

RAB MEETING - MEETING NO. 16 - NOVEMBER 28, 1995

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5 NAVAL STATION TREASURE ISLAND  
6 ENVIRONMENTAL RESTORATION ADVISORY BOARD MEETING  
7 28 NOVEMBER 1995  
8 7:00 p.m.  
9 FLEET ADMIRAL NIMITZ CONFERENCE CENTER  
10 TREASURE ISLAND  
11 MEETING NO. 16  
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20 REPORTED BY: PAUL SCHILLER, CSR @1268  
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1 HARLAN VAN WYE, T.I. Yacht Club  
2 USHA VEDAGIRI  
3 JAMES WILSON  
4 BRAD WONG, Community Co-Chair  
5 BEAU WRIGHTSON  
6  
7 REGULATORY\_AGENCIES \_\_\_\_\_  
8  
9 MARY ROSE CASSA, DTSC  
10 SHIN ROEI LEE, RWQCB  
11 RACHEL SIMONS, U.S. EPA  
12 AMY BROWNELL, SFDPH  
13  
14 U.S. NAVY \_\_\_\_\_  
15  
16 LT. NANNETTE ROBERTS, NAVSTA TI  
17 JIM SULLIVAN, BEC AND Navy Co-Chair  
18 ERNIE GALANG  
19 HUGO BERSTON, NAVSTA TI  
20 LARRY LIND  
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3 A T T E N D A N T S  
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5 COMMUNITY\_MEMBERS: \_\_\_\_\_  
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7 JAMES ALDRICH  
8 JOHN ALLMAN  
9 CHRIS SHIRLEY, ARC Ecology  
10 WILLIAM FOSTER  
11 RICHARD HANSEN  
12 FRED HAYDEN  
13 PAUL HEHN  
14 GARY JENSEN  
15 CHLOE JUE  
16 CLINTON LOFTMAN  
17 DANIEL MC DONALD  
18 KAREN MENDELOW  
19 DALE SMITH  
20 LAURIE GLASS, T.I. Citizens Reuse Committee  
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1 JOHN PFISTER  
2  
3 PRC\_ENVIRONMENTAL\_MANAGEMENT\_INC. \_\_\_\_\_  
4  
5 SHARON TOBIAS  
6 TIMO ALLISON  
7 KATHY WALSH  
8 FRANK CARROLL  
9 DANIEL COOPER  
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1 (The meeting was called to order at  
 2 7:07 p.m.)  
 3 CO-CHAIRMAN SULLIVAN: Welcome to our  
 4 Environmental Restoration Advisory Board Meeting  
 5 for Naval Station Treasure Island. Since we have  
 6 plenty of seats, I invite anyone up towards the  
 7 back, you're certainly welcome to come up forward,  
 8 maybe to get a better view of the overhead; then  
 9 we won't feel so lonely up here.  
 10 Our first item of business is the  
 11 discussion and approval of the agenda. Everyone  
 12 should have a copy of the November agenda on the  
 13 table. It was put in the mail as well.  
 14 Is there any discussion regarding the  
 15 agenda?  
 16 With that, we will consider the  
 17 November agenda approved; and we will proceed.  
 18 The next item of business is the  
 19 discussion and approval of the meeting minutes  
 20 from the 24th of October meeting. We have  
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1 additional copies of the minutes. If you don't  
 2 have your copies of the meeting, they are in the  
 3 back; so if anyone needs to take a minute to get  
 4 an additional copy of the minutes, you're welcome  
 5 to do so.  
 6 Is there any discussion or comment  
 7 regarding the October meeting minutes?  
 8 Then we will consider the October  
 9 meeting minutes approved.  
 10 We will now have the public comment  
 11 period. This is a period at the beginning of our  
 12 meetings when we afford an opportunity for any  
 13 members of the public who are with us to comment.  
 14 Are there any comments from the  
 15 general public?  
 16 We will also have another comment  
 17 period at the close of the meeting.  
 18 Thank you.  
 19 Next we will proceed into review of  
 20 action items. I will have to ask your indulgence.  
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1 Because of the week-long closure of the federal  
 2 government as well as the holiday, we really  
 3 haven't made as much progress as we wanted to on  
 4 the action items from the last meeting; so the  
 5 majority of them will be deferred until our  
 6 December meeting, which is actually only three  
 7 weeks from tonight, on December 19th.  
 8 Unless there is any particular  
 9 question, in looking at the action items -- I'm  
 10 looking at page 3 of the BRAC Cleanup Team meeting  
 11 from October 16th under "RAB Action Items."  
 12 Unless there are any comments or  
 13 questions regarding outstanding action items, I  
 14 will defer that until the December meeting.  
 15 We will proceed into organizational  
 16 business, and I will turn it over to Brad.  
 17 CO-CHAIRMAN WONG: I want to keep  
 18 this nice and sweet, because we have a good  
 19 program planned for tonight regarding the UST  
 20 programs and the Ecological Risk Assessment.  
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1 By way of an update on the interim  
 2 meeting, we essentially covered three things at  
 3 that meeting:  
 4 One was copies of the most recent  
 5 ROMA consulting company proposals for the use of  
 6 Treasure Island, plus a companion piece called  
 7 TIHDI.  
 8 CO-CHAIRMAN SULLIVAN: That is the  
 9 Treasure Island Homeless Development Initiative,  
 10 and they are a consortium that is formed under the  
 11 federal McKinney Act to request federal property  
 12 as providers to the homeless.  
 13 CO-CHAIRMAN WONG: Those documents  
 14 were provided. I don't know if they're here as  
 15 well for people.  
 16 CO-CHAIRMAN SULLIVAN: I made enough  
 17 copies so that anyone who did not receive a copy  
 18 at the interim meeting, there is copies at the  
 19 long table where Ernie is standing; and I will  
 20 mail copies to anyone who is not here tonight.  
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1 CO-CHAIRMAN WONG: Essentially what  
2 we did is take a look at those documents and what  
3 they mean and what some of the different issues  
4 are.

5 That led into a discussion that will  
6 come up in a little bit, that Dan can talk about,  
7 regarding someone from the Redevelopment Authority  
8 getting together with the community members and  
9 explaining those documents and the homeless use  
10 process a little more, so that will be coming up.

11 The other things we did, so everybody  
12 knows, we worked through the UST document  
13 distribution and the ecological risk assessment  
14 work plan distribution in terms of developing a  
15 schedule of when the Technical Subcommittee would  
16 be working on all of those and what needed to be  
17 done. That is something that Paul can probably  
18 address a little bit later in the meeting.

19 The last thing, we spent some time  
20 talking about -- and I have copies here to

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1 distribute -- is a summary of our last meeting, in  
2 terms of what we had voted on and would like to  
3 see as agenda development for '96, to get us  
4 through the next six to eight months.

5 I don't know if everybody here has a  
6 copy of that, but we have extras here I can pass  
7 around to you.

8 But, essentially, we discussed that.  
9 Paul and I had a meeting with Jim prior to the  
10 interim meeting to review it, and I think we all  
11 pretty much came out with agreement that this  
12 format would be something that would work well  
13 from the BCP side and the community side. And  
14 then we got some input from the community members  
15 that were at the interim meeting, with an  
16 agreement that we would bring it here, share it  
17 with everyone, and ask everyone here tonight to  
18 provide me with some feedback in terms of both the  
19 agenda and the topics that we would like to  
20 consider to cover over the next six to eight

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1 months, beginning in January.

2 Our goal is, by the interim meeting  
3 of December 12th, to have that all tied down and  
4 go into the new fiscal year.

5 That actually covers most of my  
6 organizational business, as well as an update on  
7 the interim meeting.

8 The last thing I would like to do,  
9 there has been an outstanding item for a while,  
10 but tonight we can bring this to a close. I have  
11 the final copy of a letter going from the Treasure  
12 Island Community RAB members, those that choose to  
13 sign it, as a response to the RAB Caucus letter  
14 that was sent to the DTSC earlier in the year.  
15 This incorporates the handful of comments that I  
16 got after the last RAB meeting and, I think,  
17 represents the final copy.

18 So I would like to pass this around  
19 tonight; and, again, no obligation to sign it; but  
20 those people that agree with the contents of the

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1 letter and that it should be sent and would like  
2 to sign it, that would be terrific.

3 Starting tomorrow, I can get it into  
4 the mail and send it out.

5 That is it on organizational  
6 business.

7 CO-CHAIRMAN SULLIVAN: Upcoming  
8 Environmental Report Review schedule, we have two  
9 documents out:

10 The first document is the UST  
11 Investigation and Corrective Measures Study, and  
12 a number of you have been given a copy of that.  
13 There was also some additional community members  
14 who had asked for copies, and Hugo has copies for  
15 those additional people, who had asked for them,  
16 at the back of the room.

17 The comments for that document are  
18 due at our next meeting on the 19th of December,  
19 and we will be having a discussion on that  
20 tonight, as well as some carryover in the December

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1 meeting.

2 The other document is the Draft Final

3 Phase II Ecological Risk Assessment Work Plan.

4 That has also been distributed. Comments are due

5 at the next mid-month meeting, on the 12th of

6 December; and we will have a presentation on that

7 report tonight as well.

8 MR. HEHN: I was wondering, on the

9 comment period for the Phase II Ecological Risk

10 Assessment, if it would be possible to get a

11 couple of extra days on that, because since we're

12 going to be discussing that during the next

13 interim meeting -- or we would like to, at

14 least -- I would like to have a couple of days to

15 put those comments together and give them to the

16 Technical Subcommittee.

17 So if it is possible to do it until

18 the 14th of 15th, that would allow us to comment

19 on that document.

20 CO-CHAIRMAN SULLIVAN: We got our

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1 field work schedule, and we're kind of driving

2 toward that date, but I think we should be able to

3 stretch it a couple of days.

4 Comments for Ecological Risk

5 Assessment are due now on the 15th, rather than

6 the 12th of December.

7 MR. HEHN: That will be fine.

8 CO-CHAIRMAN SULLIVAN: Now we're

9 moving to program updates, and Mary Rose will

10 discuss our Cleanup Team activities.

11 MS. CASSA: The BCP met on November

12 1st, mainly to discuss the Environmental Baseline

13 Survey Sampling Plan.

14 We spent a fair amount of time

15 talking about the comments that were put together

16 by the community RAB members.

17 We had a detailed discussion of the

18 regulatory comments, to some extent, about the

19 format of the Work Plan and the comments and one

20 of the outcomes of the revised approach to the

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1 Sampling Survey Plan system, which we deem is a

2 lot more comfortable and somewhat more

3 conservative than the approach presented in the

4 Draft Work Plan.

5 We also had a presentation that

6 afternoon on a relatively new technology for

7 gathering data relating to benthic examination of

8 the soil, something called Gorsorber. It could be

9 possibly used in the early stages of the

10 investigation, and it is an interesting

11 technology.

12 On November 6th, we had our monthly

13 BCP-RPN meeting; and that was largely a further

14 discussion on the approach to the Baseline Human

15 Health Risk Assessment. We also had an update of

16 field work up to that point and discussed with the

17 Navy the proposed FFSRA schedule, and that revised

18 schedule will be submitted to BCP later this

19 month, early December.

20 On November 9th we had a telephone

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1 conference, mainly to make sure Jim was on track

2 with the RAB action items; and the government did

3 not go to work; so the action items have been

4 deferred.

5 Are there any questions about the BCP

6 activity?

7 MS. VEDAGIRI: The Division sent the

8 changes that you mentioned to the sampling plan

9 and the risk assessment. Will we see the outcome

10 of that?

