

1 **HUNTERS POINT SHIPYARD**
2 **RESTORATION ADVISORY BOARD MEETING MINUTES**
3 **JULY 22, 2004**

4 These minutes summarize discussions and presentations held during the Restoration Advisory
5 Board (RAB) meeting on Thursday July 22, 2004. The meeting was held from 6:00 p.m. to 7:50
6 p.m. at Dago Mary's Restaurant, which is Building 916 at Hunters Point Shipyard (HPS). A
7 verbatim transcript also was prepared for the meeting and is available in the Information Repository
8 for HPS and on the Internet (at www.efds.w.navy.mil/Environmental/HuntersPoint.htm). The
9 list of agenda topics is provided below. Attachment A provides a list of attendees. Attachment B
10 includes action items that were requested or committed to by RAB members during the meeting.
11 Attachment C includes all of the handouts from the RAB meeting on July 22, 2004.

12 **AGENDA TOPICS**

- 13 • Welcome, Introductions, and Agenda Review
14 • Approval of Meeting Minutes from RAB Meeting on June 24, 2004
15 • Navy Announcements
16 • Community Co-Chair Report and Other Announcements
17 • Subcommittee Reports
18 • Sequential Bioremediation at Remedial Unit C5 (Building 134)
19 • Rationale for Change of Parcel A Boundary and Status Update on Building 322
20 • Future Agenda Topics and Open Question and Answer Session
21 • Adjournment

22 **MEETING HANDOUTS**

- 23 • Agenda for RAB Meeting, July 22, 2004
24 • Meeting Minutes from RAB Meeting on June 24, 2004, including:
25 ➤ Action Items from RAB Meeting on June 24, 2004
26 ➤ Table 1, RAB Roll-Call Sheet
27 • Monthly Progress Report, June 2004
28 • PowerPoint™ Presentation, NAVFAC, Groundwater Cleanup using Bioremediation –
29 A Treatability Study, July 22, 2004
30 • PowerPoint™ Presentation, NAVFAC, Parcel A FOST, July 22, 2004
31 • Meeting Minutes, HPS RAB, Membership/Bylaws and Community Outreach
32 Subcommittee, July 14, 2004

- 1 • Meeting Minutes, HPS RAB, Lowman Radiological Subcommittee, June 23, 2004
- 2 • Handout, Pro Se Services, Bouchard Industrial Metals, Notification: Proposed Ship
- 3 Dismantling Facility, HPS, Dry Dock 4
- 4 • Handout, Community Window on the HPS Cleanup, Superfund Sites, and the Law: From
- 5 Discovery to Redevelopment
- 6 • Handout, Map of Former Locations of Buildings D-19 through D-23

7 Welcome, Introductions, and Review of Agenda and Meeting Minutes

8 Marsha Pendergrass, facilitator, called the meeting to order at 6:00 p.m. All participants in
9 attendance introduced themselves. Ms. Pendergrass began the meeting and asked if there were
10 any changes to the minutes for the meeting on June 24, 2004. Clifton Smith, meeting attendee,
11 commented that two questions posed by him during the zero-valent iron (ZVI) presentation at the
12 RAB meeting on June 24, 2004, were not included in the minutes. Ms. Pendergrass stated that
13 the meeting minutes contain condensed information and reminded everyone that a verbatim
14 transcript is also posted on the Navy's website. Ms. Pendergrass called for a motion to approve
15 the June 2004 meeting minutes, and the minutes were approved.

16 Ms. Pendergrass reviewed the action items contained in the June 2004 meeting minutes and
17 asked for a status of each item. Two items (Astoria Metals Company cranes at Dry Dock 4 and
18 the field trip to the ZVI site) were carried over to the action items for the July 2004 meeting.
19 The action item for the report to the Radiological and Health Risk Subcommittee on the
20 establishment of preliminary remediation goals (PRG) for manganese was completed to the
21 satisfaction of the RAB.

22 The action item on the field trip to the former ammunition bunker was not resolved to the
23 satisfaction of the RAB members. Lani Asher, RAB member, stated during the June 2004
24 meeting that she was not satisfied with the field trip to the concrete retaining wall and requested
25 a follow up field trip be conducted. Pat Brooks, Navy Lead Remedial Project Manager (RPM),
26 said he was not aware of any additional bunkers. Maurice Campbell, RAB Community
27 Co-Chair, stated that he had viewed videotape from a former shipyard worker about bunkers at
28 HPS and a newspaper article about children playing in the bunkers. Georgia Oliva, RAB
29 member, suggested that Mr. Campbell provide Mr. Brooks with the bunker information and then
30 a field trip to the bunkers could be arranged. Barbara Bushnell, RAB member, requested anyone
31 with information on bunkers in Parcel A to provide this information to the Navy. The action
32 item was amended, and the information will be reviewed during the August 2004 meeting.

33 Navy and Community Co-Chair Reports/Other Announcements

34 Mr. Brooks stated that he would be taking over for 2.5 weeks while Keith Forman (Navy RAB
35 Co-Chair) is on training duty. Mr. Brooks noted that a revised agenda had been sent to the RAB
36 members that reflected changes in the format of the meetings. Mr. Brooks noted that a
37 discussion occurred with Ms. Pendergrass and Mr. Campbell to change the format of the RAB
38 meetings to allow for a more equitable time distribution between the Navy and the subcommittee
39 reports. Ms. Pendergrass noted that the minutes from the subcommittee meetings will be added
40 to the final meeting minutes on the Navy's website, in the Administrative Record, and in the
41 Information Repository.

1 Mr. Campbell added that only one question per RAB member will be permitted during Navy
2 presentations to allow additional time for community input during RAB meetings. Mr. Campbell
3 noted that further discussions can take place in the subcommittee meetings. Mr. Campbell then
4 requested the return of a map index showing the layout of HPS. A Navy subcontractor (Tetra
5 Tech FW, Inc.) had removed the map from Building 101 to photocopy it. Mr. Campbell also
6 noted an information handout from Pro Se Services, Bouchard Industrial Metals, on a proposed
7 ship-breaking operation on Parcel 4. While this proposal has not yet been reviewed by the Navy,
8 the community is encouraged to begin considering the proposal.

9 Karen Pierce, RAB member, asked that the policy regarding one question per RAB member be
10 reconsidered because follow-up questions may be necessary due to various levels of expertise
11 among the RAB members. Ms. Pierce stated that follow-up questions would help all RAB
12 members to better understand the information being presented and to become better informed
13 about issues at HPS.

14 **Reminder: The next RAB meeting will be held August 26, 2004, from 6:00 to 8:00 p.m., at**
15 **Dago Mary's Restaurant, Building 916 at HPS.**

16 Subcommittee Updates

17 Membership, Bylaws, and Community Outreach Subcommittee (MBCO) (Melita Rines, Leader)

18 Ms. Rines noted that the San Francisco Police Department (SFPD) attended the MBCO meeting
19 but did not make available for RAB review the terms of their lease for Building 606 at HPS. The
20 lease is in the process of being renegotiated between the City and County of San Francisco (City)
21 and the Navy. Currently the Navy is examining the market value of property before finalizing
22 the renegotiation of the City's lease of Building 606. Ms. Rines stated that a vote on the bylaws
23 will take place at the RAB meeting in August 2004. The proposed bylaws change the time
24 period for absences from the calendar year to a 12-month period. As a result, RAB members
25 will not be permitted to miss more than four meetings in 12 months. Once passed by the RAB in
26 September 2004, the revised bylaws will go into effect. Barbara Bushnell, RAB member,
27 recommended keeping the absence rules in bylaws per calendar year to make it easier to track.
28 Ms. Pendergrass requested that the proposed changes be sent to the RAB members for review
29 before the vote next month. Carolyn Hunter, SulTech, agreed to mail them.

30 The next meeting of the Membership, Bylaws, and Community Outreach Subcommittee will be
31 at 6:30 p.m. on August 11, 2004, at the Anna E. Waden Branch Library, located at 5075 Third
32 Street. **Follow Up: The next MBCO subcommittee meeting will be moved due to the*
33 *unavailability of the Anna Waden Library Community Room. The next MBCO subcommittee*
34 *meeting will take place on August 11, 2004 at the Window on the Shipyard Office at 4634 Third*
35 *Street.*

36 Technical Review Subcommittee (Lea Loizos, Leader)

37 Lea Loizos, RAB member, said the subcommittee had not met in June 2004. Ms. Loizos was
38 considering having the Navy give a technical presentation during future meetings of the
39 Technical Review Subcommittee.

40 The next meeting of the Technical Review Subcommittee will be at 6:00 p.m. on August 18,
41 2004, at the Community Window on HPS, located at 4634 Third Street.

