like just how to handle comments that that dialogue
11 needs to be captured, I think in the minutes, because
12 some procedural issues, like just how to handle
13 comments, are still important to get handled and shows
14 that we are trying to work together.

15 CO-CHAIR SULLIVAN: Okay. Organizational
16 business.

17 I turn it over to Paul.

18 CO-CHAIR HEHN: Actually, one thing before
19 we go on to that, one thing I just wanted to get back
20 to you was the BCT minutes.

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1 I noticed that in the last minutes from the
2 February the 1st, 1999 minutes, and I think that in
3 some previous minutes, too, from the BCT, there are a
4 number of attachments that are noted in the
5 discussion, which don't seem to go out with the
6 meeting minutes.

7 So we don't, you now, a lot of the things
8 that are referenced in the discussion are not
9 attached, so we don't see those.

10 So it's something we could mention, because
11 we do that for our minutes.

12 CO-CHAIR SULLIVAN: Well, now, in the draft,
13 usually it's in the draft. We don't always get
14 handouts.

15 MR. GALANG: The revised from?

16 CO-CHAIR HEHN: Revised. None of the
17 attachments were there.

18 MR. GALANG: The draft.

19 CO-CHAIR HEHN: No, 1 through 4. There is
20 no attachments. We don't see the draft.

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1 MR. GALANG: I sent, not the draft, but I
2 sent the first one with the minutes, and then the
3 revised one based on amendments on the BCT meeting.

4 CO-CHAIR SULLIVAN: Okay.

5 MS. NELSON: It sounds like we need the
6 attachments.

7 CO-CHAIR HEHN: Yes.

8 We should probably have the attachments.
9 That's all I'm saying.

10 CO-CHAIR SULLIVAN: It sounds like Paul
11 needs another copy.

12 CO-CHAIR HEHN: Not just this one, but for
13 future ones.

14 CO-CHAIR SULLIVAN: Well, the normal
15 procedure -- correct me if I'm wrong on this, Ernie --
16 is that we send out the draft to the meeting
17 attendees. The draft does include the attachments
18 because the meeting attendees would have had the
19 attachments. That's just the draft.

20 And then once the document is finalized,

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1 then it goes out to everybody with all the
 2 attachments.
 3 MR. GALANG: With the attachments.
 4 CO-CHAIR SULLIVAN: With the attachments
 5 MR. GALANG: Then if there is some
 6 revision --
 7 CO-CHAIR SULLIVAN: And in this particular
 8 case, the meeting minutes with all the attachments had
 9 gone out, the February meeting, but then there was
 10 some further changes made to the minutes, and so those
 11 went out as a third document.
 12 MR. GALANG: Revised.
 13 CO-CHAIR SULLIVAN: As a revised minutes.
 14 MR. GALANG: Without the attachments.
 15 CO-CHAIR SULLIVAN: So you might have gotten
 16 or just didn't get the final version, the second
 17 version of the document that should have had all the
 18 attachments in it.
 19 CO-CHAIR HEHN: Anyhow . . .
 20 CO-CHAIR SULLIVAN: But the intent is at

1 some point, one version of the document would have all
 2 the attachments in it.
 3 CO-CHAIR HEHN: Okay. That's what I would
 4 suggest, yes, you do have that as an attachment to
 5 those when they go out in that final version so it's a
 6 complete copy, because I don't see the draft versions.
 7 The other thing was, we are still
 8 outstanding on our TAPP proposal.
 9 CO-CHAIR SULLIVAN: Yes. I have some
 10 comments on that tonight.
 11 CO-CHAIR HEHN: Do you want to go ahead and
 12 talk about that?
 13 Pat, do you need to go?
 14 MS. NELSON: I'm going to leave shortly.
 15 CO-CHAIR HEHN: Do you want to go over the
 16 newsletter before we do the TAPP?
 17 MS. NELSON: At the last interim meeting, we
 18 talked about putting out a newsletter, kind of using,
 19 I think, the Mare Island newsletter, as an example,
 20 and this would be something to summarize our