11 MS. CASSA: The Baseline Survey

12 Sampling Plan was in draft, and the RAB comment on

13 that, and it will be resubmitted as a final. And

14 the Baseline Human Health Risk Assessment, these

15 are discussions that are leading into the

16 submittal of the draft investigation report next

17 year.

18 So the results of those discussions

19 will show up in the Draft RI Report.

20 CO-CHAIRMAN SULLIVAN: Thank you,

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1 Mary Rose.  
 2 Now, Dan, would you be able to  
 3 comment on the Subcommittee on External Affairs?  
 4 MR. MC DONALD: The most recent  
 5 committee meeting was on November 15th. The ROMA  
 6 Design Group handout -- that was discussed  
 7 earlier -- is a series of conceptual alternatives  
 8 for the base which was discussed. The  
 9 alternatives were reviewed about their physical  
 10 feasibility as well as the timeframe that these  
 11 would be done in.  
 12 These alternatives were very general  
 13 and very conceptual. I think that the CRC has yet  
 14 to address the environmental ramifications of some  
 15 of these alternatives. Some look at uses that may  
 16 or may not have a great deal of impact on the  
 17 cleanup schedule or the funding that would be  
 18 available, and that's something that we will be  
 19 pursuing with economic consultants to ask them to  
 20 take a deeper look at the financial impacts of  
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1 these alternatives vis-a-vis the environmental  
 2 cleanup costs.  
 3 The TIHDI proposal you heard a minute  
 4 ago, that is the proposal to provide homeless  
 5 services on the Island. Again, that proposal  
 6 assumes some level of residential development  
 7 somewhere on YBI or the Island. Whether those  
 8 proposals fit in with any of the other proposals  
 9 for the rest of the land is not yet clear.  
 10 But, again, all these puzzle pieces  
 11 are still being provided; and the re-use process  
 12 has not been put all together yet.  
 13 The next three months will be a  
 14 critical time for the CRC and the Office of  
 15 Military Base Conversion to frame the  
 16 alternatives, both in terms of time and money  
 17 ramifications.  
 18 To the questions that were asked at  
 19 the last meeting here about the conversion  
 20 process, we have asked, and they have answered.  
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1 We have gotten Byron Rett, who is a senior manager  
 2 in the Office of Military Base Conversion, who has  
 3 agreed to appear before the interim RAB meeting,  
 4 which will be on December 12th.  
 5 The meeting will take place in San  
 6 Francisco at Brad's office, which is at 44  
 7 Montgomery Street.  
 8 CO-CHAIRMAN WONG: 44 Montgomery  
 9 Street, 22nd Floor, Suite 2200. It is on the back  
 10 of your agenda there. And for those of you from  
 11 the East Bay, it is the Montgomery Street BART  
 12 station. You can get off there.  
 13 MR. MC DONALD: The meeting was going  
 14 to be held in San Francisco to accommodate Byron's  
 15 schedule. He will also bring with him two or  
 16 maybe three other people from the Redevelopment  
 17 Agency or maybe the Office of Military Base  
 18 Conversion to talk about the ERI/EIS process they  
 19 will be going through, so we hope to have a good  
 20 turnout of RAB members so we can better familiar  
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1 with the conversion process.  
 2 The next CRC meeting will be in  
 3 December. There is some question whether it will  
 4 be the first or second Monday. There is still  
 5 some discussion about that.  
 6 CO-CHAIRMAN SULLIVAN: I put the 11th  
 7 of December in the meeting schedule; but if it  
 8 changes, I will send out another notice.  
 9 MR. MC DONALD: For anyone who wants  
 10 a copy of the Full Issues and Opportunities Report  
 11 that was prepared by the consultants to the Office  
 12 of Military Base Conversion, let me know and I can  
 13 have a full two-volume set sent to you.  
 14 Volume II contains the geotechnical  
 15 data that we have all expressed a lot of interest  
 16 in, and they now have those available. They had a  
 17 shortage of printed copies for a while. We're now  
 18 able to get them. Anybody who would like them,  
 19 let me know; and I will have them sent to you.  
 20 CO-CHAIRMAN SULLIVAN: The two  
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1 volumes are the same documents that were printed,  
 2 I think, in July. It is not an updated version.  
 3 MR. MC DONALD: Printed in July,  
 4 first distributed in August. They ran out of  
 5 copies; they had some printing problems; and it  
 6 took quite a while to get additional copies.  
 7 There was some question about whether  
 8 they could charge or not. They were told they  
 9 could not charge. They are available free to the  
 10 public.  
 11 CO-CHAIRMAN WONG: I think this is an  
 12 unprecedented thing. We are ahead of time.  
 13 CO-CHAIRMAN SULLIVAN: Since we are  
 14 ahead of schedule, we want to afford as much time  
 15 to the two presentations that we do have.  
 16 I would like to proceed into the  
 17 presentation on the Underground Storage Tank and  
 18 Fuel Lines Program, and I would like to introduce  
 19 Shin Roei Lee from the Regional Water Quality  
 20 Control Board. She is here to give an overview of  
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1 the Regional Board activities and their  
 2 relationship to the fuel program.  
 3 There is a handout of both Shin  
 4 Roei's presentation and the Navy presentation on  
 5 your desk, or additional copies in the back.  
 6 MS. LEE: I'm Shin Roei Lee. I  
 7 apologize; I did not have time to make copies of  
 8 my overheads; but I will. I would like to reduce  
 9 them so that they fit better on less paper. I  
 10 will provide that to Jim, and that will be  
 11 distributed.  
 12 I'm Shin Roei Lee, the program  
 13 manager for all the military bases in our region,  
 14 which is the San Francisco Bay region. I  
 15 appreciate this opportunity to share with you our  
 16 state program to address leaking underground fuel  
 17 tank investigation sites.  
 18 I don't usually get this opportunity  
 19 unless my project manager is on vacation.  
 20 I would like to cover four issues  
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1 today.  
 2 First is the general approach to will  
 3 you have the leaking underground fuel tank  
 4 investigation and cleanup? And since I assume  
 5 that people here are more familiar with the CERCLA  
 6 process, I am trying to make a comparison between  
 7 the tank process investigation and the CERCLA  
 8 process. You will find that they are similar.  
 9 The next thing I want to talk about  
 10 are the state laws and regulations, plans and  
 11 policies and guidelines that would govern the tank  
 12 site investigation and cleanup.  
 13 The third item is the future  
 14 direction on fuel cleanup. With the focus on  
 15 risk-based corrective action, the tank regulations  
 16 have been promulgated since 1985; and we have  
 17 learned a lot in the last ten years; so there are  
 18 some changes that are being discussed and probably  
 19 will turn into future problems.  
 20 And the last thing is, what does it  
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1 all mean to Treasure Island in terms of the tank  
 2 program here?  
 3 On the left-hand side is the tank  
 4 program process, and on the right-hand side is the  
 5 CERCLA process.  
 6 So we start with the preliminary site  
 7 assessment, and that we will require the  
 8 responsible party to just identify the tank site,  
 9 the nature, and the quantity of the leak, general  
 10 water quality information, any nearby wells that  
 11 may be affected by the leak or releases.  
 12 Soil condition, in general; regional  
 13 geology or local geology, if that information is  
 14 available.  
 15 Land use information and any known  
 16 subsurface utilities.  
 17 Actually, at this point, some generic  
 18 risk assessment, using very conservative  
 19 assumptions, can be made. That is pretty much  
 20 equivalent to CERCLA preliminary assessment and  
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1 site investigation.  
2 If there are signs of surface or  
3 groundwater impact, or discovery of leak product  
4 on site or off site that may be originated from  
5 the release, and also evidence of contaminated  
6 soil in contact with the surface water or ground  
7 water, then we will go into the next phase, which  
8 is go into investigation. Actually, we will need  
9 to define the extent of soil, groundwater or even  
10 contamination as a result of that.

11 At this point, the risk assessment  
12 based on site-specific assumptions needs to be  
13 made.

14 Similar to surplus, any feasible  
15 interim removal action or remedial action can be  
16 implemented to address any imminent threats.

17 Then the responsible party will be  
18 required to evaluate the different corrective  
19 actions and submit a corrective action plan to the  
20 Board. And that plan needs to include information

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1 about physical, chemical characteristics of the  
2 contaminants of concern which is fuel-related and  
3 of any breakdown products

4 So, for instance, if diesel is the  
5 contaminant concerned, then, in addition to diesel  
6 analysis, we would need to know the polyaromatic  
7 hydrocarbon, because that is a very major  
8 component in diesel fuel; and those are very  
9 toxic.

10 We will need to know, identify any  
11 adjacent water bodies that may be affected, both  
12 surface water and groundwater.

13 The next information that needs to be  
14 included in the plan is to identify the beneficial  
15 uses associated with those water bodies.

16 Once that is done, we need to  
17 identify the water quality objectives. They are  
18 established for the protection of the public.

19 And then there would be a number of  
20 corrective actions, alternatives, evaluated to see

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1 which one is the most cost-effective alternative  
2 to assure compliance with the water quality  
3 objectives.

4 That is very similar to a feasibility  
5 study on the surplus.

6 The next step would be to implement  
7 the selected alternative, whether that is an  
8 active remediation or passive remediation. By  
9 that I mean active remediation, that would be  
10 groundwater concentrate, first screen or vacuum  
11 extraction of the soil vapor, etc.

12 Passive remediation allows the  
13 natural biodegradation to address the  
14 contamination, if that is feasible, and also deed  
15 restrictions or deed notices.

16 The typically adopted action,  
17 corrective action, in the Board, that's when the  
18 public would have an opportunity to participate in  
19 the selected remedy in a public meeting. And that  
20 is something equivalent to an MTL site for RAB,

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1 and then remedial design and remedial action.

2 And the last thing under the UST  
3 program process is that, since a lot of  
4 assumptions were made to predict a state of  
5 transfer of contaminants of concern as a  
6 calculated risk, the purification monitoring is  
7 absolutely essential to validate the assumption.

8 Again, that is similar or equivalent  
9 to the long-term operation and maintenance,  
10 whatever remedial action might be taken.

11 This is the list of laws,  
12 regulations, plans and policies that govern the  
13 investigation and cleanup of tank sites. I will  
14 start with the law.

15 The Porter-Cologne Act provides the  
16 legal mandate for states and regional boards to  
17 regulate any activity or factors that may affect  
18 the quality of water of the state, and by that  
19 water of the state, meaning both groundwater and  
20 surface water, to attain the highest water quality

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1 which is reasonable; and I would like to emphasize  
2 "reasonable" here.

3 The Porter-Cologne Act requires each  
4 regional board -- we have nine regional boards  
5 throughout the state -- to adopt its own Basin  
6 Plan that will define the water body and  
7 beneficial uses of those water bodies and  
8 promulgate water quality objectives to protect  
9 those beneficial uses.

10 We also have the California Code of  
11 Regulations, Chapter 15, which regulates  
12 discharges of waste to land, which applies to  
13 landfill surface, waste piles, land treatment  
14 units; but to some extent it applies to leaks.

15 And Chapter 16 is the most relevant  
16 to underground water and the tank program.

17 The Health and Safety Code is also  
18 very relevant. It has a very similar process for  
19 corrective action.

20 Additional state laws and  
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1 regulations: The State Board Resolutions are the  
2 three most commonly used. Number one is 68-16,  
3 which is also known as anti-degradation policy,  
4 which requires that if the water quality is higher  
5 than what is prescribed in the Basin Plan, that  
6 higher water quality must be maintained.

7 And 88-63, Sources of Drinking Water  
8 Policy, provides criteria when a groundwater  
9 aquifer can be considered a potential drinking  
10 water source. It has to meet both the TDS of less  
11 than 3000 ppm and also a yield of more than 200  
12 gallons a day from any single well, so that you  
13 have to decide what are the potential beneficial  
14 uses.