42 Lowman Radiological Subcommittee of the HPS RAB (Ahimsa Sumchai, Leader)

1 Dr. Ahimsa Sumchai, RAB member, thanked the members for attending the subcommittee
2 meeting. Dr. Sumchai stated that Dr. Dan Stralka from the U.S. Environmental Protection
3 Agency's (EPA) Superfund division gave a presentation on manganese, which included a
4 discussion on sources, background information, and the establishment of PRGs for manganese.
5 Dr. Sumchai said that manganese has been detected at elevated concentrations at HPS, although
6 it is unknown if these concentrations are naturally occurring. Dr. Sumchai continued that
7 manganese is a natural component in the geology of HPS and is a product of the combustion of
8 fossil fuels. Dr. Stralka discussed the establishment of the PRGs to protect human health,
9 including the most sensitive populations. Previous studies evaluated in the establishment of the
10 PRGs looked at manganese in drinking water and at the effect on human health from inhalation
11 by mine workers, including neurological disorders. Dr. Sumchai stated that the subcommittee
12 would also address the reuse plans and would table the discussion for a full RAB presentation.

13 Dr. Sumchai stated that the RAB should revisit the concern that a Naval Radiological Defense
14 Laboratory (NRDL) laboratory was located in the D-series buildings. Dr. Sumchai expressed
15 concerns about Building 103, which was identified in the Historical Radiological Assessment
16 (HRA) as a personnel decontamination center during World War II and is currently leased to
17 local artists. She recommended that this building should be retained for further evaluation based
18 on the final Environmental Impact Report for Phase I development at Parcels A and B. Laurie
19 Lowman, Naval Sea Systems Command, Radiological Affairs Support Office (RASO), will
20 address some of these issues at her presentation during the August 2004 meeting.

21 Dr. Sumchai recommended that Dr. Stralka give a presentation on manganese to the full RAB, if
22 the group is interested.

23 The next meeting of the Lowman Radiological Subcommittee of the HPS RAB will be from 3 to
24 5:00 p.m. on August 25, 2004, at The Greenhouse, located at 4919 Third Street.

25 Economic Development Subcommittee (Maurice Campbell, Leader)

26 Mr. Campbell did not have an Economic Development Subcommittee report for June 2004. The
27 year-to-date and quarter-to-date financial information, as well as the community's portion of the
28 cleanup of HPS, will be discussed during the next meeting.

29 The next meeting of the Economic Development Subcommittee will be at 2:30 p.m. on August
30 10, 2004, at the Young Community Developers, located at 1715 Yosemite Avenue.

31 Results of a Study on Groundwater Cleanup using Bioremediation

32 Glenn Christensen, Navy RPM, said this presentation would provide the results of a treatability
33 study on groundwater cleanup using bioremediation. Mr. Christensen began by giving the
34 background of Building 134. This building was a former machine shop on Parcel C. Building
35 134 contained an oil/water separator (OWS) and a solvent degreaser pit that were removed. Soil
36 and groundwater at Building 134 are contaminated with solvents. The degreaser pit has been
37 over-excavated to remove all contaminated soil above the water table. The purpose of this study
38 was to evaluate the potential of enhanced bioremediation to treat contaminated water at this
39 building and also other areas of HPS.

40 Mr. Christensen described the process of in situ bioremediation, which destroys contaminants in-
41 place with naturally occurring bacteria in the aquifer. After the bacteria are provided a food

1 source, they eat the contaminants, breaking them down into nontoxic chemicals. This process is
2 similar to other biological processes, such as making wine or beer.

3 Mr. Christensen showed a map of the plume within Building 134. The source of the
4 contamination is the former degreaser pit, which has been excavated and backfilled. An
5 extraction well was installed in the former OWS excavation area to control groundwater
6 movement. Mr. Christensen showed pictures displaying the installation of the well vaults. The
7 monitoring wells are 4-inch flush-mounted wells located outside the building.

8 Mr. Christensen stated that the bioremediation study at Building 134 includes the following two
9 steps: (1) bioremediation without oxygen (anaerobic) followed by (2) bioremediation in the
10 presence of oxygen (aerobic). Some contaminants, such as tetrachloroethene (PCE) and
11 trichloroethene (TCE), degrade without oxygen or under anaerobic conditions. Other
12 contaminants, such as benzene, petroleum hydrocarbons, and semivolatile organic compounds,
13 degrade with oxygen or aerobic conditions. Still other contaminants, such as vinyl chloride and
14 chlorobenze, can degrade under aerobic or anaerobic conditions.

15 Bioremediation creates favorable conditions for the breakdown of contaminants
16 (biodegradation). Stage 1, anaerobic bioremediation, began on April 14, 2004, at Building 134,
17 and it is expected to continue through November 2004. The second stage, aerobic degradation, is
18 scheduled to begin in December 2004 and to continue through April 2005. The first stage,
19 anaerobic breakdown of contaminants, is already occurring. PCE and TCE are degrading into
20 vinyl chloride and ethene. Ethene is nontoxic, and detected concentrations are far below the
21 lower explosive limit (LEL). The LEL for ethene is 30,000 parts per million (ppm). The highest
22 concentration of ethane detected is 7 ppm.

23 Ms. Pierce asked for a further explanation on anaerobic bioremediation. Mr. Christensen
24 explained that the environment is currently anaerobic. Groundwater is pumped out of the
25 aquifer, and sodium lactate is added to the water and then reinjected into the aquifer. Mr. Brooks
26 added that petroleum hydrocarbons from an adjacent site have degraded in the aquifer and used
27 up the oxygen in the groundwater, thereby creating favorable anaerobic conditions.

28 Mr. Christensen explained the aerobic biodegradation process. During this process, oxygen is
29 added to the aquifer. A different type of bacteria uses oxygen for respiration, and these bacteria
30 complete the destruction of the remaining contaminants. The byproducts of this process are
31 carbon dioxide, water, and chloride ions.

32 Mr. Christensen showed a picture of the equipment inside of Building 134, as well as the
33 excavation and treatment zone. The depth to groundwater is about 8 feet below ground surface.
34 The walls of the building act as a containment cell. The soils are made of silty sands and silty
35 clay. Several monitoring wells were installed outside the building. This study is treating the
36 upper aquifer, known as the A1 Zone, but testing is also being performed on the lower aquifer to
37 ensure that no vertical migration of contaminants is occurring.

38 Mr. Christensen showed three graphs of analytical results for groundwater samples from each
39 well. Six samples have been collected to date. The trends in these three wells indicate that
40 breakdown of PCE and TCE is already occurring, with an increase in vinyl chloride
41 concentrations. The process is also pulling contaminants from the soil. Mr. Christensen then
42 asked for questions.

1 Dr. Sumchai expressed concerns regarding the volatilization of byproducts, particularly at the
2 groundwater outfall into the Bay. She stated that carbon dioxide is a global warming gas and
3 therefore this is a concern for a community with respiratory problems. Another concern is the
4 formation of ethene and chloride. Dr. Sumchai also asked if air monitoring data were being
5 collected. Mr. Christensen responded that air monitoring was conducted at all times for the
6 health and safety of workers.

7 Ms. Rines asked if the bacteria used in the aerobic biodegradation process are also naturally
8 occurring and if so, then why doesn't the process occur naturally. Mr. Christensen responded
9 that while it does occur naturally, this process speeds it up.

10 Mr. Campbell inquired about the effect of methane and ethane for global warming. Mr. Brooks
11 responded that activities conducted during the treatability study or methane released from Parcel
12 E would have no effect on the atmosphere.

13 Raymond Tompkins, RAB member, inquired about the effects of sodium lactate on the bacteria.
14 Mr. Brooks responded that the bacteria reproduce, grow, and eat the contamination as a food
15 source.

16 Ms. Asher asked if this process had been used at other bases. Mr. Christensen responded that the
17 Navy's contractor, Shaw Environmental & Infrastructure, Inc., had successfully used it at Point
18 Mugu and Treasure Island. Ms. Asher then asked if there were other contaminants in the aquifer
19 that were not being eaten by the bacteria. Mr. Christensen responded that this study was looking
20 at the contaminants with the highest concentrations, notably PCE and TCE, although other
21 contaminants are degraded aerobically and anaerobically. He stated that the work plans for this
22 study have been submitted to and reviewed by both the RAB and the BCT.

23 Frank Niccoli, meeting attendee, stated that an increase in anaerobic biodegradation created a
24 decrease in aerobic biodegradation in the aquifer. He asked if oxygen was injected into the wells
25 for the aerobic biodegradation process, and Mr. Christensen responded that it was.