1 activities and issues of significance to the RAB.
 2 So it could be distributed within our
 3 community and certainly at the Treasure Island
 4 Development Authority to keep a voice in the
 5 activities addressing Treasure Island.
 6 So I have some ideas for articles to include
 7 in the newsletter, but I think this first addition
 8 will be comprised of individual RAB member
 9 contributions with regard to technical and procedural
 10 issues, and, hopefully, we would then concurrently be
 11 applying for a TAPP grant to fund maybe a contractor
 12 that could help us prepare and mail the subsequent
 13 newsletters.
 14 So I just wanted to open up discussion on
 15 that and what items would be of interest.
 16 I don't even know what examples of the other
 17 newsletters and things have been distributed, but
 18 perhaps we need to do that so that people are aware of
 19 it.
 20 I didn't happen to bring any copies with me.

1 CO-CHAIR SULLIVAN: We have some copies.
 2 Actually, I think the Mare Island one is the only one
 3 that is actually a RAB newsletter.
 4 We do have the copies that Barry brought of
 5 a newsletter that GPI put together for the Alameda
 6 Naval Air Station, but that's basically a Navy
 7 publication, so it's a little different than the Mare
 8 Island one.
 9 MS. NELSON: But I think as the housing
 10 becomes occupied, there will be a greater interest in
 11 what we have been doing in the last four or five years
 12 and where the various issues are going within the RAB,
 13 the feasibility study and Record of Decision.
 14 CO-CHAIR HEHN: Yes.
 15 I think, as we were talking about it at the
 16 interim meeting, too, seeing that as a little bit
 17 less.
 18 We have the one from Alameda point here
 19 tonight, and maybe a little less glossy or little less
 20 extensive than that; maybe just a one page, two-sided

1 flier or something like that that could be done very
2 easily and very quickly, you know, to get out some
3 issues as they come up; as we talked about Site 12
4 issues, for instance; or issues of concerns about
5 dioxin in soil, for instance; or what the removal
6 actions will do and what that's going to entail, so
7 that those issues are available to hand out to
8 community members at Treasure Island Development
9 Authority, and so that they are aware of the RAB
10 viewpoint or the RAB concern about some of those
11 issues.

12 So I think that's a real good way to have
13 something that's a little bit more easily distributed.
14 Certainly, we don't mind making a presentation to the
15 Treasure Island Development Authority, but this is
16 something that they could take away with them, too.

17 So I think it would be a really good process
18 for us to try to get more information out. And they
19 could be handed out to any community organization or
20 wherever we think they should go, the mail.

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1 So I think we really need to get some input
2 on that.

3 MS. NELSON: The timing is good if we get a
4 couple of newsletters out prior to the EIR being
5 issued, the Environmental Impact Report for the base
6 reuse, as the Development Authority is grappling with
7 whether or not to really put together a citizens
8 advisory committee.

9 People need to know that we are out there
10 doing an outstanding job and what the issues have
11 been.

12 I offered to try my hand at a cartoon, a
13 political cartoon.

14 MS. LA PIERRE: If you don't have a logo
15 yet, I would be happy to work on that with you.

16 CO-CHAIR HEHN: Great.

17 MS. NELSON: Alice, we would love you to do
18 that.

19 CO-CHAIR HEHN: You obviously have some
20 ideas on that.

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1 MS. LA PIERRE: Well, yes.

2 CO-CHAIR HEHN: That would be great.

3 MS. NELSON: Something with Pink Panther,
4 Peter Sellers. Only kidding. I think of Inspector
5 Clouseau's comment. I'm sorry.

6 I need to leave, so if you have ideas, let
7 me know before the next interim meeting, if you have
8 something to contribute at the next RAB meeting. We
9 should have a draft together.

10 CO-CHAIR HEHN: Okay.

11 MS. NELSON: Okay. Thank you.

12 CO-CHAIR HEHN: Thanks, Pat.

13 Do you want to go ahead and go over the TAPP
14 proposal status?

15 CO-CHAIR SULLIVAN: Okay. As a quick note,
16 we already had in the agenda here, Site 12 removals
17 are still scheduled, Ernie, for the May time frame?