15 Related managed Resolution 92-49  
16 basically provides the policies and procedures how  
17 to conduct cleanup. It has pretty much the same  
18 procedures I just described, not for UST,  
19 underground source tank, but it also applies to  
20 landfills and any other type of waste management

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1 units and leaks from other sources.

2 The most recent development on that,  
3 there is a pending amendment to 92-49, and that is  
4 called Containment Zone Policy. Later on, I will  
5 describe that a little bit more and see how that  
6 would apply.

7 As I mentioned earlier, the  
8 underground source tank regulations have been  
9 promulgated since 1985, so what have we learned in  
10 the last 10 years dealing with tank cleanup?

11 We have learned that the number of  
12 drinking water wells affected actually are pretty  
13 limited, even though statewide we have 21,000  
14 aquifer cases right now.

15 The wells that are affected are  
16 mostly private drinking water wells. They're very  
17 close to the source of contamination, and they are  
18 very shallow.

19 And the other thing we learned is,  
20 once the source is removed -- by that I mean the  
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1 very contaminated soil -- and the debris product  
2 is removed, the contamination is subject to very  
3 rapid biodegradation. By nature that is very  
4 different from the chlorinated solvent that we're  
5 dealing with.

6 The last thing that we learned is  
7 that there are limits to current technology. For  
8 example, groundwater pumping and treatment is very  
9 effective to remove a mass of contamination; but  
10 it may never achieve the cleanup goals, for  
11 instance, the drinking water standard.

12 Based on what we learned, we are very  
13 supportive of risk-based corrective action for  
14 these reasons here. They allow us to focus more  
15 on technical and economic feasibility. We have,  
16 in the past, I guess, taken a position toward  
17 active remediation; the contamination having been  
18 there; therefore, the responsible party should  
19 clean it up.

20 But now we are asking our sources a  
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1 harder question: Is it really feasible to do  
2 that, knowing that there are limitations?  
3 They allow us to distinguish between  
4 low versus high risk sites for better  
5 prioritization, and that works for both  
6 responsible parties as well as the regulatory  
7 agencies.  
8 If I can give an example of low risk  
9 sites, like very localized soil contamination in  
10 an industrial setting where the underlying  
11 groundwater has really no beneficial uses, maybe  
12 the soil is solid.  
13 The high risk sites are like very  
14 widespread soil groundwater contamination, and  
15 maybe in a residential setting, or maybe  
16 groundwater recharge zone; so to distinguish  
17 between the two allows us to move the lower sites  
18 faster to closure and free up the resources to  
19 deal with the high priority types better.  
20 And the third thing that is now  
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1 recognized is natural degradation, natural  
2 biodegradation, as an alternative to active  
3 remediation, based on empirical data.  
4 Some Napa county sites were surveyed  
5 by a regional board, based on review of all the  
6 historical tank data. Of the 200 sites that we  
7 looked at, only 57 sites had groundwater impact.  
8 And out of the 57, 90% of the sites had the plume  
9 of less than 200 feet; and yet 10% had wider plume  
10 land and that usually can be attributed to some  
11 obvious reasons, for instance, residential  
12 pathways, facility corridors, or stormwater  
13 ditches.  
14 Most recently a statewide effort was  
15 done and pretty much confirmed the same results as  
16 the Napa County did.  
17 To move on to the other two remaining  
18 advantages associated with the risk-based  
19 corrective action, it will provide more  
20 flexibility by applying a tiered approach to site  
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1 assessment and cleanup.  
2 When a site is identified, we will  
3 try to classify the site as to low-risk or high-  
4 risk site, as the example I just gave. For  
5 low-risk sites, some limited site investigation  
6 may be required and based on the information to  
7 perform generic risk assessment with conservative  
8 assumptions and either go into no further action  
9 or implement the next corrective action.  
10 For high-risk sites, it will require  
11 more extensive site investigation and, with that  
12 information, conduct site-specific risk  
13 assessment, and then make the cleanup decisions.  
14 All of these will expedite case  
15 closure based on acceptable reduction of risk.  
16 With all that, I wanted to comment on  
17 what does that mean to Treasure Island. I see  
18 that, at a minimum, we will have to perform source  
19 removal or isolation; and by that I mean we have  
20 to remove the tanks, the pipelines, and  
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1 contaminated soil or cap it.  
2 The next thing we have to do is  
3 remove the free product, especially when the free  
4 product is sitting on the edge of the Bay, it  
5 causes a significant threat.  
6 The main issue at Treasure Island  
7 would be how we deal with the dissolve problem.  
8 To make a decision, we would have to go through  
9 this same process.  
10 First, we have to determine what are  
11 the beneficial uses in the groundwater. Based on  
12 my understanding, I know that TDS meets the  
13 groundwater to be considered as a potential  
14 drinking water source.  
15 So what is the opportunity for  
16 development of this resource? Are there other factors  
17 we should consider, for instance, land subsidence,  
18 if we go on and pump? Would that induce seawater  
19 to come in and therefore change the TDS?  
20 Those are the considerations that we  
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1 need to take into account.  
2 So if we decide that we don't need to  
3 protect it as a drinking water source, what does  
4 that mean? If that is the case, what are the  
5 beneficial uses of the Baywater?

6 Containment at the perimeter of this  
7 facility would be, in my opinion, more cost  
8 effective.

9 So that is the conclusion of my  
10 presentation.

11 CO-CHAIRMAN SULLIVAN: We can open it  
12 up to questions before we proceed into the Navy  
13 presentation.

14 MS. SHIRLEY: I have one question  
15 about definition: How is a site defined?

16 MS. LEE: If there is evidence of  
17 release, and that can be either done by tanks  
18 testing or inventory records or just soil borings  
19 and groundwater monitoring, if that is confirmed,  
20 then we call it a site.

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1 MS. SHIRLEY: Well, the reason I  
2 asked, here at TI various sites may be in  
3 communication with each other. How would that be  
4 handled?

5 MS. LEE: You mean field sites?

6 MS. SHIRLEY: I mean there may be an  
7 IR site that's fairly clearly defined, very close  
8 to a non-IR site, whose boundaries are not clearly  
9 defined. And what is considered a site?

10 MS. LEE: Site is one of extended  
11 contamination. So if we know there is a clear  
12 distinction between the contamination at two  
13 sites, then by doing the groundwater definition  
14 work, we ought to be able to establish the  
15 boundary; and then we look into the corrective  
16 action, does it make sense to deal with them  
17 totally separately if they're right next to each  
18 other? Because when you do perform a pumping  
19 treating, you might pull the plume from the other  
20 side over; so you may end up with one system.

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1 MS. SHIRLEY: So it is a professional  
2 judgment issue? There is not a guideline about  
3 how you define a site?

4 MS. LEE: I think again you have to  
5 decide what is the most feasible or cost-effective  
6 way of dealing with both.

7 CO-CHAIRMAN SULLIVAN: One thing I  
8 would like to add, because the tanks and  
9 underground storage tanks we used were mostly from  
10 the World War II era and were no longer in use,  
11 where we are removing all of our underground  
12 storage tanks from service, so there will be no  
13 underground operating storage tank when the Navy  
14 finally turns over the property.

15 We do have an opportunity to look at  
16 each tank as we remove it, unlike another  
17 situation. If we were not closing and had  
18 operating tanks, we would have to try to assess  
19 whether or not the tanks were leaking while they  
20 were still operating.

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1 MR. HANSEN: On the definition aspect  
2 again, to define this floor to be a site, is the  
3 base level a gallon of petroleum product or a  
4 hundred gallons? How much contaminant would have  
5 to be originated to make it into a site?

6 MS. LEE: I don't think that matters.  
7 I think it really depends on whether the amount  
8 that leaks made its way into the soil, the  
9 underlying soil and groundwater.

10 MR. HANSEN: If I went out to the  
11 grassy area before the parking lot and spilled a  
12 quart of oil, would that be a site?

13 MS. LEE: I don't think that would  
14 ever reach to the groundwater. That is our bottom  
15 line, the groundwater.

16 MR. HEHN: I wonder, if you're  
17 looking at beneficial uses of groundwater from  
18 Treasure Island, saying that the area, the central  
19 part of the Island has potential for beneficial  
20 use, what happens out of the boundary if you're