26 Clifton Smith, meeting attendee, inquired into the baseline conditions used for this study. Mr.
27 Christensen responded that groundwater samples were collected previously from monitoring
28 wells. Therefore, the Navy already had knowledge of PCE and TCE contamination at HPS. The
29 Navy tested the groundwater samples to ensure a sufficient colony of the bacteria existed in the
30 area. The Navy also measured groundwater parameters, including dissolved oxygen and
31 temperature. Mr. Smith inquired if this study was based on published research, and Mr.
32 Christensen responded that it was, including contractor knowledge of the process and previous
33 data collected at HPS.

34 Ms. Loizos asked why it was necessary to circulate the groundwater. Mr. Christensen responded
35 that this process ensured that sodium lactate was distributed evenly in the well. The circulation
36 is turned off when sodium lactate is detected in the extraction well.

37 Ms. Oliva inquired into byproducts of the biodegradation process and expressed concerns about
38 the explosive properties of ethene. Mr. Christensen stated that the maximum concentration that
39 ethene will reach is 7 ppm, which is well below the LEL.

40 Chris Hanif, RAB member, reminded the Navy to explain terms and acronyms used in the
41 presentations. Dr. Sumchai stated that a list of acronyms was provided during past RAB
42 meetings and suggested this would be helpful for the RAB members.

1 Status of Parcel A FOST

2 Mr. Brooks stated that before he addressed the Parcel A FOST and Building 322, he wanted to
3 discuss the boundary changes of Parcel A. Mr. Brooks stated that the Navy's main objective is
4 to clean up the parcels and transfer them to the City. Mr. Brooks stated that the boundary of
5 Parcel A has been redrawn to exclude Buildings 813 and 819. Building 813 was an NRDL
6 building that is a potential source of strontium from a leak in test equipment. Building 819 was a
7 sewage pump station that could have received radioactive waste from sewage pump lines. The
8 draft final HRA identified these buildings as affected, so they were removed from Parcel A to
9 allow for its transfer to the City.

10 Mr. Brooks began his discussion of Building 322 by showing a picture of the building, which has
11 since been demolished. The Navy is currently working with EPA and the California Department
12 of Health Services (DHS) to release the building so Parcel A can be transferred. Building 322 is
13 a former guard shack and NRDL building that was used as a storage area for instruments. It was
14 formerly located on Parcel D and subsequently moved to Parcel A. The Navy conducted a
15 radiation survey of the entire building. Based on the survey results, EPA granted approval to
16 demolish the building and it was sent to a landfill. A radiation survey was then conducted on the
17 remaining concrete slab. No contamination was found, and the slab was subsequently broken up.

18 On June 30, 2004, EPA conducted an independent radiological survey on the footprint of the
19 building. This survey found no radiation at the site at concentrations above background. EPA
20 used two instruments for the evaluation: a gamma scintillation probe and a Exploranium GR130
21 Mini Spectrometer. A nearby grassy area was also evaluated as a baseline. The EPA inspection
22 concluded that no radiological contamination is affecting the environment at HPS due to
23 activities previously conducted at Building 322 and that further radiological investigation of the
24 site is not warranted. Based on EPA's conclusions, the site of former Building 322 is eligible for
25 release under unrestricted reuse.

26 Mr. Brooks stated that the Navy's next step would be to compile the survey report and submit the
27 report to the DHS following a review by Laurie Lowman, RASO. The Navy will prepare the
28 Draft Final Finding of Suitability to Transfer (FOST), Revision 3, which will include the letters
29 of free release for the site. The Draft Final FOST, Revision 3, will have a 30-day comment
30 period.

31 Ms. Oliva asked which instruments were used to evaluate the building materials. Mr. Brooks
32 replied that the same instruments and analysis were conducted on all materials of the building.
33 Ms. Oliva also asked when the report would be finished. Mr. Brooks responded that he expected
34 it to be completed the following Tuesday, and that he would provide copies of the report to any
35 interested RAB member.

36 Ms. Pierce stated that there are two sites for former Building 322 and she wanted to ensure that
37 the original site was adequately addressed in Parcel D. Mr. Brooks stated that in the draft final
38 HRA, the site of Building 322 on Parcel D is known as the "former site of Building 322" and a
39 survey is recommended for that site.

40 Dr. Sumchai asked why the building had been demolished. Mr. Brooks responded that the
41 building needed to be demolished in order to survey the concrete slab and soil underneath the
42 building. Dr. Sumchai then inquired into the size of Parcel A and asked about the background
43 levels of radiation used. Mr. Brooks responded that background levels were measured at a

1 nearby grassy area. Dr. Sumchai stated that 20,000 counts per minute appeared to be a high
2 number. She inquired if any gamma rays had been detected at the site. Mr. Brooks stated that he
3 would need to review the report.

4 Mr. Campbell stated that he would like more information on the background level of radiation at
5 HPS. Mr. Brooks stated that background levels vary across HPS, but a range could probably be
6 provided. Michael Work, EPA, will check if background levels are available for the San
7 Francisco area from EPA.

8 **Future Agenda Topics**

9 Aside from the standard agenda topics and subcommittee updates, no additional agenda topics
10 were suggested.

11 **Other Discussions and Topics**

12 The items below also were discussed at the July 2004 meeting. A verbatim account of these
13 discussions is included in the Information Repository for HPS and may be found on the Internet
14 at www.efds.w.navy.mil/Environmental/HuntersPoint.htm.

15 • Mr. Hanif stated that a training program for hazardous waste by Young Community
16 Developers will take place beginning on September 1, 2004. At the completion of this
17 training, Mr. Hanif will provide an informational presentation on the terminology of
18 hazardous training programs at an upcoming meeting, which will be open to RAB
19 members. Mr. Hanif will provide the dates for the training orientation and information to
20 the RAB.

21 • Dr. Sumchai stated that an invitation had been extended to Gerald Vincent from the U.S.
22 Army Corps of Engineers to give a presentation on formerly used defense sites. Dr.
23 Sumchai will provide additional information on this schedule because Mr. Vincent is not
24 available for the August meeting.

25 • Don Capobres from the San Francisco Redevelopment Agency (SFRA) stated that
26 August 13, 2004, will be his last day with the agency. Mr. Capobres will coordinate with
27 Mr. Campbell to introduce the SFRA's replacement to the RAB. He thanked the RAB
28 members for their involvement the past few years.

29 • Dr. Sumchai stated that the Anna E. Waden Branch Library is an important resource to
30 the communit, and requested that it be stocked with the same documents as the main
31 library. Mr. Brooks replied that the Anna E. Waden Branch Library does not have
32 enough space available to fit all the Navy documents. Mr. Smith suggested the Navy put
33 the administrative records on compact disc and then provide these to the library. The
34 library has computers available where the documents could be viewed. Mr. Brooks
35 agreed to look into providing compact discs of Navy documents for the Anna Waden
36 Library.

37 • Mr. Campbell stated that future RAB meetings will focus on the subcommittees and their
38 recommendations, and reminded everyone to participate in these meetings.

39 There were no further announcements. The meeting was adjourned at 7:50 p.m.

1
2

Reminder: The next RAB meeting will be held from 6:00 to 8:00 P.M., Thursday evening, on August 26, 2004 at Dago Mary's Restaurant, Building 916 at HPS.

**ATTACHMENT A
JULY 22, 2004 - RAB MEETING
LIST OF ATTENDEES**

Name	Association
1. John Adams	SulTech
2. Lani Asher	RAB member, CBE, CFC
3. Pat Brooks	Navy, Lead Remedial Project Manager
4. Amy Brownell	RAB member, SF Dept of Public Health
5. Barbara Bushnell	ROSES, Silview Terrace Homeowners Association
6. Maurice Campbell	RAB Community Co-chair , CFC, New California Media
7. Don Capobres	San Francisco Redevelopment Agency
8. Shirley Cherry	SulTech
9. Glenn Christensen	Navy, Remedial Project Manager
10. Tommie Jean Damrel	SulTech
11. Steve Dixon	Young Community Developers
12. Jennifer Gibson	SulTech
13. Chris Hanif	RAB member, Young Community Developers
14. Carolyn Hunter	SulTech
15. Jackie Lane	EPA, Community Involvement
16. Lea Loizos	RAB member, ARC Ecology
17. James Morrison	RAB member, Environmental Technology, ROSES
18. Christine M. Niccoli	Niccoli Reporting, court reporter
19. Frank Niccoli	Niccoli Reporting
20. Georgia Oliva	RAB member, CBE, CCA member
21. Ralph Pearce	Navy, Remedial Project Manager
22. Marsha Pendergrass	Pendergrass & Associates
23. Karen Pierce	RAB member, BVHP Democratic Club, HEAP
24. Jim Ponton	RAB member, Regional Water Quality Control Board
25. Melita Rines	RAB member, India Basin Neighborhood Association
26. Dennis Robinson	Shaw Environmental & Infrastructure, Inc
27. Robert Server	Pendergrass & Associates
28. Clifton Smith	C.J. Smith & Associates, Eagle Environmental Construction
29. Peter Stroganoff	Navy, ROICC Office
30. Ahimsa Sumchai	RAB member, BVHP Health and Environmental Resource Center
31. Keith Tisdell	RAB member, resident
32. Raymond Tompkins	RAB member, BVHP Coalition on the Environment
33. Julia Vetromile	SulTech
34. Michael Work	RAB member, US EPA
35. Leilani Wright	RAB member, JRM Associates