18 MR. GALANG: Yes.

19 CO-CHAIR SULLIVAN: So as we get more
20 precise on the date, we can talk about a field trip.

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1 CO-CHAIR HEHN: Good.

2 CO-CHAIR SULLIVAN: The TAPP proposal.

3 The RAB had submitted a TAPP proposal --
4 actually, if anyone doesn't have, does not have a copy
5 of it previously, I made some more copies -- so,
6 basically, what the TAPP proposal is for is to
7 evaluate institutional controls. The major criteria,
8 or the major methods of evaluation or benchmarks of
9 evaluation is, has the institutional control worked at
10 other locations, and can it work in the context of
11 what the local laws and regulations may be at Treasure
12 Island?

13 And, then, secondly, how would it work in
14 light of potential seismic issues at TI, not only in
15 the case of a seismic event, but where the city may be
16 making some seismic improvements to the site which
17 could change the site conditions.

18 That, I think in a nutshell -- and then the
19 TAPP consultant would then make a report on that
20 evaluation.

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1 So we took this and sent it to our
2 Washington headquarters. Our Navy office in
3 Washington has basically been sort of acting as a
4 clearinghouse for the TAPP program, which they
5 initiated at that level.
6 And so the questions, really, that came back
7 to me were, really, one, what institutional controls
8 are we evaluating at Treasure Island; and so I think
9 the issue is, right now, with the exception of
10 groundwater, we haven't put any institutional controls
11 on the table. I think that's where our Washington
12 office is having concerns, is that the proposal, TAPP
13 proposal as written, would be kind of looking at a
14 range of potential institutional controls that we
15 haven't, that the Navy hasn't necessarily even
16 proposed to use at TI.
17 So it would be kind of going beyond, in
18 their viewpoint, it would be kind of going beyond a
19 site specific TAPP proposal.
20 Whereas, at least the Navy had envisioned

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1 that DoD, the Department of Defense, had envisioned
2 that the TAPP program was geared towards helping
3 communities deal with issues at that particular
4 closing base.
5 And then I think the central question
6 revolved around how the seismic issues would be
7 evaluated. Since we don't have specific proposals yet
8 from the city as to how they might conduct the seismic
9 stabilization, it's difficult to evaluate even if we
10 did have proposed ICs, it would be difficult to
11 evaluate that against a seismic stabilization program
12 that hasn't yet been proposed.
13 So from the Navy's standpoint, the proposal
14 seems that it's -- I'm not sure premature is the right
15 word -- but, rather, it's based on evaluating
16 institutional controls that we haven't proposed and
17 evaluating them against a seismic stabilization
18 program that hasn't been proposed either.
19 So it becomes less of a TA site specific
20 proposal and more general purpose.

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1 And so from the Washington office
2 standpoint, they would have, they would have kind of
3 expected to see a TAPP proposal regarding ICs that
4 would be evaluating ICs once they had been proposed or
5 were being discussed, which would normally be in the
6 FS stage.
7 CO-CHAIR HEHN: Of those two issues, the
8 institutional controls and seismic issue, which seems
9 to be the most, the largest issue of concern as far as
10 the Navy is concerned, which are they least
11 comfortable with?
12 CO-CHAIR SULLIVAN: Actually, probably, it
13 may be a little of both, because in the case of both,
14 it's evaluating, trying to, the TAPP proposal would be
15 looking, evaluating ICs against some unknown factors.
16 You have unknown factors.
17 And if we haven't proposed any specific ICs,
18 yet, and then you have the unknown factors in not
19 knowing what type of seismic stabilization would be
20 undertaken.