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1 looking at cleanup criteria and also containment  
 2 zone-type technology?  
 3 How would that change the scenario of  
 4 whether you're dealing with saltwater cleanup?  
 5 You have containment; you obtained a high TDS;  
 6 how does that interaction between beneficial use  
 7 and nonbeneficial use happen on Treasure Island?  
 8 MS. LEE: It depends on the location  
 9 of the site, which we're going to hear next, and  
 10 the size of the Island. We need to see whether it  
 11 is feasible to divide the space maybe into  
 12 different zones that would have different  
 13 management strategies applied to it.  
 14 I can use as an example the Presidio.  
 15 They have 223 tanks. Here we only have 73. And  
 16 over there the land uses are Crissy Field, which  
 17 is very different from the rest of the park. So  
 18 we divided it up, and there is a coastal zone and  
 19 Lobos Creek that has a beneficial use for that  
 20 groundwater. So we divided it up into five zones,  
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1 and then we look at the human use, the ecological  
 2 risk. We look at the different beneficial uses  
 3 for different zones, and we try to arrive at a  
 4 cleanup level that would be the most protective,  
 5 the most sensitive use.  
 6 Whatever scenario we go through, if  
 7 it is the lowest cleanup level, that is what we're  
 8 going to apply to that zone, so that would measure  
 9 all of our concerns.  
 10 So we may apply here that you have  
 11 more inlets, where it is freshwater but the  
 12 surrounding base line is a separate zone, because  
 13 the risk there is not a drinking water but is a  
 14 more aquatic risk.  
 15 MR. HEHN: If I can come up with an  
 16 entirely different standard for the fringe area  
 17 than the central area --  
 18 MS. LEE: That is very possible. San  
 19 Francisco Airport has exactly the same.  
 20 MR. FOSTER: I wanted to make a quick  
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1 comment:  
 2 In my experience, the way they  
 3 identify a lot of the sites, the IR sites or any  
 4 type of environmental concern, a lot of that  
 5 occurs in what she had up there at the beginning,  
 6 what they call a preliminary assessment or site  
 7 investigation. Those are rather long and  
 8 repetitive processes by which they either  
 9 literally walk around and look and find and tag  
 10 just about everything they suspect. It might have  
 11 been a spill, something like above-ground tanks,  
 12 fuel lines.  
 13 Places where people used to work on  
 14 planes are more obvious. Some are more subtle and  
 15 a lot of things are discovered by people we  
 16 interview who work there. We come up to somebody,  
 17 and they say, "We used to take oil to kill the  
 18 weeds."  
 19 That is a site of concern, and do we  
 20 go through that process, looking through  
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1 historical records, interviewing people, and  
 2 taking preliminary soil samples and water samples.  
 3 They started to eliminate sites or  
 4 combine sites, and that's how the sites  
 5 themselves, for instance on Treasure Island, come  
 6 to be called what they are, by that type of  
 7 process.  
 8 Of course, it varies from base to  
 9 base, area to area, depending on which type of  
 10 environmental concerns you are talking about. But  
 11 the sites definitely get named, and they get  
 12 identified, and then it is a matter of eventually  
 13 you want all the sites down to no further action  
 14 or some sort of decision as to what to do with  
 15 them. That is what this process really is about.  
 16 CO-CHAIRMAN WONG: Questions from the  
 17 audience?  
 18 FRANK CARROLL (From the audience):  
 19 Just a further clarification on the tank site  
 20 issue that this gentleman raised over here.  
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1 Federal UST Statute and LECTRA  
 2 specifies 110 gallons or less will not be  
 3 considered a UST.  
 4 Did you say that the state, the  
 5 applicable state statutes override that or are  
 6 more stringent than that?  
 7 MS. LEE: We don't set a reportable  
 8 quantity limit in the regulations. It is going to  
 9 be based on whether you suspect there is a  
 10 problem; and when you have strong evidence to  
 11 suspect that, then you go in and investigate.  
 12 MR. CARROLL: It is based on the  
 13 site-specific evaluation and does not have any  
 14 particular limit, okay.  
 15 MR. HANSEN: What agency makes the  
 16 final determination of whether the groundwater,  
 17 for example, under Treasure Island has potential  
 18 potable use? How is that decision made?  
 19 MS. LEE: That's a very good  
 20 question.  
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1 In the Basin Plan, we required to  
 2 again identify the water bodies and designate  
 3 beneficial uses. We have been doing that; and  
 4 also based on the state regulation, 88-63, any  
 5 water that meets the criteria is designated as  
 6 potential municipal water supply.  
 7 And the question is, is that  
 8 realistic? Is that, I guess, appropriate?  
 9 We are in the process of working with  
 10 the City and County of San Francisco. What they  
 11 are doing is, this Master Plan that they collected  
 12 a lot of information, and they're looking into  
 13 whether they want to protect any aquifer for  
 14 priority to be eventually used as a water  
 15 resource.  
 16 We are using that information to  
 17 define if beneficial uses is better.  
 18 MR. HANSEN: Has any groundwater been  
 19 designated as not a potential beneficial use, for  
 20 example, the groundwater under Crissy Field at the  
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1 Presidio? Has that been written off at that  
 2 point?  
 3 MS. LEE: No, it has not been written  
 4 off. When we make the cleanup decision, we're  
 5 going to look into the cost effectiveness to see  
 6 what is the beneficial use we need to protect; and  
 7 at Crissy Field, although the PTT may be low, if  
 8 you pump it, based on the hydraulic conductivity,  
 9 you may have a Baywater intrusion problem.  
 10 So I know that the City and County of  
 11 San Francisco is trying to designate a particular  
 12 basin to be of lower priority in terms of  
 13 potential water use.  
 14 When we do our assessment, we're  
 15 going to focus more on ecological risk that may be  
 16 a problem, especially at Crissy Field, to the Bay;  
 17 and if that is a problem, we're going to do very  
 18 aggressive cleanup.  
 19 MR. HAYDEN: You mentioned San  
 20 Francisco International Airport as an example of  
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1 corrective action, and I was wondering, with  
 2 respect to the conductivity of the estuary, at the  
 3 International Airport I guess there will be a  
 4 concern about that in the risk phase correction?  
 5 MS. LEE: That actually is the  
 6 driver.  
 7 MR. HAYDEN: And as far as the  
 8 aquifers, if they're simply -- I don't know how  
 9 many aquifers there are under Treasure Island.  
 10 There is more than one aquifer at San Francisco  
 11 International Airport, is that correct, or are you  
 12 just concerned about one?  
 13 MS. LEE: If I remember correctly --  
 14 MR. JENSEN: I can answer that. The  
 15 airport has two aquifers. The upper aquifer is  
 16 within about 10 feet of the surface and is not  
 17 suitable for drinking water.  
 18 There is a lower aquifer that is  
 19 separated by the Bay mud that is a source for a  
 20 couple of San Bruno Municipal wells, so the main  
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1 focus of the airport is, one, the ecological risk  
2 to the Bay and the Estuary; the other is  
3 maintaining the integrity of that Bay mud.  
4 MR. HAYDEN: I guess the final  
5 question, are there new cleanup technologies at  
6 the International Airport that might be applicable  
7 to Treasure Island?  
8 MS. LEE: They are not at that stage  
9 right now. The cleanup levels are set; they are  
10 going to use that to select the remedy and  
11 accomplish that.  
12 I know they were talking about pump  
13 and treat; they were talking about one section to  
14 contain it from going into the Bay.  
15 MS. VEDAGIRI: I heard of something  
16 called a noncontainment zone approach, where you  
17 sometimes do write off the groundwater quality in  
18 certain areas. Could you explain that?  
19 MS. LEE: Yes. The name has been  
20 changed; now we call it containment zone policy.  
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1 That is an pending amendment to Resolution 92-49,  
2 and the concept is that your groundwater is  
3 contaminated; you define the plume; and if it is  
4 feasible, you establish a containment zone at the  
5 property line or just the plume, the footprint of  
6 the plume. You set your compliance point outside  
7 the plume. Your measure does not migrate beyond.  
8 You may have some more contributing  
9 values when the plumes lid were detected, so you  
10 would have the time to reactivate or initiate the  
11 necessary corrective actions.  
12 I guess the concept is, within that  
13 containment zone, you are right, we do now require  
14 people to clean up to nondetect or whatever  
15 standard is appropriate, because we don't think  
16 there is beneficial use of the aquifer, which may  
17 be very shallow and local.  
18 MR. ALLMAN: How is the Board dealing  
19 with the fire school, which had water down the  
20 main mockup to test putting out fires, and they  
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1 had a mixture, the water-fuel separation process  
2 that happened, they would recover the fuel and  
3 send the water out somewhere. Is that considered  
4 a storage tank, because it is underground; or does  
5 it fall under the guidelines Mr. Hansen was asking  
6 of spilling fuel on the ground, because that was a  
7 significant amount of fuel?  
8 MS. CASSA: If it has not passed into  
9 the groundwater, so by definition it is a  
10 petroleum site that can be addressed under the  
11 Regional Board.  
12 MR. ALLMAN: If you are assessing the  
13 area to see if there is a potential leak from  
14 where the fuel is collected.  
15 MS. CASSA: The leak has been  
16 identified; the site has been identified; the soil  
17 is virtually saturated from oil; there is oil  
18 product in the groundwater; so it is a petroleum  
19 site.  
20 A lot of the petroleum sites at  
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1 Treasure Island were designated as installation  
2 restoration sites, because it was through there  
3 would be a very good possibility that other  
4 contaminants that would be the surface  
5 contaminants would become mingled with petroleum.  
6 By subsequent investigation it has  
7 been demonstrated that these are basically  
8 petroleum-only sites, and they don't have to be  
9 carried through the entire CERCLA process.  
10 Does that address your question?  
11 MR. ALLMAN: I am confused. My  
12 understanding is, talking about the underground  
13 storage tanks, they are removed; we did  
14 assessments for the areas around the tanks.  
15 MS. CASSA: The site is contaminated,  
16 and the site is remediated under the evaluated  
17 corrective actions. Her number 2, "Define extent  
18 of contamination" being completed, and we get into  
19 evaluating corrective action in order to clean up  
20 the soil and to figure out how to address the  
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1 contaminated groundwater.

2 MS. SMITH: I am also a little bit

3 confused. Treasure Island is actually an island

4 and not part of the mainland, and most of our

5 cleanup processes and definitions involved

6 mainland sites.

7 Also, you seem to focus extensively

8 on groundwater; and yet you have issued two

9 reports in the last five years directed towards

10 the cities of the Bay Area for nonpoint discharge

11 cleanup, because that's what most of our cities

12 discharge into the Bay.

13 You wrote, in 1991, where the study

14 is 275 square miles and the nonpoint discharge was

15 the most significant discharge.

16 You also issued a report in 1995, but

17 the draft was in 1994, on contaminant levels of

18 fish tissue in the Bay; and Treasure Island

19 contributed significant amounts of mercury in the

20 leopard shark. They were tested off the little

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1 old wharf of the northeast corner of the island,

2 which had high levels of mercury contamination.

3 Now you are saying all you are

4 concerned about is groundwater, so we only need

5 the center of the island - the perimeters can be

6 dirtier - yet you issued reports to the cities of

7 the Bay Area that are not allowed to do the kind

8 of discharge that you are talking about.

9 Is the Island allowed to do it?

10 MS. LEE: I guess I did not make

11 myself clear enough. Even though my main focus is

12 on soil groundwater, I did mention, if there is a

13 concern about the extent of the contamination

14 ready to go into the Bay, that is going to be

15 definitely addressed under the Phase II Ecological

16 Work Plan, because that will be evaluated, and in

17 these, cleanup actions definitely will be

18 required.

19 MR. HEHN: My question, looking at

20 the designation of beneficial use for the Island,

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1 does the Board consider the fact that it is

2 essentially a man-made island and, therefore, an

3 artificial aquifer would have a bearing of

4 beneficial uses of the aquifer on Treasure Island,

5 or is it just based on the groundwater quality?

6 MS. LEE: The way - 88-63

7 definitions are strictly based on quality, so we

8 need to test maybe the quality in an area that has

9 not been affected by the base operation and see

10 what is the so-called BAGRA quality to meet the

11 drinking water standards to be considered a usable

12 aquifer.

13 MR. HEHN: And that was in looking at

14 the differences between the IR-type investigation

15 and normal UST LUFT process.

16 How does the Regional Board look at,

17 or what is their view of combining all of the

18 fuel-related issues under one program, possibly

19 under the Regional Board purview, and do they have

20 the staff or the funding available to put that in

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1 one program?

2 MS. LEE: If I see the opportunity to

3 expedite cleanup of the fuel tanks, then I would

4 support to do it. I'm sure that BCP and the

5 private team are going to talk about this a lot.

6 MR. HEHN: So the Regional Board has

7 the ability to do that and take that choice.

8 CO-CHAIRMAN WONG: Question from the

9 audience.

10 DANIEL COOPER (From the audience): I

11 have a question for the woman in BCP.

12 Back to site 6, 14 and 22, they're

13 all in the same area and being cleaned up as part

14 of the CERCLA process; is that right?

15 MS. CASSA: They're being

16 investigated as part of the CERCLA process.

17 MR. COOPER: And immediate action is

18 going to be taken?

19 MS. CASSA: You can probably direct

20 that question to the Navy.