**ATTACHMENT B
JULY 22, 2004 - RAB MEETING
ACTION ITEMS**

Item No.	Action Item	Due Date	Person/Agency Committing to Action Item	Resolution Status
Carry-Over Items				
1.	Navy to notify David Terzian and Navy Caretaker Site Office prior to removal of Astoria Metals Company's cranes at Dry Dock 4	To be determined	Navy/ Keith Forman	
2.	[Amended from June Action Item] RAB members with information on potential storage bunkers to provide this information to the Navy. The Navy will then set up a field trip to look at those areas identified by the RAB.	August RAB	RAB members	
3.	Navy to arrange a field trip for RAB to view the site where zero-valent iron will be used.	To be determined	Navy/Pat Brooks	Field work will begin mid-August; because it may begin before the next RAB meeting, the Navy will invite the RAB and the BCT via e-mail instead of setting a date at the August RAB meeting
New Items				
1.	EPA to provide information on measured levels of local background radiation	To be determined	EPA/Michael Work	
2.	Navy to check on the return of the map index to Building 101	To be determined	Navy/Pat Brooks	
3.	SulTech to mail copies of proposed membership bylaws to RAB members	August RAB	SulTech/Carolyn Hunter	This action item has been completed
4.	Navy to provide interested RAB members with a copy of the Draft Final FOST, Revision 3	To be determined	Navy/Pat Brooks	
5.	Navy to assess the feasibility of providing Anna E. Waden Branch Library with HPS documents on compact disc	To be determined	Navy/Pat Brooks	

**HUNTERS POINT SHIPYARD
RESTORATION ADVISORY BOARD (RAB) - MEETING AGENDA
THURSDAY, 22 JULY 2004**

Day/Date:
Thursday – 22 July 2004
Time:
6:00 p.m. to 8:05 p.m.

Location:
Dago Mary's Restaurant
Hunters Point Shipyard
Building # 916
San Francisco

Facilitator: Marsha Pendergrass

Time	Topic	Leader
6:00 p.m. – 6:05 p.m.	Welcome/Introductions/Agenda Review	Marsha Pendergrass <i>Facilitator</i>
6:05 p.m. – 6:15 p.m.	Approval of Meeting Minutes from 24 June 2004 RAB Meeting • Action Items	Marsha Pendergrass
6:15 p.m. – 6:25 p.m.	Navy Announcements	Pat Brooks <i>Navy Lead Remedial Project Manager</i>
	Community Co-chair Report/Other Announcements	Maurice Campbell <i>Community Co-chair</i>
6:25 p.m. – 6:55 p.m.	Subcommittee Reports	Subcommittee Leaders
6:55 p.m. – 7:05 p.m.	BREAK	
7:05 p.m. – 7:40 p.m.	Sequential Bioremediation at Remedial Unit RU- C5 (Building 134)	Glenn Christensen <i>Remedial Project Manager</i>
7:40 p.m. – 7:55 p.m.	Parcel A Boundary Change Rationale and Status Update on Building 322	Pat Brooks <i>Navy Lead Remedial Project Manager</i>
7:55 p.m. – 8:05 p.m.	Future Agenda Topics/ Open Question & Answer	Marsha Pendergrass
8:05 p.m.	Adjournment	Marsha Pendergrass

HPS web site: <http://www.efds.w.navy.mil/Environmental/HuntersPoint.htm>

RAB Navy Contact: Mr. Keith Forman (619) 532-0913 or (415) 308-1458

HUNTERS POINT SHIPYARD MONTHLY PROGRESS REPORT

JUNE 2004

This monthly progress report (MPR) summarizes environmental restoration activities conducted by the Navy at Hunters Point Shipyard (HPS) during June 2004. This MPR is prepared in accordance with the HPS Federal Facility Agreement, Section 6.6. The MPR is presented in three sections: Section 1, Parcel Updates, summarizes key activities at each parcel completed during the past month and planned for the upcoming 2 months; Section 2, Schedule, identifies submittals, meetings, and field activities completed during the past month and planned for the upcoming 2 months; Section 3, Other, is intended for special announcements, changes in personnel, basewide issues, or other topics not included in Sections 1 or 2.

1.0 - PARCEL UPDATES

PARCEL B JUNE 2004 ACTIVITIES

- Continued post-injection groundwater monitoring for the Ferox injection treatability study at Building 123.
- Continued preparation of a construction summary report (CSR) addendum that will present information for excavations not included in the draft CSR.
- Conducted April – June 2004 quarterly groundwater sampling.
- Continued evaluation of human health and ecological risk assessment methodologies. Continued preparation of technical memorandum to support the record of decision (ROD) amendment (TMSRA).
- Began preparation of the final corrective action plan (CAP) addendum with response to comments (RTC).

PARCEL B JULY 2004 – AUGUST 2004 ACTIVITIES

- Submit final work plan with RTCs for follow-on soil vapor extraction (SVE) treatability study work plan. Begin implementation of SVE work plan.
- Prepare and submit final annual/October – December 2003 quarterly groundwater monitoring report with RTCs. Prepare and submit draft January – March 2004 quarterly groundwater monitoring data package and field summary report. Begin preparation of final January – March 2004 quarterly groundwater monitoring report with RTCs. Begin preparation of April – June 2004 quarterly groundwater monitoring report. Begin conducting July – September 2004 quarterly groundwater sampling.

- Continue preparation of CSR addendum.
- Continue preparation of TMSRA. Conduct a storyboard meeting with regulatory agencies to discuss TMSRA.
- Continue preparation of the final CAP addendum with RTCs.

PARCEL C JUNE 2004 ACTIVITIES

- Began anaerobic injections and continued groundwater circulation for sequential anaerobic/aerobic bioremediation treatability study in Building 134.
- Submitted draft work plan for follow-on zero valent iron (ZVI) treatability study at Building 272.
- Submitted final Dry Dock 4 water sampling work plan with RTCs.
- Began preparation of the Parcel C Draft Feasibility Study (FS).
- Began preparation of the final waste consolidation report.

PARCEL C JULY 2004 – AUGUST 2004 ACTIVITIES

- Perform groundwater sampling per basewide groundwater monitoring SAP.
- Monitor groundwater for evidence of biodegradation as part of the sequential anaerobic/aerobic bioremediation treatability study in Building 134.
- Prepare and submit final work plan for sequential anaerobic/aerobic bioremediation treatability study in Building 134 with RTCs.
- Implement Dry Dock 4 water sampling work plan. Prepare draft summary report.
- Continue preparation of the Draft FS.
- Prepare and submit RTCs and supplemental information for underground storage tank (UST) closure request and documentation, pending receipt and resolution of agency comments.
- Prepare and submit final waste consolidation report.
- Prepare final work plan with RTCs for follow-on ZVI treatability study at Building 272.

PARCEL D JUNE 2004 ACTIVITIES

- Continued to finalize action memorandum and workplan with RTCs for the time-critical removal action (TCRA).

PARCEL D JULY 2004 – AUGUST 2004 ACTIVITIES

- Prepare and submit final TCRA action memorandum and work plan with RTCs.
- Complete field work for Parcel D TCRA.
- Perform groundwater sampling per the basewide groundwater monitoring SAP.
- Begin preparation of the Draft Final FS.

PARCEL E JUNE 2004 ACTIVITIES

- Continued monthly gas monitoring at the industrial landfill. Submitted final April 2004 landfill gas monitoring report. Continued preparation of May 2004 landfill gas monitoring report.
- Continued preparation of annual report for landfill storm water discharge management program (SWDMP).
- Continued preparation of Parcel E-2 (landfill) Remedial Investigation/Feasibility Study (RI/FS)
- Continued operation of groundwater extraction system at industrial landfill.
- Submitted final metal reef/slag removal action site characterization work plan with RTCs. Began implementation of work plan.
- Began preparation of Investigation Remediation (IR) Site 02 removal action work plan (to be performed under the basewide radiation removal action).
- Continued preparation of action memorandum and work plan for removal of soil containing polychlorinated biphenyls (PCB).
- Performed groundwater sampling per basewide groundwater monitoring SAP.

PARCEL E JULY 2004 – AUGUST 2004 ACTIVITIES

- Perform groundwater sampling per basewide groundwater monitoring SAP.
- Continue preparation of RTCs for draft landfill extent report.