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1 So there is really unknowns in both.
2 CO-CHAIR HEHN: I guess the one thing that
3 concerns me, as far as this difficulty with the
4 institutional controls is, the issue of institutional
5 controls seems to come up in discussion fairly often,
6 and, granted, there may not have been a proposal to do
7 institutional controls on a particular site, but as
8 you go through this process, it seems to come up in
9 the process of looking at it, what kind of options we
10 have for the site.
11 It came up at the last BCT meeting, for
12 instance, for looking at institutional controls.
13 We need to know a little bit ahead of time
14 whether that's a viable option. It's like any other
15 option or technology that we are proposing. If it's
16 not viable, it wouldn't solve the problem we are
17 trying to take on for Treasure Island, for a solution
18 for Treasure Island.
19 We are trying to play catch up and it's
20 already proposed at that point.

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1 So we are trying to find out if that's a
2 viable option to consider at some point, even though
3 there is not one on the table right now. But it does
4 seem to come up with some regularity.

5 If we look at that as one of the ways to
6 deal with, say, the groundwater issue, we do
7 institutional controls for, you know, so if we know
8 ahead of time that institutional controls means
9 institutional controls for groundwater or lead in the
10 soil on Yerba Buena Island, for instance, or an issue
11 like that is not going to work, then we could take it
12 off the table as being a viable alternative.

13 So we are trying to find that out ahead of
14 time to see if that's something we should consider.

15 So that's the reason, I think, that's still
16 a valid concern as far as Treasure Island, even.

17 But there is a lot of other alternative
18 technologies and things that are out there, too, that
19 aren't proposed right now, but that doesn't prevent us
20 from evaluating them further down the road when that

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1 evaluation stage actually comes to fruition.

2 So it's a valid issue.

3 MR. BRENNAN: Well, just as the Air Force
4 and DoD, DoE funded the national attenuation workshop,
5 they talk about the next one would probably be
6 institutional controls.

7 I don't think there has been any military
8 base where that hasn't come up. You still have a gate
9 here. You still have some controls. I don't think
10 there is a base anywhere that they say, "We're not
11 going to have institutional controls."

12 It seems like something is going to have to
13 be evaluated to get a step ahead instead of one
14 behind.

15 CO-CHAIR SULLIVAN: But, actually, though, I
16 think what you said is really kind of what our Navy
17 office is thinking, in terms of a conference on
18 institutional controls.

19 There are other forums both within the
20 regulatory agencies and between DoD and the regulatory

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1 agencies, which are looking at the general issues of
2 institutional controls or generic or institutional
3 controls that might be used at multiple bases.

4 They give you that impression, too, that if
5 this was really going beyond, if the TAPP proposal was
6 going beyond evaluating a specific situation at TI,
7 then they felt that it might already, that it might
8 be, being addressed in some of these other more
9 national type forums in that the TAPP program might
10 not be appropriate for that kind of broad evaluation
11 of ICs that weren't specific to TI or weren't
12 specifically proposed for TI.

13 And I understand what Paul is saying. I
14 understand what was the thinking behind the proposal.

15 But I think the Navy is taking a position
16 that the TAPP proposal needs to be focused on the
17 conditions at that specific base and not in the
18 broader issue of whether institutional controls are,
19 you know, appropriate in general or not, or some
20 specific type of institutional control is appropriate

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1 in general.

2 CO-CHAIR HEHN: What if we made the TAPP
3 proposal more specific, like: Institutional controls
4 are one of the alternatives that are being considered
5 for Treasure Island? Just reword the proposal.

6 Essentially, it has come up, and if it does
7 continue to come up, I think it's something that is
8 one of the more often used options for bases, or, for
9 instance, where there is not a real alternative,
10 viable, remedial alternative for, you know, some of
11 these bases. That's what makes the fall back position
12 institutional controls.

13 So I could see the seismic issue. I could
14 see that's probably a little bit more iffy from my
15 viewpoint, too, personally, but I think that's
16 something we will have to discuss at the interim
17 meeting and see whether we want to rewrite this.