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1 MR. COOPER: Well, it is my  
2 understanding that BCP and the Regional Board make  
3 the determination whether it is going to be a  
4 CERCLA cleanup or UST cleanup; is that correct?  
5 MS. CASSA: It is a decision among  
6 the responsible party and the regulators.  
7 MR. COOPER: So that's a decision  
8 among all three; it is not by the regulatory  
9 agency; is that correct?  
10 MS. CASSA: I feel like I have been  
11 led into a trap.  
12 MR. COOPER: I want to know how is  
13 the decision made about under which program a site  
14 is cleaned up.  
15 MS. CASSA: We are at a point where  
16 the BCP is attempting to make a decision, and we  
17 would like to have a cleanup procedure in the most  
18 expeditious fashion.  
19 So there has been concern over  
20 whether adequate staff would be available; and  
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1 there has been a lack of personal knowledge on the  
2 part of the people who don't work for the Regional  
3 Board as to exactly how the Regional Board  
4 processes work. So part of the purpose of  
5 tonight's presentation was to elucidate that,  
6 contribute to our knowledge base, so we can, as a  
7 group, arrive at a proper decision.  
8 MR. COOPER: So it is still up in the  
9 air which program it is going to be cleaned up  
10 under?  
11 MS. CASSA: Definitely.  
12 MS. LEE: The level of the Navy  
13 funding would be one of the considerations. If  
14 there is very limited funding in the IR program,  
15 why don't we take it out and do it under UST, or  
16 the reverse?  
17 CO-CHAIRMAN WONG: I have a question:  
18 I noticed a couple of points in your  
19 presentation. You stressed what struck me as  
20 maybe shifts of philosophy in terms of approaches  
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1 to cleanup. One had to do with the Porter-Cologne  
2 Act. You said you wanted to stress reasonable  
3 levels, and I'm not sure exactly how "reasonable"  
4 is defined. One person's "reasonable" is another  
5 person's "unreasonable."  
6 I picked up a shift in philosophy.  
7 For the last ten years or so, cleanup had assumed  
8 that the responsible party should not have leaked  
9 whatever contaminants, so they should technically  
10 get in there, and maybe that does not have to be  
11 the case as much now.  
12 I am just curious. A couple of  
13 questions:  
14 Is this shift due to the politics and  
15 the funding, in terms of what is going on in  
16 Washington and available funds and the state  
17 crisis, so this is a cost-benefit type of thing  
18 that is coming to the fore that maybe was not  
19 there before?  
20 How is the term "reasonable"  
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1 determined? What avenues for public input are in  
2 there if the public feels that it is reasonable?  
3 What are the identification issues around that?  
4 Can you kind of speak to that,  
5 because I get a sense there is a philosophical  
6 shift, and it happens to be coinciding with a lack  
7 of funds.  
8 MS. LEE: I have been working for the  
9 Regional Board for over ten years. I guess,  
10 initially, up to a couple of years ago, I would  
11 say there was a shift. It is not because of  
12 policy but because of the lessons we learned and  
13 the better understanding of how water migrates or  
14 biodegrades versus fuel products.  
15 Ten years ago we had really no clue  
16 about how they behaved in the subsurface. We said  
17 then that it is so mobile, there are the toxics,  
18 it is like a time bomb, so a very aggressive  
19 approach was taken to clean up the tank sites.  
20 And then we reviewed the historical  
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1 data. We looked at what residual soil  
2 contamination was left behind and what really got  
3 into the groundwater. And the data seemed to show  
4 that, once the source is removed, maybe a cap is  
5 put over it, you really reduce the infiltration  
6 rate. The fuel products don't migrate that far,  
7 and it is very biodegradable, especially the  
8 lighter chain hydrocarbons.

9 So again, this predisposition that  
10 there is very active remediation, regardless of  
11 the risk, that was before. Now we're asking  
12 ourselves harder questions, saying, "What are the  
13 risks? What are the existing or future potential  
14 receptors? Are they being exposed to the  
15 contamination?"

16 If they're not being exposed or if we  
17 can implement some measure that will reduce the  
18 exposure, reduce the risk or no risk, why spend  
19 the money to do the cleanup? Why not spend the  
20 money elsewhere?

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1 That is sort of how I set my  
2 priority.  
3 CO-CHAIRMAN WONG: I have two quick  
4 followup questions, and everybody is probably  
5 ready for a break.

6 One, I assume there is a  
7 philosophical shift, given past history, and there  
8 is no longitudinal history where it is over  
9 generations, that somewhere down the road, in the  
10 long run, that infiltration does start and there  
11 is contamination, that philosophy would shift back  
12 to cleaning it up.

13 But where it is convenient to get  
14 public input into the process, I'm curious where  
15 we or some public entity has input into describing  
16 what is reasonable and where you're going to go in  
17 terms of the UST program or keeping it in CERCLA.  
18 What avenues are open to us?

19 MS. LEE: It probably means that  
20 whenever we make significant policy changes, it

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1 Like Dale was saying, what about this  
2 contaminated fish issue?

3 MS. SMITH: This is the petroleum  
4 hydrocarbon that you specifically addressed in  
5 those reports. In addition, the chlorinated  
6 hydrocarbons, these were specific fuel products  
7 that were addressed.

8 MS. LEE: Definitely we need to  
9 eliminate the source from going into the Bay.  
10 What is the most effective way to deal with it,  
11 and then use that to free up the resource to deal  
12 with the existing contamination that is sitting in  
13 the Bay. That has been my priority.

14 If contamination is already sitting  
15 in the Bay, available to the benthic organisms,  
16 and then reduce the pollution by prevention, stop  
17 the sources from further migrating into the Bay,  
18 and then if land use or the drinking water is a  
19 requirement, then you do very active cleanups to  
20 address that.

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1 has to be part of a Basin Plan amendment, which is  
2 a very long, extensive process. The last one that  
3 was just adopted took about a year, and it does  
4 not have this new policy in it.

5 In 1992 this Regional Board adopted  
6 that policy with a lot of input. The mailing list  
7 was with a thousand people on it. They commented,  
8 they testified, we got really a wide spectrum of  
9 comments, so we got a lot of input.

10 The Board felt it was a good policy,  
11 so we adopted it, and then submitted it to the  
12 State Board. They did not approve that policy  
13 because they wanted to be sure that the state  
14 consistency is there.

15 They took it over now. They're doing  
16 this amendment to Resolution 92-49 with the intent  
17 to eventually adopt that for the whole state, and  
18 that process is like in the middle of it. I know  
19 there was a comment period, but there would be a  
20 public hearing held on that particular problem in

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1 December of January.  
2 CO-CHAIRMAN WONG: I move that we  
3 take a break here, a ten-minute break, so that we  
4 can get another good 45-minute session or so.  
5 (Recess taken.)  
6 CO-CHAIRMAN WONG: We will get  
7 started, so we can still get out in time.  
8 CO-CHAIRMAN SULLIVAN: We will come  
9 back, and I would like to introduce John Pfister  
10 from Engineering Field Activities West. He's  
11 basically our fuels guy.  
12 John has recently joined EFA West,  
13 and we expect to see a lot more of him during the  
14 next year.  
15 MR. PFISTER: Good evening, everyone.  
16 As Jim mentioned, I have been at EFA  
17 now for about three months; and I am on Treasure  
18 Island; and immediately, my first day was to come  
19 out.  
20 I was in San Diego for a couple of  
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1 years, working for the Navy there as well, and  
2 then transferred up here to EFA and have the fuels  
3 program for Treasure Island.  
4 With that, I would like to start in.  
5 I'm not sure how many of you know the  
6 history of Treasure Island. I'm sure many of you  
7 are familiar with it; but as far as environmental  
8 information, we have on base here approximately  
9 3.5 miles of inactive fuel line and a total of 73  
10 underground storage tanks that are fuel line  
11 served; and UST's primarily stored petroleum  
12 products are used to provide fuel for vehicles,  
13 generators, and ships; fuel to buildings; and  
14 waste storage.  
15 Again, the fuel line transferred the  
16 fuels to the UST's, and the UST's stored the  
17 following materials: gasoline; diesel fuel;  
18 kerosene; waste oil; jet fuel; and transformer  
19 coolant.  
20 In light of Shin Roei's talk here,  
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1 the lead regulatory agency we have is the Regional  
2 Water Quality Control Board. The San Francisco  
3 County Health Department does oversee tank  
4 removals.  
5 And the applicable laws and  
6 regulations we have here is California Code of  
7 Regulations, Title 23, Division 3, Chapter 16; and  
8 Chapter 6.7 of the Health and Safety Code, State  
9 of California.  
10 Also, as Shin Roei mentioned, there  
11 are two programs: There is the Installation  
12 Restoration, which follows the National  
13 Contingency Plan, which is the guide for CERCLA;  
14 and we also have the UST Program; and it is guided  
15 by RCRA.  
16 So, basically, we have under the UST  
17 Program, fuel line at Naval Station; and to our  
18 knowledge now, it is approximately just under  
19 12,000 feet. Actually, we know of under 12,000  
20 feet to be removed. We have identified it. We  
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1 are planning to close, in place, 2,300 linear feet  
2 of the fuel line at Yerba Buena Island, mainly due  
3 to inaccessibility.  
4 We still have 3,500 feet to be  
5 located.  
6 We have the removal plans and  
7 specifications complete, ready to be awarded. The  
8 Work Plan is complete and under review by the  
9 Regional Water Quality Control Board. And a  
10 Corrective Measures Study is planned upon the  
11 results of the investigation, when the fuel line  
12 will be removed.  
13 On to the UST's at the Naval Station:  
14 We have a recorded history to date of  
15 73 at the Naval Station; 36 UST's have been  
16 removed, five in 1989, two in 1990, twenty-three  
17 in 1992, and six this year, the beginning of this  
18 year, 1995.  
19 And our consultant, PRC, recommends  
20 no further action at twelve of the 36 sites.  
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1 Of the remaining 37 UST's, fourteen  
2 we're planning to close in place.  
3 We still have some ideas, perhaps,  
4 that there are nineteen UST's still on base,  
5 mainly just rumors from oldtimers around, and not  
6 quite certain if they do exist; but we are  
7 investigating that.

8 There are two active tanks here and  
9 two inactive tanks. And once the base closes, we  
10 will inactivate the active tanks and, as Jim  
11 indicated earlier, remove those.

12 Of the total amount of UST's here at  
13 Naval Station, eighteen of them are handled under  
14 the Installation Restoration Program. The  
15 remaining are under UST Compliance.

16 The information I have down here, the  
17 source of that information is the BCP and the  
18 Baseline Survey. It should be consistent with  
19 those documents.

20 Well, our objective here now as the  
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1 main plan for the Naval Station has changed. It  
2 is to transfer the parcels at the Naval Station  
3 from the Navy to interested parties with  
4 description of each parcel. The base is being  
5 closed, and essentially the Navy would like to  
6 transfer the property to basically whoever is  
7 interested in it.

8 The base closes in September 1997,  
9 and really the objective is to remove  
10 uncertainties from the sites that either do  
11 contain or contained UST's.

12 To handle this, we have recent  
13 accomplishments. Just recently I have reviewed,  
14 and you as well, the UST Investigation and  
15 Corrective Measures Study for the eight UST sites.

16 As I mentioned earlier, there are  
17 potential UST's that we're not certain; we are  
18 investigating those sites. Just recently we have  
19 investigated five and found one UST.

20 We do have a request to the Water  
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1 Board. They are reviewing our request to close in  
2 place eleven UST's at YBI, mainly due to  
3 inaccessibility and foundation problems.

4 In the future, we have in mind to  
5 remove the fuel line, as I mentioned; and as we  
6 remove it, we will be analyzing the soil and  
7 groundwater encountered and conduct a corrective  
8 measures study.

9 We also plan to implement the  
10 recommendations from the UST corrective measures  
11 study by ERM West that some of you have.

12 We plan on conducting an  
13 investigation for other UST sites. There are, I  
14 believe, four other tank sites we know that we  
15 will be conducting further investigation. Also,  
16 we will conduct further investigation for the  
17 potential tanks that I mentioned.

18 We completed our investigation just  
19 recently and found one tank. There are still more  
20 on the list. We have reason to believe there are  
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1 more tanks, so we will continue to search for  
2 those until we have rationalized there has been  
3 enough effort expended.

4 And, finally, we are planning to  
5 create a data base, including all available  
6 information we have on the UST's and the fuel  
7 lines.

8 Some cost estimates we have here. We  
9 just committed a planning, a budget planning; and  
10 the fuel line removal we estimate should be just  
11 over a million dollars, just to remove the fuel  
12 line. And based on what we find during the  
13 removal, there may be potential cleanup actions we  
14 will have to perform, thus driving the cost to  
15 more than double.

16 As far as the UST cleanups, this year  
17 we expended \$350,000. We are planning, in fiscal  
18 year '97, to go with \$625,000, based on the  
19 information we have. And in '98, \$375,000.

20 MS. GLASS: What happened in '96?  
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1 MR. PFISTER: We did not get any  
2 funding this year, basically because there is not  
3 a re-use plan for the Naval Station in place; thus  
4 the prioritization was not very high.

5 So in summary, it is apparent that  
6 UST's have leaked and impacted soil and the  
7 groundwater at the Naval Station. The Navy is  
8 continuing environmental investigations at the  
9 base to ascertain the extent of some of those  
10 sites, all those sites.