- Continue preparation of RTCs for draft landfill cap removal action closeout report.
- Continue preparation of RTCs for draft landfill liquefaction potential report.
- Continue preparation of draft shoreline characterization technical memorandum.
- Continue preparation of IR-02 removal action work plan (to be performed under the basewide radiation removal action).
- Continue preparation of action memorandum and work plan for removal of soil containing PCBs.
- Continue preparation of final landfill gas closeout report, pending receipt and resolution of agency comments.
- Record monthly storm water visual observations at the industrial landfill during rain events (if any). Submit annual report for landfill stormwater discharge management plan.
- Prepare and submit final waste consolidation report.
- Continue monthly gas monitoring at the industrial landfill. Prepare and submit final May 2004 and June 2004 landfill gas monitoring reports. Begin preparation of July 2004 and August 2004 landfill gas monitoring reports. Prepare and submit final January 2004 landfill gas monitoring report and final interim landfill gas monitoring and control plan.
- Continue preparation of the data summary report for the standard data gaps investigation.
- Continue implementation of the final metal reef/slag removal action site characterization work plan. Begin preparation of the metal reef/slag removal action implementation work plan.
- Continue preparation of Parcel E-2 (landfill) RI/FS.
- Continue operation of groundwater extraction system at industrial landfill.

PARCEL F JUNE 2004 ACTIVITIES

- Continued preparation of draft final validation study report with RTCs.

PARCEL F JULY 2004 – AUGUST 2004 ACTIVITIES

- Prepare and submit draft final validation study report with RTCs.

2.0 SCHEDULE

This section presents meetings and deliverables conducted and planned during this reporting period.

Activities Conducted	Date
Submitted final April 2004 landfill gas monthly monitoring report	June 3, 2004
Submitted draft work plan for follow-on ZVI treatability study at Building 272	June 14, 2004
BCT basewide groundwater monitoring plan SAP technical meeting	June 15, 2004
BCT monthly meeting	June 23, 2004
RAB meeting	June 24, 2004
Submitted final metal reef/slag removal action site characterization work plan with RTCs	June 25, 2004
Submitted final work plan for sequential anaerobic/aerobic treatability study at Building 134	June 25, 2004
Submitted final Dry Dock 4 water sampling work plan with RTCs	June 25, 2004

Activities Planned	Date
Parcel C feasibility study scoping meeting	July 1, 2004
Submit annual report for landfill SWDMP	July 1, 2004
Submit May 2004 Monthly Landfill Gas Monitoring Report	July 1, 2004
Submit draft Parcels C, D, and E CAP (Revision 2)	July 2, 2004
Submit final Parcels C and E waste consolidation summary reports	July 6, 2004
Submit final follow-on SVE work plan with RTCs	July 7, 2004
Parcel B TMSRA storyboard meeting	July 14, 2004
Submit January to March 2004 groundwater monitoring data package/field summary report	July 14, 2004
BCT monthly meeting	July 21, 2004
RAB meeting	July 22, 2004
Submit final annual/October -- December 2003 quarterly groundwater monitoring report	July 22, 2004
Submit June 2004 Monthly Landfill Gas Monitoring Report	August 5, 2004
Submit Final January 2004 Monthly Gas Monitoring Plan with RTCs	August 6, 2004
Submit Final Groundwater Monitoring Program SAP with RTCs	August 9, 2004
Submit Final Interim Landfill Gas MCP	August 13, 2004
Submit Final HRA Volume II with RTCs	August 17, 2004
BCT meeting	August 24, 2004
PCB Removal Action Public Meeting	August 25, 2004
RAB meeting	August 26, 2004
Submit IR-02 Removal Action Workplan	August 26, 2004

Activities Planned	Date
Submit Parcel C UST RTCs and Supplemental Information	August 31, 2004

Note:

- Document submittal pending receipt and/or resolution of BCT comments

3.0 OTHER

- The Navy submitted the draft final HRA volume II on February 25, 2004. The final HRA is scheduled for submittal in August 2004, pending receipt and resolution of agency and public comments.
- The Navy submitted the draft basewide groundwater monitoring program SAP on December 18, 2003. The final SAP is planned for submittal in August 2004, pending receipt and resolution of agency comments. Additional monitoring wells were installed and the first quarter of groundwater sampling at Parcel B completed in March 2004. The second quarter of basewide groundwater sampling began in June 2004. The January to March 2004 groundwater monitoring report is scheduled for submittal on July 14, 2004.
- The Navy submitted the draft final Parcel A Finding of Suitability to Transfer (FOST), Revision 2 on March 19, 2004. Additional radiological surveys were completed at Building 322. The structure and slab foundation at Building 322 were removed during the week of June 21, 2004. Soil beneath the slab was then surveyed and a Final Status Survey Report is in preparation. The Navy is planning to submit the draft final FOST, Revision 3 in August 2004.



Groundwater Cleanup using Bioremediation - A Treatability Study

Hunters Point Shipyard
RAB Meeting
July 22, 2004

Introduction



- Building 134 was the marine machine shop
- It had a solvent degreaser pit and oil/water separator
- Soil and groundwater at Building 134 are contaminated with solvents

Purpose of Bioremediation Study

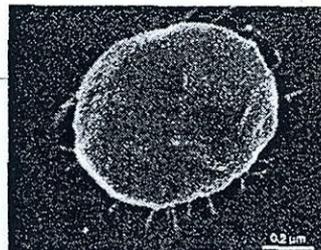


- Existing monitoring data suggest chemicals are biologically degrading
- Excavation conducted to install large diameter wells and also removed the degreaser pit, the oil/water separator and soil below
- Study proposed to evaluate enhanced bioremediation to treat contaminated groundwater

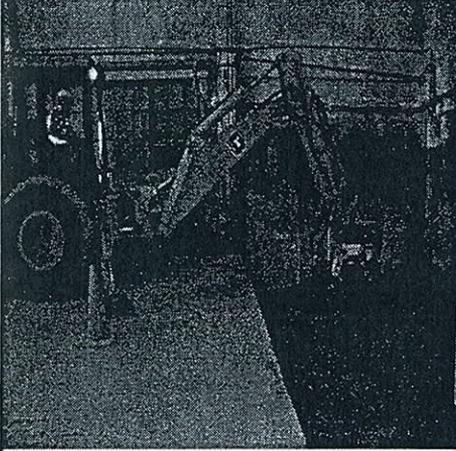
In Situ Bioremediation Process



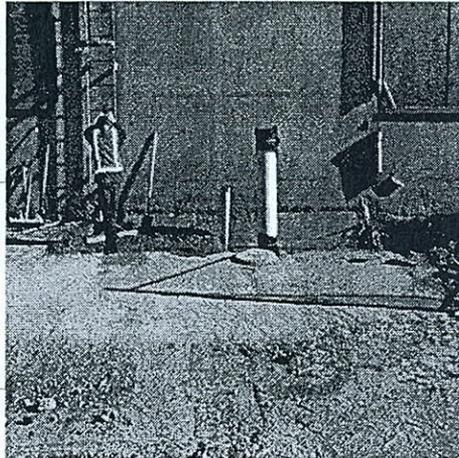
- In Situ Bioremediation is a process that destroys contaminants in place with bacteria
- Microorganisms (bacteria) change contaminants from toxic to non-toxic chemicals
- Process similar to other biological processes such as making wine/ beer.



Study Area

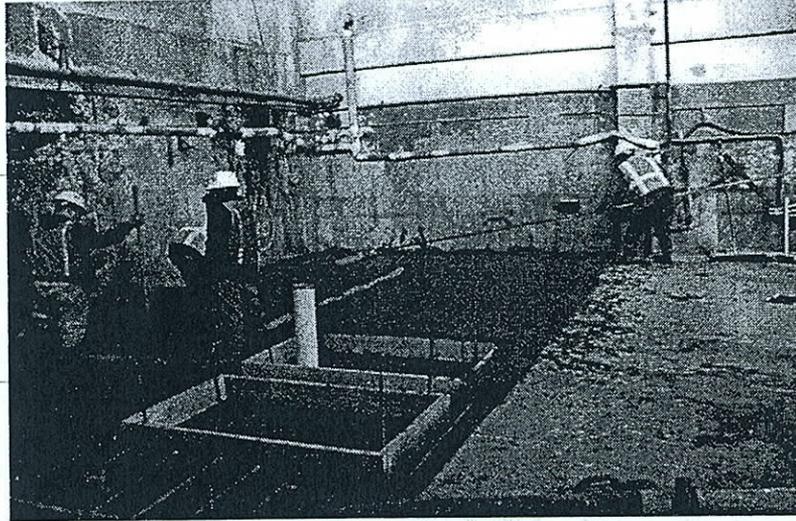


Outside of Building 134-Study Area

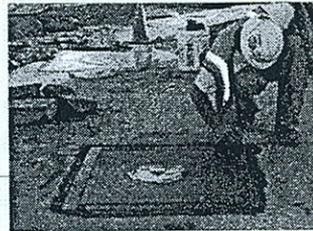


Extraction well installed in former oil/water separator excavation area

Test Area Preparation



Installing well vaults



Sequential Anaerobic - Aerobic Bioremediation



- **Some contaminants degrade without oxygen (anaerobic conditions)**
 - Tetrachloroethene (PCE)
 - Trichloroethene (TCE)
- **Other contaminants degrade with oxygen (aerobic conditions)**
 - Benzene
 - Petroleum hydrocarbons
 - Semivolatile hydrocarbons
- **Some contaminants don't care**
 - Vinyl chloride
 - Chlorobenzene