18 I think that to look at institutional
19 controls for this base is very valid. I think it's a
20 good idea to do that and come up with a view of how

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1 well they have worked at other bases. Are they really
2 a valid alternative? I believe it's going to come up
3 here, too.
4 MR. BRENNAN: Can we do this the other way?
5 Can they send us TAPP proposals they had approved so
6 we can look at what they approved?
7 I mean, we could put one in and say: We
8 will look at the corrosion on galvanized steel used on
9 Treasure Island exposed to seawater and wind. I mean,
10 it could get absurd.
11 So why don't they send us what they have
12 approved and try to come within that realm, that
13 kingdom of approval.
14 CO-CHAIR SULLIVAN: Yes. I think there may
15 very well not be others regarding ICs, but I think it
16 may be useful to see what others are doing.
17 MR. BRENNAN: I mean, they have the computer
18 at Mare Island.
19 They have the consultant review on Alameda.
20 But there must be some across the country,

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1 right, that the Navy has approved near the water.
2 CO-CHAIR SULLIVAN: Yes.
3 MR. BRENNAN: So if we saw those, that might
4 help us meet the standard.
5 CO-CHAIR SULLIVAN: That's a good point.
6 What is it? Imitation is the sincerest form
7 of flattery?
8 MR. BRENNAN: That's right.
9 CO-CHAIR SULLIVAN: But then along the line
10 what Paul was thinking, I think if the TAPP grant was
11 more narrowly focused, say, towards institutional
12 controls of groundwater, that would be, I think, more
13 in line with the direction that we are more seriously
14 heading.
15 MR. BRENNAN: Are you also recommending
16 institutional control where you're going to dig the
17 soil up, because you don't go under buildings? You're
18 going to put up the orange mesh or something?
19 CO-CHAIR SULLIVAN: Well, we haven't gotten
20 to the point on any of our sites where we think of --

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1 well, I will just speak for the Navy -- where the Navy
2 thinks that we may have to place an institutional
3 control because we can't get at something.
4 I mean, that's kind of one reason why we are
5 doing the lead removal at Building 1207, 1209 area, is
6 that we had some subsurface elevated concentrations of
7 lead, subsurface, and one potential alternative would
8 have been to place, that the agencies had mentioned
9 was to place some sort of control on the site.
10 But we ended up deciding between them, the
11 Navy and the agencies, to go ahead and remove it.
12 Now, of course, we haven't done the removal yet, and
13 our intent is that when we do the post removal
14 sampling, that we would essentially remove the
15 concentrations at the elevated concentrations, and,
16 then, consequently, there would be no need to have any
17 restriction on the use of that site.
18 So I think we have been kind of aiming as a
19 team to not have to have any restrictions. But like
20 in the case of groundwater, that maybe one that's --

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1 the groundwater is not going to be potable. It's not
2 going to be drinkable.
3 There may be some formal controls placed on
4 that to make sure that somebody in the future doesn't
5 decide to pump it up and drink it.
6 CO-CHAIR HEHN: Can I ask you to do this?
7 Jim, would you go ahead and E-mail me just a
8 synopsis of their concerns so that I could send that
9 out to the members of the technical subcommittee and
10 other members with an interest in that, and we will
11 discuss that more and evaluate whether we want to
12 change that TAPP proposal? Something that we think
13 can get funded. It does seem to be a lot more of a
14 difficult process than we were led to believe.
15 CO-CHAIR SULLIVAN: Well, I think our
16 Washington office is kind of surprised at the
17 proposal.
18 I guess it wasn't kind of what they had
19 originally expected.
20 And, in fact, the classic, very classic TAPP

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1 proposal is to evaluate independent evaluation of the
2 document. That was kind of what they envisioned to be
3 the typical TAPP proposal.
4 In fact, I think the Alameda TAPP might have
5 been even the first Navy TAPP in the nation, or pretty
6 close to it, and that was simply to have a third party
7 evaluation of the documents.
8 MR. GALANG: Maybe start looking at other
9 proposals, other topics that you can work on, not just
10 one.
11 CO-CHAIR SULLIVAN: Yes. There is no limit
12 to the number as long as it doesn't exceed the 25,000
13 for the year.
14 Even that, that limit of 25,000 is up for
15 discussion. It's not necessarily a hard number.
16 But Ernie has gone ahead since the beginning
17 of the year and set aside 25,000 for this fiscal year,
18 which will end at the end of September.
19 But in order to execute it, the contracting
20 would have to be done sometime during, you know, by