11 As I mentioned earlier, a data base  
12 is being created, compiling all available data we  
13 have; and that should aid in prioritization and  
14 perhaps further funding.

15 And as I mentioned, the re-use plan  
16 is not complete for the Naval Station; and perhaps  
17 once that is done, we will have a better idea of  
18 what we have to do.

19 In conclusion, the Navy plans to  
20 continue removal and cleanup action of any

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1 underground tanks we encounter and have  
2 encountered.

3 We are taking action for remedial  
4 investigation, for example, to allow the transfer  
5 of parcels in an appropriate member.

6 And, finally, cleanup levels for each  
7 parcel may be established once the re-use plan is  
8 completed.

9 That is the status we have for the  
10 underground tanks.

11 MS. GLASS: You mean will be  
12 established --

13 MR. PFISTER: What I mean --

14 MS. GLASS: -- or could be?

15 MR. PFISTER: Based on, say,  
16 residential or commercial categorization within  
17 the re-use plan, they won't be established in the  
18 re-use plan.

19 MS. GLASS: Will be established once  
20 the re-use plan is completed?

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1 MR. PFISTER: I would imagine, yes.

2 MR. ALDRICH: What work do you  
3 anticipate will be done in fiscal year '96, the  
4 current fiscal year?

5 MR. PFISTER: Nothing at all, nothing  
6 that we have planned.

7 CO-CHAIRMAN SULLIVAN: Now we had  
8 hoped to obtain funding for the fuel line removal,  
9 and Treasure Island fuel line abandonment on Yerba  
10 Buena Island. There is still a possibility at the  
11 mid-fiscal year, which would be the end of March  
12 1996, that additional funding might become  
13 available. We have the plans and specifications  
14 all ready to go, so we're still hoping that we  
15 might be able to expend another million dollars  
16 this year if it becomes available, otherwise that  
17 work will be deferred until 1997.

18 MR. ALDRICH: And those budget  
19 figures don't reflect money that should have been  
20 spent in this current fiscal year? Money budgeted

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1 for fiscal year '97 does not take into account  
2 what had been budgeted for this fiscal year?

3 CO-CHAIRMAN SULLIVAN: Well, no. It  
4 would, because the FY '97 figure of \$625,000 does  
5 not include the fuel lines; so if the fuel line is  
6 funded in '97, that would be an additional dollar  
7 amount.

8 MR. HANSEN: I feel this is a real  
9 stupid question, but if the controlling  
10 regulations are those established by the Regional  
11 Water Quality Control Board and if the driver is  
12 protection of the groundwater, why does it make  
13 any difference what re-use is proposed for the  
14 surface of the dirt? If the driver is to protect  
15 the Bay and if the driver is to protect the  
16 groundwater, why do you care what is on the  
17 surface of the island? Why is that relevant?

18 MR. PFISTER: For example, perhaps  
19 the construction on the base uncovering  
20 contamination in the soil at some point.

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1 MR. HANSEN: If it is there, it is  
2 there.  
3 MS. CASSA: The issue is, first of  
4 all, as Shin Roei mentioned earlier, to remove the  
5 source if the soil is contaminated. If it  
6 continues to contaminate the groundwater, you need  
7 to remove the contaminated soil.

8 The second issue is, there are other  
9 constituents that can affect people who occupy the  
10 facility, whether they are residential or  
11 occupational. There could be something from the  
12 soil into their breathing zone.

13 So those two are reasons why the soil  
14 needs to be addressed; and when he talks about  
15 setting cleanup levels, he is talking about  
16 setting up cleanup levels for the soil as well as  
17 setting up cleanup levels for the water.

18 MS. JUE: Are the cleanup levels  
19 going to be risk based, or are there drinking  
20 water standards that are set, or are cleanup

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1 levels based on the re-use plan, because it is  
2 based upon what the end product of the base is?

3 MS. CASSA: There is a lot of  
4 questions.

5 MR. PFISTER: It is my understanding  
6 removal towards risk base depends on the exposure  
7 which is related to the re-use plan.

8 If you know how many people will be  
9 on the base after it closes and transfers from the  
10 Navy's hands, the Navy is trying to relinquish any  
11 responsibility that they have; and it will take  
12 appropriate action if it knows what to do.

13 MS. CASSA: There are no miracle  
14 cleanup values for gasoline and diesel fuel and  
15 compounds like that. There are none for that.

16 There are only numerical cleanup  
17 levels established for drinking water, in terms of  
18 specific constituents.

19 MS. JUE: And none of them are listed  
20 here. It is all organics on the base; is that

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1 true?

2 MS. CASSA: Well, there are maximum  
3 contaminant levels for benzene; there are  
4 numerical values for those original constituents;  
5 but they're not available for the compounds.

6 MS. LEE: There are two approaches  
7 for setting up cleanup levels for contamination:  
8 You look at total petroleum hydrocarbons and  
9 whatever that is for this site. If it is a  
10 mixture of gasoline and diesel fuel and if it  
11 occurred years ago, that is the airport's  
12 approach. They took the soil samples from their  
13 site; they put that into a jar, mixed it with  
14 water, shake it up, and measure what the total  
15 concentration was in the soil, what was in the  
16 partitioning effect from the soil into the water;  
17 and they do the bioassay for the water, to try to  
18 establish a response curve that will tell us what  
19 level in the water will have reverse chronic  
20 impact along the fringes of the airport facility.

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1 And then they use that number, if  
2 the number turns out to be 100 ppb for gasoline  
3 and for diesel, they use a number to  
4 back-calculate back into what can be left behind  
5 in the soil that will be leaching and that won't  
6 exceed that 100 ppb at the Bay.

7 That is sort of a mixture approach,  
8 and you can also pick surrogate compounds, what  
9 would be a representative for that type of fuel  
10 for diesel. We typically use naphthalene; and for  
11 gasoline, we typically use benzene.

12 So you can also approach it from the  
13 constituent specific.

14 MR. ALLMAN: My question relates to  
15 the Navy relinquishing responsibilities as far as  
16 cleaning things up.

17 I assume that is what the disposition  
18 disclosure means for people using the land, that  
19 you know there is a problem in that area and that  
20 because of funding limitations, you are planning

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1 on closing down in 1997; and obviously there is  
2 not going to be enough money available; and  
3 chances are it will probably be cut more in the  
4 next couple of years; so it seems you're going to  
5 have responsibility for cleaning it up.

6 As far as the potential tanks that  
7 you are searching for, is there going to be any  
8 stipulation when the property is transferred over  
9 that if, during some re-use activity, one of the  
10 potential tanks is discovered, which was not  
11 discovered during your search now, will you then  
12 have the responsibility of cleaning it up as well,  
13 in which case you need independent searchers  
14 looking for the tanks as well.

15 MR. PFISTER: I would imagine an  
16 interested party would have to recognize a  
17 disclaimer from the Navy once they acquired the  
18 parcel of property.

19 MR. ALLMAN: You're saying that, as  
20 soon as you sign it over, basically it's their

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1 problem for these tanks?

2 CO-CHAIRMAN SULLIVAN: The first part  
3 of your question, as far as disclosure goes,  
4 ultimately maybe we're also dealing with two  
5 issues - leasing and transfer.

6 In the case of leasing, our cleanup  
7 activities and investigation activities may be  
8 ongoing; and that's the reason for finding the  
9 suitability to lease, in order to determine  
10 whether or not there is any risk associated with  
11 the temporary or leasing of the property, and then  
12 to disclose to the occupier of the property that  
13 these activities are going on.

14 When it comes down to final transfer,  
15 there has to be a settlement, a final  
16 determination as far as what cleanup actions need  
17 to be taken and are implemented.

18 And if that results in a cleanup to  
19 an unrestricted use, then any property re-use can  
20 occur.

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1 If that remediation only cleans up to  
2 a point where there have to be deed restrictions,  
3 that is a restriction, a legal restriction on the  
4 use of that property by the new owner. But,  
5 ultimately, the loop is closed in terms of a  
6 cleanup occurring, which is either to where the  
7 use is unrestricted or cleanup occurs to some  
8 point where some uses are allowed and some uses  
9 are not allowed.

10 It is more than just a disclosure.  
11 We wouldn't just say, "There is a leaking fuel  
12 tank on this site; we told you about it." There  
13 would have to be either a cleanup or a  
14 determination in concert with the regulators that  
15 we have taken all actions possible.

16 If there is some residual  
17 contamination in the property, then we would have  
18 to make a risk calculation to determine what  
19 restrictions there might be in the future use of  
20 that piece of property.

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1 MR. ALLMAN: Otherwise you lose the  
2 security deposit.

3 CO-CHAIRMAN SULLIVAN: The second  
4 part of your question, as far as if anything is  
5 discovered at a later date, if there is discovery  
6 after the property is transferred and it is  
7 apparent that it is due to the previous owner,  
8 being us, then we would come back and undertake a  
9 cleanup.

10 MR. ALLMAN: You would be legally  
11 obligated to come back?

12 CO-CHAIRMAN SULLIVAN: I can't cite  
13 the specific legality of it, but that has always  
14 been my understanding.

15 MS. BROWNELL: If I can add a comment  
16 to that:

17 Assuming the City would take it over,  
18 I know for a fact that the City attorneys would be  
19 sure that kind of agreement is in the legal  
20 document of transfer that basically says, if we