Bioremediation Process



- **Bioremediation Process – Create favorable conditions for biodegradation of contaminants**
- **Stage 1 – Anaerobic Bioremediation – April 14 to Nov 28, 2004**
- **Stage 2 – Aerobic Bioremediation – December 2004 to April 2005**

Anaerobic Biodegradation Process



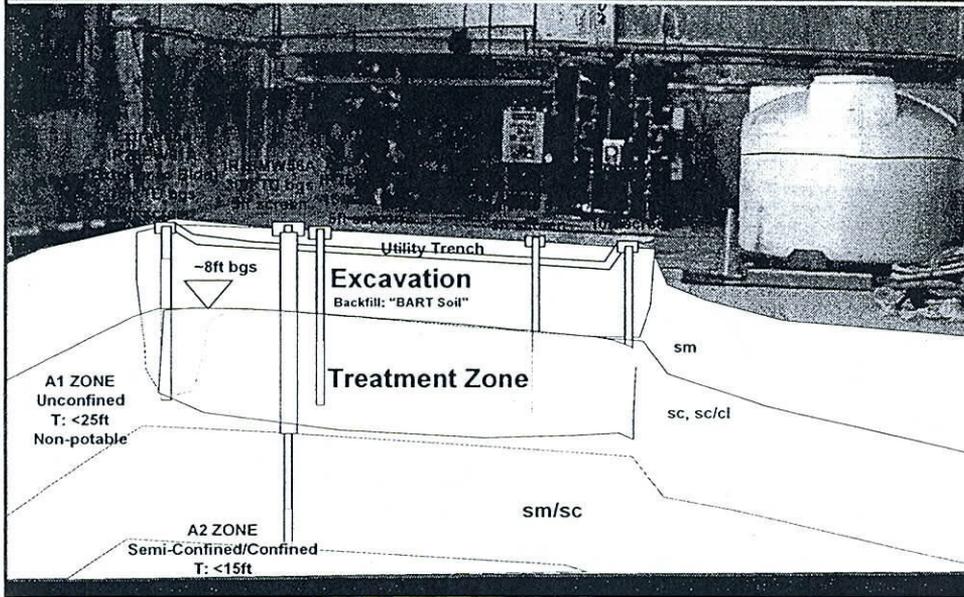
- **Conduct anaerobic biodegradation first**
 - Anaerobic biodegradation already occurring
 - PCE degrading bacteria confirmed present
- **Inject food (sodium lactate) into aquifer that bacteria use to degrade contaminants.**
- **Sequentially degrade PCE to TCE to DCE to VC to Ethene**
- **Ethene is non-toxic and concentrations are far below the lower explosive limit**

Aerobic Biodegradation Process

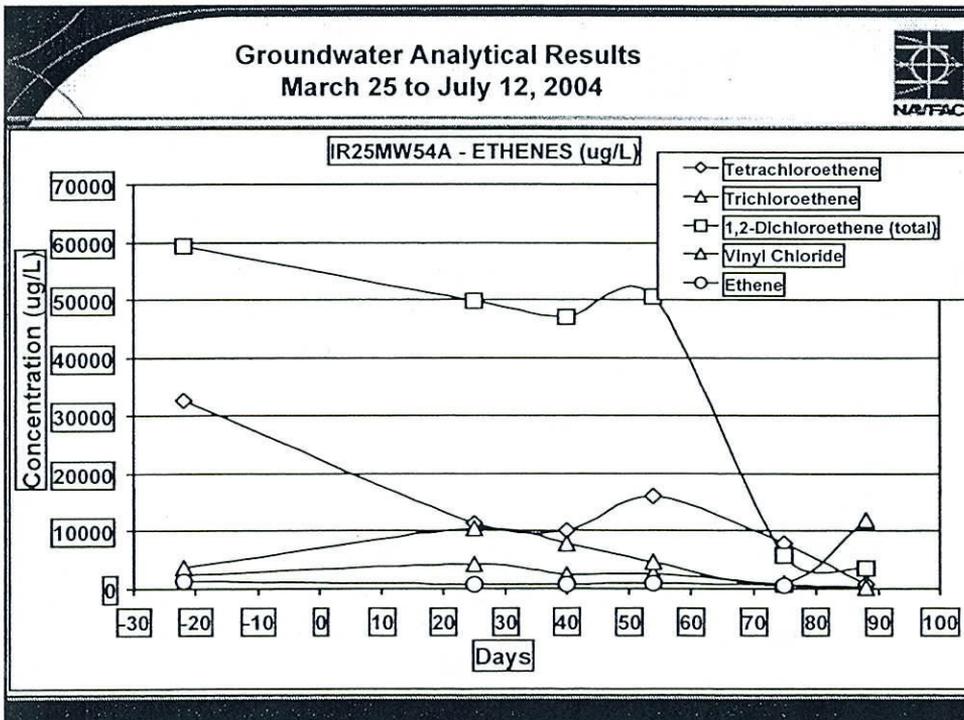


- **Add oxygen to contaminated aquifer.**
- **A different type of bacteria use oxygen for respiration**
- **These bacteria complete the destruction of remaining contaminants**
- **Contaminants are degraded to non-toxic carbon dioxide, water and chloride ions.**

In Situ Distribution / Monitoring Design



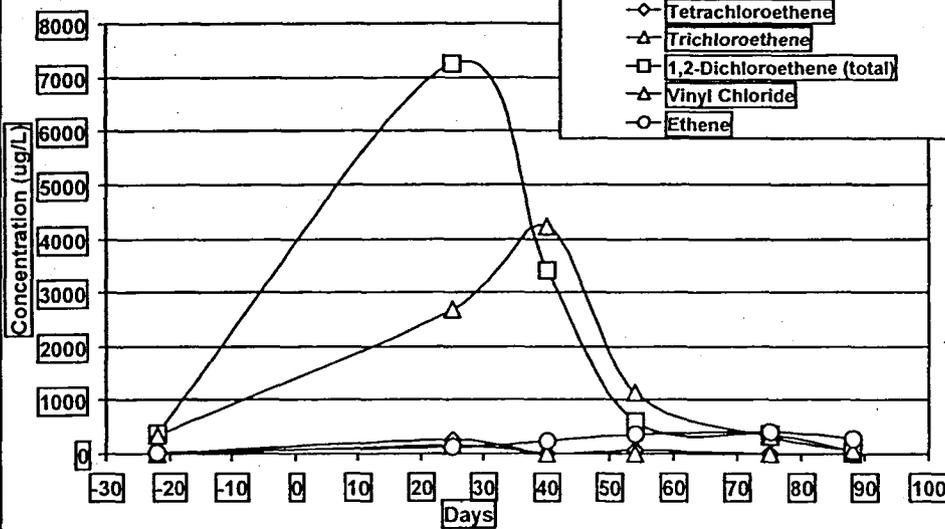
Groundwater Analytical Results March 25 to July 12, 2004



Groundwater Analytical Results
March 25 to July 12, 2004



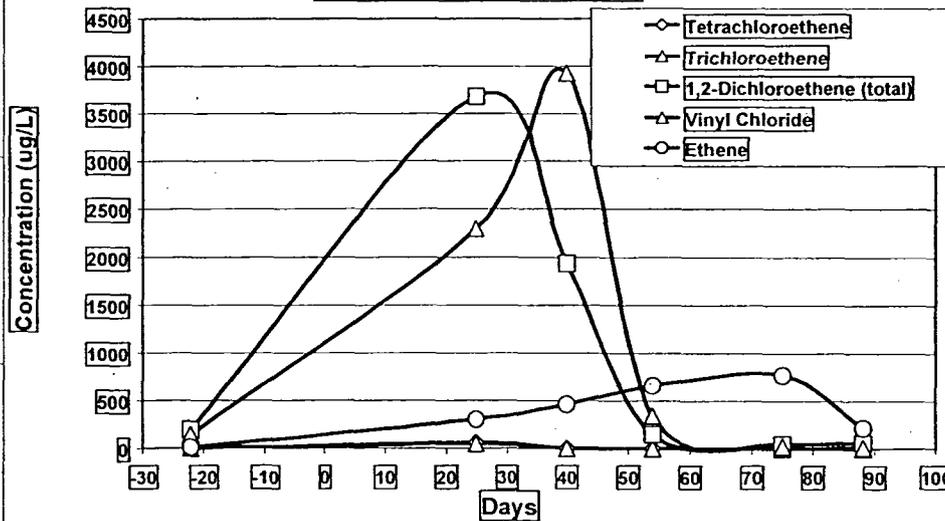
IR25IW02A - ETHENES (ug/L)



Groundwater Analytical Results
March 25 to July 12, 2004



IR25MW53A - ETHENES (ug/L)



Questions?