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1 the summer months.
2 CO-CHAIR HEHN: Well, I think there is
3 probably, putting together a second TAPP proposal for
4 work on that newsletter.
5 I'm assuming that that would be something
6 that would be acceptable, because that's beneficial to
7 our getting out information to the general population,
8 which is part of the necessity by the RAB.
9 So I'm hoping that that would be acceptable,
10 because that's something we would certainly use some
11 help in doing because that's another whole
12 undertaking.
13 In addition to the document that we review
14 comments, that would be beneficial for us.
15 CO-CHAIR SULLIVAN: Yes. I think it sounds
16 like something that would be acceptable.
17 And, in fact, I think Mare Island, I think
18 it's even being done without a TAPP. I think we were
19 just paying for the publication and not the TAPP
20 grant.

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1 All right. Any other open questions or
2 discussion?
3 Agenda items for next meetings: I think the
4 final onshore RI is probably going to fall by the
5 wayside because that was predicated on having reached
6 some conclusion with the TPH screening. That isn't
7 going to happen probably before our meeting with
8 managers in April.
9 But we are still tracking to produce a Site
10 12 RI report, because we already previously resolved
11 the TPH issue.
12 So I don't think there is any outstanding
13 issues for the Site 12 RI?
14 MR. KNAPP: Not really.
15 There is what we call dual tracking of risk
16 assessment, because there is still some issue there on
17 exposure parameters and so forth, but we managed to
18 not let that hold it up. We are simply looking at a
19 couple of different risk scenarios.
20 We are on track to produce a document, the

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1 draft final.
2 CO-CHAIR SULLIVAN: So then that would still
3 be appropriate to present at the next RAB meeting in
4 April.
5 MR. GALANG: Yes.
6 Maybe for the next meeting, also, we will
7 probably have the work plan for the Site 12 removals.
8 So maybe if we do the removal in May, we have to
9 present it in April.
10 CO-CHAIR SULLIVAN: Yes.
11 So maybe then April will be kind of a focus
12 on Site 12. There will probably be enough material to
13 cover a good part of the meeting.
14 CO-CHAIR HEHN: Are there any other
15 documents that are coming out at that time that you're
16 focused on?
17 MR. GALANG: Yes.
18 CO-CHAIR SULLIVAN: But it would still all
19 be related to Site 12.
20 MR. GALANG: Yes.

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1 CO-CHAIR SULLIVAN: Are there any other
2 documents other than Site 12 which would be
3 appropriate to have in a meeting topic, if significant
4 enough?

5 (No response.)

6 CO-CHAIR SULLIVAN: Well, that's something
7 that we would be able to discuss at the BCT meeting on
8 the 5th.

9 And then we would be able to carry that over
10 into the RAB interim meeting on the 7th.

11 But it sounds like Site 12 is going to be a
12 major focus at the April meeting.

13 I'm kind of at a loss for May, but I'm sure
14 other documents will fall out.

15 So our next meeting, our next regular RAB
16 meeting falls a little later in the month, Tuesday the
17 20th of April, back here at the Casa. But do watch
18 for the locations, because if there is another event
19 here, we may get relocated elsewhere.

20 But it seems like Tuesdays are not too busy

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1 so far, so it's likely we will continue to be here at
2 the Casa. There is a potential we may, from time to
3 time, meet elsewhere.

4 And then the next interim meeting is
5 Wednesday the 7th of April at Pat's office. We will
6 put out a flier on that ahead of time, too.

7 And the BCT meeting is Monday, the 5th, at
8 Tetratex.

9 The next Development Authority meeting
10 should be Wednesday the 14th, but I can't speak for
11 the city. You will have to look at their mailer that
12 they send out. It is possible that they may adjust
13 their meeting date.

14 But, typically, they have been meeting now
15 on the second Wednesday of the month.

16 Any other comments before we close tonight's
17 meeting?

18 Well, thank you very much.

19 (The meeting adjourned at 9:52 p.m.)

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