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1 find something that was obviously Navy-caused,  
2 we're going to come back and make you clean it up.  
3 MR. ALLMAN: As long as you can  
4 legally put it in there.  
5 MS. BROWNELL: I know at other sites  
6 that kind of thing has been negotiated.  
7 MR. WRIGHTSON: I have a couple of  
8 questions here:  
9 There is 24 former UST sites that PRC  
10 recommended no further action on 12 of the sites.  
11 What about the other sites? What is their  
12 recommendation for those sites?  
13 MR. PFISTER: We have investigations  
14 on eight; that's in here.  
15 MR. WRIGHTSON: This report covers  
16 eights of the 24 that have already been removed?  
17 MR. PFISTER: Correct.  
18 MR. WRIGHTSON: How come it does not  
19 cover 24?  
20 MS. TOBIAS: I believe it covers the  
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1 eight required for further investigation. We  
2 prepared it -- I believe the eight that are in the  
3 document you have were on the tanks that we  
4 recommended further investigation. There were 12  
5 that we said "no further action," and there were  
6 also a number that we recommended that they close  
7 in place, because due to their inaccessibility,  
8 tanks couldn't be removed, and we really couldn't  
9 investigate them further.  
10 MR. WRIGHTSON: Are these the 14  
11 here, the home heating ones?  
12 MS. TOBIAS: No, and there were also  
13 some tanks that were removed under the original 24  
14 that were part of installation restoration sites  
15 that are being handled under the IR sites.  
16 MR. WRIGHTSON: Would those be the 18  
17 on the next page, the 18 underground storage  
18 tanks?  
19 MR. PFISTER: Yes.  
20 MR. WRIGHTSON: I see. That goes  
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1 under the first 36?  
2 MR. PFISTER: Right.  
3 MR. WRIGHTSON: The two inactive  
4 tanks, what is the story with those right now?  
5 Where are these along the process?  
6 CO-CHAIRMAN SULLIVAN: Right now the  
7 two active and two inactive tanks are right down  
8 the street here, on the south side of Building  
9 180. And there is four tanks there, which once  
10 was a government fueling facility.  
11 We are only using two of them now,  
12 and we decided that rather than to pull the two  
13 inactive ones right away, that we would wait until  
14 we closed the two active tanks, and then we're  
15 going to pull all four. In fact, we are ready to  
16 pull all four; we're just completing installation  
17 of a new above-ground tank at our fuel farm at the  
18 northeast side of the Island. Once we've got a  
19 permit to operate that from the Regional Air  
20 Board, then we will close down the two active  
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1 tanks and then proceed to pull all four.  
2 MR. WRIGHTSON: Has there been any  
3 investigation -- I know there is investigations  
4 around Building 180 -- but around those tanks in  
5 particular?  
6 CO-CHAIRMAN SULLIVAN: When we pull  
7 the tanks, then we will be drawing samples.  
8 MR. DAN COOPER (From the audience):  
9 What about tank 85 over by site 14? Has that been  
10 pulled?  
11 CO-CHAIRMAN SULLIVAN: Eighty-five, I  
12 don't recall that one specifically. There is a  
13 small waste oil tank.  
14 MR. COOPER: On the Bayside of site  
15 14.  
16 MR. PFISTER: That one was removed  
17 earlier this year, 1995.  
18 MS. GLASS: Going back to the ones  
19 that were abandoned, you said that some of them  
20 were not--  
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1 MR. PFISTER: Building 201 is an  
2 example. We have to somehow gain access  
3 underneath the building, and that would entail  
4 demolishing the building.  
5 MS. GLASS: I don't know how to say  
6 this: I noticed that in the letter there are  
7 certain kinds of things that are not reasonable to  
8 get at; but on the other hand, there is a concern  
9 of what is going on with them.  
10 CO-CHAIRMAN SULLIVAN: We still have  
11 to characterize the site. Whether or not it is  
12 removed or not and where or not there is  
13 remediation or not, it still has to be  
14 characterized to the point where we can do a risk  
15 assessment to determine is there any risk there or  
16 not.  
17 In the case on that one tank, it was  
18 a fairly small tank underneath our existing Navy  
19 Exchange Retail Building; and to pull it out, we  
20 would have had to basically destroy part of the  
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1 building.  
2 MS. GLASS: So you're not pulling  
3 them out in situ; you pretty much know what was in  
4 them and pretty much know how long the last  
5 duration of activity use was?  
6 CO-CHAIRMAN SULLIVAN: We have a  
7 reasonable amount of information, especially for  
8 TI, where the tanks are from vintage 1940 on.  
9 MR. FOSTER: Maybe, John, you might  
10 mention, just in the general population here, what  
11 they mean by "abandonment in place" or "closure in  
12 place." They don't just close the valve and walk  
13 away. They do things, they purge and fill them  
14 with sand. They do all sorts of things with them  
15 so that they are essentially inert things; and a  
16 thousand years from now, they may not be - you  
17 might just mention that a little bit.  
18 There are many situations, especially  
19 in fuel lines or tanks in hard-to-get-to places,  
20 sometimes it's impossible to dig up the entire  
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1 airport to get at a fuel line that has been there  
2 since the '40s. It's probably rotting away as it  
3 sits there.  
4 If there is anything else you want to  
5 add to that?  
6 MR. PFISTER: You have covered quite  
7 a bit of it.  
8 We attempt to close off any  
9 accessible pipeline that goes to the tank; and as  
10 we have indicated, fill it with either sand or  
11 some inert material so it does not rust through  
12 and create some problem for someone walking above  
13 it.  
14 So we do make all attempts to take  
15 away a threat, leaving such an object in the  
16 ground.  
17 MS. SMITH: I have three quick ones:  
18 What constitutes transformer coolant?  
19 MR. PFISTER: From what I know, the  
20 history, I guess, would be mono PCP.  
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1 MS. SMITH: And where are the  
2 additional 3,500 feet to be removed from?  
3 MR. PFISTER: Of the fuel line, we're  
4 not really certain.  
5 MS. SMITH: Treasure Island or Yerba  
6 Buena, or both? How much work have you done to  
7 Yerba Buena?  
8 MR. PFISTER: Well, I believe,  
9 actually we have not really tested very much of  
10 them.  
11 MS. CASSA: My understanding is that  
12 they accounted for most of the linear footage over  
13 Yerba Buena Island, but there are 3,500 feet that  
14 are not accounted for, and there is money proposed  
15 to be budgeted sometime in the future to conduct  
16 some kind of geophysical survey or maybe even do  
17 some not-terribly-intrusive digging to try to find  
18 the pipeline.  
19 I also learned recently about another  
20 approach regarding the Navy archives, which I  
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1 recommended to John; so there may be other source  
2 information.

3 MS. SMITH: And my last question was,  
4 the 12 tanks that PRC proposed to abandon or to  
5 not further investigate on, is there a general  
6 rationale for that; or is each one site-specific?

7 This is almost a year-old material,  
8 and I am frankly a little foggy on it.

9 MR. PFISTER: Usually it is proposed  
10 no further action be taken. The levels are low  
11 enough.

12 There are certain levels that have  
13 been proposed that are guidelines for that, or if  
14 basically nothing has been encountered.

15 MS. SMITH: I thought this was  
16 removal.

17 MS. CASSA: Basically, if you remove  
18 the tanks, samples come up intact; there is no  
19 further remediation of the site.

20 MS. SMITH: But it does not say that  
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1 the tanks were removed; it says 12 of the 36  
2 underground storage tanks have been recommended  
3 for no further action. It does not mean filling  
4 them with sand, and it does not mean removing  
5 them.

6 MS. CASSA: I think it does infer the  
7 tanks were removed.

8 MR. ALLMAN: The statement was made a  
9 couple of times that they were abandoned because  
10 they had foundation problems.

11 MS. CASSA: That is abandonment in  
12 place. That's not no further action.

13 CO-CHAIRMAN SULLIVAN: We had  
14 intended to continue the discussion of UST and  
15 fuel-related work to the December meeting, and we  
16 are taking comments on the report. You will then,  
17 since we don't have funding to do the work,  
18 probably have some further latitude beyond the  
19 19th of December.

20 But what we do need to do is devote  
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1 the remaining time of the meeting to our  
2 presentation of the Ecological Work Plan, because  
3 we're going to get into the field with that  
4 program, and so we need to finalize the plan.

5 I thank John very much, and we will  
6 have to continue this discussion in our December  
7 meeting.

8 At this point, I would like to turn  
9 it over to PRC for a brief presentation on the  
10 Ecological Work Plan.

11 MR. ALLISON: My name is Timo  
12 Allison; I am with PRC. I am a biologist, and I  
13 have been working on the Treasure Island  
14 Ecological Risk Assessment since we began it a  
15 couple of years ago.

16 Almost a year ago, I presented the  
17 first presentation of a plan that we prepared on  
18 the Phase II Risk Assessment.

19 The purpose of tonight's presentation  
20 is to inform you of some modifications to the work  
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1 plan that you're going to see in the draft final  
2 plan, I believe that those of you have now, or if  
3 you don't have a copy of it and you wish to  
4 receive one, talk to Ernie and he will make sure  
5 that you get one.

6 The Phase II Ecological Risk  
7 Assessment consists of a terrestrial assessment,  
8 as well as an offshore characterization  
9 assessment.

10 The terrestrial assessment has not  
11 changed from the time we prepared it originally in  
12 the draft work plan and, again, is proposed in the  
13 draft final.

14 There are a few modifications we have  
15 incorporated based on comments on the approach  
16 from other sites consistent with the approach  
17 we're using at Hunters Point as well as Concord,  
18 and there has been some comments on those plans,  
19 and we have incorporated that into this plan as  
20 well, so it is consistent.

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1 The offshore preservation has been  
2 revised, based on a new Navy approach case, to  
3 characterize the offshore sediments. We are  
4 trying to focus the effort onto sites in  
5 remediation versus continuing to study them, and  
6 trying to get things cleaned up versus ongoing  
7 further phases of risk assessment.

8 Just to summarize real quickly what  
9 we're doing under the terrestrial assessment, we  
10 are proposing no additional field work for  
11 terrestrial assessment. A qualitative approach is  
12 going to be handled for the IR sites on Treasure  
13 Island, and we're going to do a complete writeup  
14 of each IR site on Treasure Island, what kind of  
15 habitats are there, what kind of receptors you  
16 might find, as well as any sort of contamination  
17 they may be exposed to.

18 One reason we're only doing  
19 qualitative risk assessment for these sites is, we  
20 performed a site walk with the regulators last

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1 spring; and they all agreed that the habitats were  
2 such that it did not require any further  
3 additional field work or a lot of intensive study.  
4 The sites on Yerba Buena Island do  
5 represent more habitats than on Treasure Island;  
6 therefore, we're going to put more effort into  
7 those; and we have developed, as you see in the  
8 plan, some exposure models and a different way of  
9 looking at those sites.

10 The offshore assessment, I'm going to  
11 go over a few points on that, the sample locations  
12 and how we determined those. Those have not  
13 changed.

14 And then I'm going to go over your  
15 classic approach that we have, in the past, looked  
16 at, assessing those sediments; and then into the  
17 new approach, or the common sense approach; and  
18 then a little bit more on that as the screening  
19 assessment, trying to focus on the sites that  
20 really need the additional work.

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1 The sample locations are primarily  
2 the ones you have seen in the draft plan. We have  
3 focused these throughout the site.

4 The Phase I Ecological Assessment, we  
5 conducted about 10 or 12 sediment samples; and  
6 based on those results and based on some  
7 stormwater sampling results we did in the Phase  
8 IA, we have selected several areas for further  
9 studies in the Phase II Ecological Assessment.

10 They primarily focus on outfalls or  
11 drained the IR sites, storm outfalls, as well as  
12 areas where we know there is past Navy activity.  
13 For example, there used to be some Navy piers  
14 along here (indicating); and then, as well as the  
15 outfalls coming out of here and here (indicating),  
16 there are multiple sources in Clipper Cove that we  
17 are investigating, as well as the landfill area  
18 over here we're looking at (indicating).

19 The lead contamination over here,  
20 we're looking if it got into the sediments; and

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1 over here (indicating), we're doing somewhat of a  
2 background check.

3 In the previous sampling, we did not  
4 receive a lot of high hits in the area; but we  
5 want to make sure, because there are some areas in  
6 site 12 that drain through here, petroleum; so we  
7 want to be sure we get all the spots where there  
8 could be contamination.

9 The classic approach we proposed  
10 previously, and we have been doing during the  
11 task, is very extensive studies, quantifying the  
12 risk, narrowing down what the risk assessments  
13 are.

14 It consists of several phases. It  
15 does not focus on remediation, and it can be very  
16 time consuming and expensive for everyone  
17 involved.

18 Based on this, the Navy has come up  
19 with what we call a common sense approach; and the  
20 Navy is trying to implement this on all the sites

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1 in the Bay Area. Right now it is being proposed  
2 for Mare Island, Treasure Island; and most likely  
3 when Alameda moves into its next phase, it will be  
4 proposed there as well.

5 What we're trying to do is focus on  
6 the sites that really require further  
7 investigation. We're going to eliminate  
8 unnecessary studies, and we're going to direct  
9 funds for early cleanup, instead of continuing  
10 studies, and we're using presumptive remedies.

11 For sediments remaining here,  
12 assuming there is a remedy possible, it is going  
13 to be dredging. There is some other technology  
14 out there to look at as far as in situ  
15 solidification, but the current way to go is to  
16 dredge the sediments, so that is what we are  
17 basing our approach on.

18 The approach mainly consists of a  
19 screening assessment. We are going to take  
20 samples, and we're going to use different criteria

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1 and select them into three categories. My little  
2 marble machine shows how we're going to do this.