Parcel A FOST

Hunters Point Shipyard

RAB Meeting

July 22, 2004

Overview



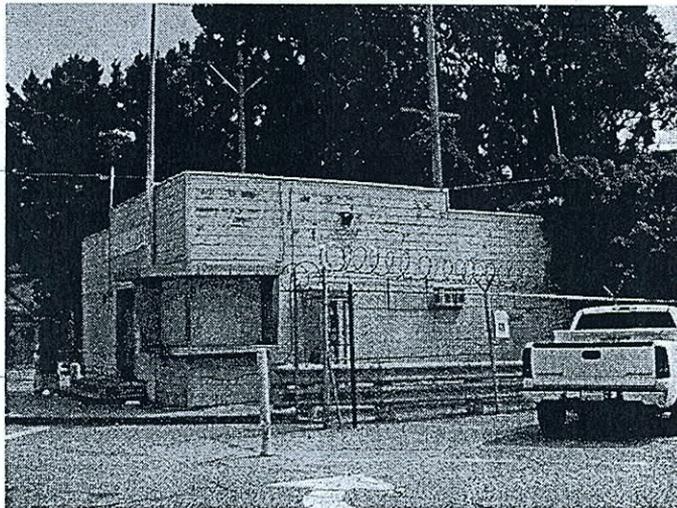
- Objectives
- Completed Building 322 Activities
- EPA inspection results
- Status of Parcel A FOST
- Path Forward

Objectives



- Document the evaluation of Building 322 for radiation impacts
- Work with EPA and DHS to release building site
- Submit Final FOST with Building 322 results
- Transfer Parcel A

Former Building 322



Completed Building 322 Activities



- Radiation survey of Building 322
 - Furniture, floor and building survey
 - Building demolition
 - Slab survey and removal
 - Footprint survey
- Inspection by EPA
- No radiation above background

Site after Building Demolished



EPA Inspection Results



- EPA field inspection performed June 30, 2004
- Two instruments used for evaluation
 - Gamma Scintillation Probe
 - Exploranium GR130 Mini Spectrometer
- Evaluated a nearby grassy area as a reference area
- Found similar levels of counts per minute in reference area and building 322 (16,700 cpm and 18,300 cpm)
- Gamma spectrum analysis found no evidence of fissionable products

EPA Inspection- Former Building 322 Site



- Concluded that there is no radiological contamination impacting the environment of Hunters Point Naval Shipyard due to activities previously conducted at the former Building 322.
- Further radiological investigation at this site is not warranted.
- Based on radiological issues the site of former Building 322 is eligible for release for unrestricted use.

Path Forward



- **Finalize Building 322 Survey Report following RASO review**
- **Regulatory review of Survey Report**
- **Obtain DHS release of Building 322**
- **Complete agency unresolved comments**
- **Prepare Draft Final FOST Revision 3 (will be virtually identical to Final FOST)**
- **30 day comment period**

**HPS Membership/Bylaws & Community Outreach (MBCO)
Restoration Advisory Board (RAB) Subcommittee
Meeting Minutes for 14 July 2004
6:30-8:00 p.m.
Anna Waden Library**

The MBCO RAB subcommittee meeting on July 14, 2004 was called to order by Melita Rines, RAB member and Subcommittee Leader. The subcommittee meeting took place at the Anna Waden Library from 6:30 to 8:00 p.m.

MBCO Subcommittee attendees: RAB Members- Lynne Brown, Lea Loizos ,Keith Tisdell, Chris Hanif SFPD - Capt. Jim Dudley, Capt. Al Pardini , NAVY - Keith Forman (BRAC, RAB Co-chair), Pat Brooks (Lead RPM), Ralph Pierce (RPM) - SFRA - Nicole Franklin, EPA - Jackie Lane, SulTech - Carolyn Hunter

SFRA UPDATE

Ms. N. Franklin provided the subcommittee with an update on the SFRA lease negotiations at Building 606. Currently the Navy and the SFRA are working out the master lease for the base, which is between the City of San Francisco and the Navy. There is a sublease for Building 606 between the City of San Francisco and the SFPD. SFRA is currently working with the Navy to renew their master lease. Prior to getting the master lease renewed, the Navy is researching the market value for this type of property in the City of San Francisco. Once the market value research has been completed, SFRA and the Navy will meet and negotiate the master lease.

Ms. N. Franklin stated that once it is time to negotiate the sublease between SFRA and SFPD, it will not include the community outreach portion of the previous lease. Until the new leases are negotiated, the property will be rented on a month to month basis.

Capt. Pardini stated that once the new sublease term sheet is available, SFPD will review it and decide if they would like to continue to rent Building 606. Once SFPD agrees with the term sheet, they will present it to the MBCO subcommittee for review.

SFPD UPDATE

Mr. Tisdell stated that on May 13, 2004 at 4:20 p.m. he spotted SFPD on motor cycles driving around Parcel A. During the May 12, 2004 MBCO subcommittee meeting SFPD representatives confirmed that there would not be any police activity on Parcel A. Mr. Tisdell stated that during a previous RAB meeting, Captain Martelli (SFPD) clearly stated that SFPD activities would cease and desist at Parcel A. Mr. Tisdell requested an update from SFPD representatives on why there was activity on Parcel A. Mr. Forman stated that after the police activity on Parcel A on May 13, 2004 he received multiple telephone calls from the community requesting additional information. Mr. Forman made multiple telephone calls to SFRA representatives to receive an update on the activity in order to report back to the concerned citizens.

Capt. Dudley requested that if another incident occurs on Parcel A, that the community witness contact him immediately so that he can send someone out to the site to investigate. Capt. Dudley stated that he understood that the SFPD agreed not to

conduct any activities or "game" playing on Parcel A. It has not been clear to SFPD that the RAB is requesting a halt of all activity including driving through the area. Capt. Dudley stated that SFPD off road training such as Mr. Tisdell witnessed on May 13, 2004 is done all over the City of San Francisco. Ms. Rines stated that the RAB is concerned with the health and safety of the Community & SFPD because they could potentially be disturbing contamination by off roading. Ms. Franklin stated that once Parcel A transfers to the City of San Francisco, all of the police activity will cease.

Ms. N. Franklin and Capt. Dudley agreed to go back to SFRA and SFPD to gain clarification on the agreement made regarding activity on Parcel A. During the next MBCO subcommittee SFRA will report back their findings and future steps SFPD will take in order to address the communities concern.

Mr. Brown requested that SFPD look into ways to curb their speeding down Evans Street and Innes Avenue, which both lead in and out of HPS. It is very dangerous for community members to cross the street due to the speeding SFPD cars and motorcycles. Ms. N. Franklin suggested that a side meeting be scheduled to discuss slowing down traffic on Innes Avenue. Ms. N. Franklin will coordinate a meeting with Don Capobres (SFRA) and invite interested community members to attend. Ms. Rines stated that the homeowners association she belongs to has been looking into installing a flashing warning light on Innes Avenue to slow down traffic. Capt. Dudley suggested that the RAB or the homeowners association contact the Department of Traffic to discuss the speeding issue.

RESPONSE TO COMMENTS SUBMITTED DURING THE JUNE 2004 MBCO SUBCOMMITTEE MEETING

The MBCO subcommittee reviewed the comments submitted during the June 2004 meeting by Marie Franklin (RAB member). The MBCO subcommittee agreed to discuss each comment and provide a response to Ms. M. Franklin concerns in the July 14, 2004 meeting minutes. For reference, a copy of Ms. M. Franklin's comments is provided as an attachment to the meeting minutes.

Mission Statement: A general mission statement developed by the Department of Defense (DoD) as guidance for RAB's is located on the DoD website <http://www.dtic.mil/envirodod/Policies/PDRAB.htm>. If the HPS RAB is interested in refining their mission statement, the DoD website will assist them in preparing it.

Alternates: Ms. M. Franklin's concern has been addressed in the HPS RAB Bylaws. RAB alternates are allowed to attend and participate during meetings. An alternate's participation in a meeting does not count towards a RAB members attendance.