3 We will take the data from an  
4 assessment site or a sampling site, go through our  
5 magic box here with the screening assessment, and  
6 come out with one of the three doors:

7 There will be a cold site, which will  
8 be no further action; gray site, which we're  
9 considering - we're not really sure what that  
10 site means. It could be a risk or it may not be,  
11 so there will be further investigation. Or it is  
12 definitely a hot site, a problem site. Let's put  
13 it right in the feasibility study and start  
14 looking at ways to clean it up.

15 We are proposing using approved  
16 screening criteria to define these three sites.  
17 The criteria we are working on has not been  
18 developed as yet.

19 We are working with the regulatory  
20 agencies, with a group known as Biological

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1 Technical Advisory Group. We're looking at the  
2 Regional Water Board data, about 105 data points  
3 that have bioassay and chemical data; and we are  
4 developing screening criteria for sediments based  
5 on these, similar to the way NOAA has developed  
6 screening criteria in the past, nationwide.

7 We are going to group it into three  
8 different areas, based on either a definite,  
9 immediate risk, which is a hot site; or little or  
10 no risk, which we're calling a cold site; or  
11 uncertain or a gray area. That is the gray site.

12 The cold sites, which I show by my  
13 snowflake up here, these are sites that we're  
14 saying do not pose a risk. These are sites that  
15 under all the agreed-upon screening criteria and  
16 sites that we really don't need to go back to and  
17 spend any more money on.

18 These are sites that we hope are of  
19 no risk in an ideal world. With that, we are  
20 considering them "no further action" sites; and no

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1 remediation is required.

2 On the other hand, we have the hot  
3 sites, which my campfire represents. These are  
4 sites which do exceed screening criteria, and  
5 these are sites that we know are a problem, and  
6 remediation is definitely necessary.

7 We don't want to spend any more money  
8 studying these. Where we know it is already a  
9 problem, we say, "Let's put it in a feasibility  
10 study and try to find a way to clean them up."

11 An example of a site like this on  
12 another base, in Alameda, they have a seaplane  
13 lagoon, where they know there are some problems  
14 there; so they moved it into a feasibility study  
15 and are looking at a way to clean it up.

16 The gray sites are the question mark  
17 sites. These are sites which may exceed some  
18 criteria but are not really considered a hot site,  
19 but exceeded enough that it is not a cold site,  
20 either.

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1           These sites, we're proposing doing a  
2           toxicological examination, doing bioassays  
3           proposed in the work plan; and we will look at the  
4           results of those bioassays and reassess the site.  
5           If the bioassay shows toxicity, we will consider  
6           it a hot site; if they don't show toxicity, maybe  
7           we will consider it a cold site.

8           A lot of criteria are still being  
9           worked out with the regulatory agencies, the Navy  
10          and the BTAG.

11          If we still, after doing some  
12          bioassays, find that these gray sites we still  
13          can't decide, then the Navy will perform a cost  
14          benefit analysis on it, whether it is a good idea  
15          to do some further investigations, doing even more  
16          intensive studies, or is it better just to decide  
17          it is cheaper to dredge this thing and clean it  
18          up.

19          Based on that analysis, a risk  
20          management decision will be made; and we either do

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1           the funding we are awaiting. The field work is  
2           going to go on, but the quality assurance plans  
3           have changed so rapidly, based on different  
4           approaches, that we felt it would be better to  
5           wait until we are closer to actual sampling to get  
6           the quality assurance plan put together.

7           We have some of it. We are currently  
8           meeting for other sites that are different than  
9           the ones in that plan. Mostly, we will have a few  
10          modifications. That is why that one was pulled  
11          out.

12          The second one you are probably  
13          referring to is the site health and safety plan,  
14          which actually was not ever supposed to be part of  
15          the document. That was just included if it was to  
16          be taken into the field. That is more for  
17          internal use only.

18          MS. SMITH: There was the methodology  
19          used to analyze toxicity on benthic creatures.

20          MR. ALLISON: Yes.

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1           a no further action or move it into remediation.

2           The benefits of the new sediment  
3           approach is that it is going to provide  
4           environmental protection the same way as the TAG's  
5           approach. It gets to a decision point quickly,  
6           and also it focuses the money on cleanup versus  
7           expensive studies.

8           That is the main point of my  
9           presentation, the new approach. If there are any  
10          questions?

11          MS. SMITH: I am a little confused.  
12          The second document does not seem to contain major  
13          parts of the first document. Are they going to be  
14          lumped together at some point?

15          MR. ALLISON: Which parts are you  
16          referring to?

17          MS. SMITH: Appendices in the first  
18          document about quality assurance plan.

19          MR. ALLISON: The quality assurance  
20          plan has been pulled out, partly because due to

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1           MS. SMITH: That has gone on?

2           MR. ALLISON: Because the methodology  
3           has changed, the approach has changed.

4           CO-CHAIRMAN WONG: It is currently  
5           9:30; and this presentation was a part of the  
6           presentation intended to just walk you through the  
7           document that the Technical Subcommittee is going  
8           to review.

9           I would like to see, if there are no  
10          further questions regarding the presentation here,  
11          if we can just move on to bring the meeting to a  
12          close or if people want to go a few more minutes,  
13          because there are points of clarification.

14          MS. SHIRLEY: I have a couple of  
15          general questions, not about this but about the  
16          petroleum stuff.

17          CO-CHAIRMAN WONG: If we can close  
18          off on this document?

19          MR. ALLMAN: One quick one:  
20          Part of the purpose is to cut back

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1 the amount of studying. If the Navy decides it is  
2 cheapest to dredge away the sediment, are they  
3 going to do a risk assessment to find out what  
4 that is?

5 MR. ALLISON: That is part of the  
6 feasibility study. When you go into proposed  
7 different ways of handling a situation, you need  
8 to look at what kinds of eco systems you are going  
9 to destroy, if that would be a potential problem.

10 MR. ALLMAN: Even as far as having  
11 noise.

12 MS. VEDAGIRI: Is there more than one  
13 version of this eco risk?

14 MR. ALLISON: There was a draft plan  
15 submitted last year. There is a draft final, and  
16 the next one is the final.

17 MS. VEDAGIRI: Which one do we  
18 review?

19 MR. ALLISON: The draft final.

20 MS. VEDAGIRI: Dated November 8?

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1 in the committee, that Jim would be available to  
2 answer the questions over the next couple of  
3 weeks.

4 I would like to move to a couple of  
5 quick questions and the open discussion session.

6 MS. SHIRLEY: I want to know how the  
7 community RAB members can participate in the  
8 elaborations or different comments about the  
9 petroleum going into the CERCLA or staying out of  
10 CERCLA. Will there be an opportunity for us to  
11 share thoughts on that?

12 CO-CHAIRMAN SULLIVAN: Yes. We're  
13 not sure at this point what the mechanism for that  
14 will be, whether it will be some sort of document  
15 available for review or have the kind of  
16 discussion in a Restoration Advisory Board  
17 meeting; but there will be some input. We just  
18 have not determined what that mechanism is going  
19 to be.

20 MS. SHIRLEY: Thank you.

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1 MR. ALLISON: Yes.

2 FROM THE AUDIENCE: What methodology  
3 do you propose to employ in characterizing and  
4 quantifying the benefits and the cost benefit  
5 analysis?

6 MR. ALLISON: There is a pilot study  
7 being done on the Mare Island site that will  
8 include a lot of that.

9 Right now we're going to follow the  
10 guidance they are proposing there and regulatory  
11 comment, basically how much it will cost to do  
12 further investigation and what kind of results we  
13 will get from it; look at the cost of remedying  
14 it; look at the habitat destruction, potential  
15 benefits or nonbenefits.

16 This is a pilot study being done at  
17 Mare Island that we're going to use as a model.

18 CO-CHAIRMAN WONG: I would like to  
19 bring this part to a close and go into the  
20 Technical Subcommittee; and if questions come up

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1 CO-CHAIRMAN WONG: If there are no  
2 further questions, the next thing on our agenda is  
3 proposed agenda items for the next meeting; and  
4 one that is getting carried over is further  
5 discussion about the UST program.

6 Any other suggestions for the next  
7 meeting?

8 CO-CHAIRMAN SULLIVAN: With that, the  
9 next regular meeting is in only three weeks, on  
10 the 19th of December. We moved it up because of  
11 the Christmas Holiday.

12 And then the following meeting, in  
13 January, returns to the fourth Tuesday of the  
14 month.

15 The mid-month meeting at Brad's  
16 office is two weeks from tonight, on the 12th of  
17 December; and Byron Rett and others from the San  
18 Francisco Redevelopment Agency will be there; so I  
19 would certainly encourage you all to attend, as  
20 well as the Technical Subcommittee.

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1 MR. HEHN: I want to mention, if you  
2 review the two documents that are currently in  
3 review, I would like to spend some of the time at  
4 the interim meeting on reviewing those documents,  
5 getting comments out to those who either attend  
6 the meeting, bring the comments, bring them down,  
7 or you can fax them to me so we can include them  
8 with comments on the Technical Subcommittee. Or  
9 you can submit them on your own, especially on the  
10 Ecological Risk Assessment.

11 The comments are until the 15th, so  
12 we can do that as part of that interim meeting  
13 after we have a discussion.

14 MS. SHIRLEY: I have a concern about  
15 that. There is an awful lot of territory to be  
16 covered at that meeting. Are we going to have  
17 enough time?

18 MR. HEHN: I think one of the things  
19 we could do is go ahead; and if you can jot down  
20 your suggestions, ideas and comments; we can

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1 include those as sort of an overview or maybe put  
2 them in a cover letter from the subcommittee --  
3 that would be another way to do that -- and bring  
4 up some of the points of discussion as much as we  
5 can in the time available.

6 Would there be interest in trying to  
7 start that a little bit earlier, to try to get  
8 more time? Would that be available?

9 CO-CHAIRMAN WONG: Do you people want  
10 to show up, from five o'clock on, it's fine.

11 MR. HEHN: I would be happy to start  
12 at six or six-thirty.

13 MS. SHIRLEY: That would be really  
14 useful. If we all show up at seven, by ten  
15 o'clock we will be brain dead; and I know the  
16 re-use issues will be interesting. I'm afraid by  
17 9:30 we will end up with 15 minutes each on the  
18 review.

19 CO-CHAIRMAN WONG: Why don't we start  
20 at six; and people interested in the work plan

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1 discussion, there will be an hour's discussion  
2 before Byron Rett shows up for the presentation.

3 MS. SHIRLEY: That sounds good.  
4 Thank you.

5 CO-CHAIRMAN SULLIVAN: Okay. Last  
6 chance to get anyone who has not got a copy, that  
7 would like to get a copy, of both the UST report  
8 or the Ecological Work Plan.

9 We have copies of both of those  
10 documents here tonight; or if we run out, give  
11 your name to Hugo; and we will Xerox you another  
12 copy.

13 The next Citizens Re-use Committee  
14 Meeting is tentatively or definitely --

15 MS. GLASS: The 11th of December at  
16 3:30 p.m. at the Redevelopment Agency.

17 CO-CHAIRMAN WONG: If I could get the  
18 DTSC letter back, there is still time available, I  
19 want to get that out tomorrow.

20 And if anybody wants a draft of the  
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1 summary of last month's discussion on agendas for  
2 '96, that dovetail with the schedule of reports  
3 and educational components, there are extra copies  
4 here.

5 (Whereupon the meeting adjourned at  
6 9:47 p.m.)

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CERTIFICATE\_OF\_REPORTER

I, PAUL SCHILLER, a duly Certified  
Shorthand Reporter No. 1268, do hereby certify:

That the foregoing transcript  
constitutes a true, full and correct transcript of  
my shorthand notes taken as such reporter of the  
proceedings herein and reduced to typewriting  
under my supervisioon and control to the best of  
my ability.

\_\_\_\_\_  
(Date) PAUL SCHILLER

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