Disciplinary Measures: No disciplinary measures for attendance purposes will be taken against RAB members.

Priority Membership: All RAB members are equal in membership and voting.

RAB Meeting Absences: Even if a RAB member has an alternate participate during a meeting, it does not count toward their attendance. Absence due to illness will not be counted differently. If a RAB member misses four meetings in a twelve month period (to be outlined in the new bylaws) , they must reapply for reinstatement to the board.

Sign in sheet: It is completed during the meeting. The RAB facilitator will make sure to remind members to sign in at each meeting. But this is still the responsibility of the RAB member.

Subcommittee Meeting: The MBCO subcommittee suggested that if there is not a topic of discussion during the month, they will not meet until it is necessary. Subcommittees will alternate meetings during slow times. This decision will be made by the subcommittee chair.

Community Comment: The MBCO subcommittee will make a motion during the July 22, 2004 RAB meeting to provide the community a separate comment section of the agenda. The MBCO subcommittee discussed how questions are posed during the RAB meetings. The subcommittee agreed that attendees will not pose multiple part questions in order to give all everyone an opportunity to participate during the RAB meetings. The MBCO subcommittee suggested that if there is interest shown by RAB members to have more in depth questions answered on a particular topic, then that presentation will be taken to a subcommittee level.

Technical Assistance for Public Participation (TAPP) Grants: There are two types of grants that a RAB can apply for. The TAPP issued by the Navy and the Technical Assistance Grant (TAG) is given through EPA. Currently the HPS RAB has hired Clifton Davis and Mike Boyd through EPA's TAG process. The TAG grantees were announced during the June 2004 RAB meeting. Mr. Brown stated that the Community First Coalition (CFC) is in charge of the TAG. Ms. Loizos stated that she emailed the CFC to let them know that if they need some help or are interested in attending a subcommittee meeting that she would assist them.

Meeting Location: The MBCO subcommittee recommended that meeting in the same location on a monthly basis is important to maintain high RAB attendance. Mr. Forman stated that if the RAB is interested in changing the location of the RAB meeting that the Navy will look into it. Ms. Rines stated that some of the community members are concerned about meeting at HPS in Dago Mary's due to fear of contamination from the Shipyard. Mr. Forman stated that the Navy will have to look into moving the RAB meeting to a different location once Parcel A is transferred. Ms. Loizos volunteered the Window on the Shipyard as a potential RAB meeting location.

AMENDMENTS TO BYLAWS

Ms. Rines stated that the MBCO subcommittee has been revising the language in the HPS RAB Bylaws in order to clarify the number of meetings that can be missed during a 12 month period. The term calendar year has caused confusion with the RAB members. Once the revised text in the bylaws has been passed by the RAB at the August 2004 meeting, all members will have their previously missed meetings removed from their record and everyone will receive a clean attendance slate in September 2004. This will be done to facilitate the application of the new bylaws to all RAB members equally.

ADDITIONAL AGENDA ITEMS

RAB Application

Ms. Rines agreed to cover the new application for the RAB at the August MBCO meeting.

Number of HPS RAB Meetings Held

Mr. Forman stated that the Navy is compiling a list of RAB meetings that have been held at HPS. At the next milestone RAB meeting, the Navy plans to invite the Mayor of San Francisco to attend.

Zero Valent Iron (ZVI) Injection Field Trip

Ms. Loizos stated that she has been working with Ryan Ahlersmeyer (Navy RPM) to conduct a ZVI field trip. During the July 22, 2004 RAB meeting Ms. Loizos will announce the date of the ZVI field trip.

Next Meeting

The next MBCO Subcommittee meeting will be held Wednesday, August 11, 2004 from 6:30 – 8:00 p.m. at the Anna Waden Library.

August MBCO Agenda Items

- SFPD Update
- New RAB application update
- BEEP funding

MB & CO SUBCOMMITTEE JULY 2004 ACTION ITEMS

1. Once SFPD agrees with the term sheet for the sublease of Building 606, they will present it to the MBCO subcommittee for review.
2. Community members who witness police activity on Parcel A should contact Capt. Dudley as soon as possible at (415) 671-3150 so that he can send someone out to the site to investigate.
3. Ms. N. Franklin and Capt. Dudley agreed to go back to SFRA and SFPD to gain clarification on the agreement made regarding activity on Parcel A. During the next MBCO subcommittee meeting SFRA will report back their findings and future steps SFPD will take in order to address the communities concern about activity on Parcel A.
4. Ms. N. Franklin will coordinate a meeting to discuss speeding issues on Innes Avenue with Mr. Capobres and invite interested community members to attend.
5. The MBCO subcommittee will make a motion during the July 22, 2004 RAB meeting to provide the community a separate comment section on the RAB agenda.
6. Ms. Rines agreed to cover the new application for the RAB at the August MBCO meeting.
7. During the July 22, 2004 RAB meeting Ms. Loizos will announce the date of the ZVI field trip.

Lowman Radiological Subcommittee

Abbreviated minutes - June 23, 2004

The meeting was called to order at 4:15pm. The following attendees signed in: Willie Ratcliff - Host, Ahimsa Sumchai - chair, Lynne Brown - RAB community co-chair, Francisco DaCosta, Christine Siataga, Gaynorann Siataga, Edward Wiesick, Cindy Vincent, Gerry Vincent, Pat Brooks, Keith Forman, Ralph Pearce, Maurice Campbell.

The subcommittee acknowledged the presence of Gaynorann Siataga a youth candidate for the San Francisco Board of Education and Mr. Edward Wiesick a senior retired gardner who worked at the Shipyard for many years.

Mr. Gerald Vincent of the U.S. Army Corp of Engineers was welcomed and began the presentation describing a "FUDs" as a piece of property owned, leased or operated by the Department of Defense and turned over to civilian use before October of 1986. There are over 9,800 FUDs nationwide and the environmental investigation and remediation of these properties fall under separate jurisdiction in the DoD. At Hunters Point there exist properties whose clean-up and reuse fall under the BRAC (Base Realignment and Closure) process and the FUDs (formerly utilized defense) programs.

Francisco DaCosta asked Mr. Vincent why he had not presented to the HPS RAB. Mr. Vincent replied that the Restoration Advisory Board for the shipyard is a body that falls under the jurisdiction of the BRAC program. Mr. DaCosta stated that the Navy has not been "forthcoming" about the extent of environmental cleanup at the Shipyard and that the recently released HRA has proved to be an "eye opener" with regard to the extent of radiological contamination on the base. He shared with attendees as current map of Environmental Cleanup sites at HPS.

A focused discussion centered on FUDs 815, 820, 830 and 831. The history and remediation of Building 815 has been a major topic of concern and Mr. Vincent gave a brief background of the events leading up to the DoD's release of the HPS 800 series FUDs to the GSA. Dr. Sumchai described Building 815 as an eight story structure including a basement that housed support services and five floors with laboratories and machine shops. RASO has designated it for a full scoping survey. Mr. Vincent expressed disagreement with this decision and reminded the committee that Building 815 had undergone numerous investigations and decontaminations and that there successive studies have been driven by dynamic changes in release criteria for radiation impacted property. He stated that the most recent release criteria change was in 1974 and that the last survey conducted in 815 was in 1985. Edward Wiesick provided new information that Building 815 was used for Planning and Estimating for Navy Civil Service for years after NRDL disestablishment.

Dr. Sumchai stated that the RASO decision may have been factored by the following facts. Standards for radiation cleanup in the state of California are being challenged in Superior court, additionally, the DHS letter signing off on Building 815 is not signed and

dated, the San Francisco Department of Public Health has remained in communication with Mr. Lowpensky - the owner - about the status of two 15,000 gallon holding tanks that were used for holding low level radiation waste water. Mr. Vincent stated they were concrete vaults set in the parking lot of Building 815 for storm water runoff. Maurice Campbell clarified that they were used for sampling of radioactive waste from the NRDL laboratories and if the effluent concentrations were below release criteria it was discharged into the sewer system. Sumchai also stated that the basewide impactation of the storm water and sanitary sewer system brings into sharper focus concerns about the status of drains and holding tanks for former NRDL laboratories and building 815 became the major laboratory and administration building for NRDL.

Lynne Brown asked "if you had 600 scientists working in this building and these were called decontamination tanks what was being decontaminated?" Mr. Vincent stated a more exact description of the tanks was, "holding tanks for decontamination water". He stated that if radioactive waste was detected that exceed release criteria it would have been shipped off site for disposal. Dr. Sumchai stated that the new focus on Building 815 is likely the result of the fact that for the first time the HRA acknowledges that low level NORM and NARM were being released into the drains and sewer systems of NRDL laboratories by post-WWII scientists. Mr. Forman asked that Amy Brownell clarify the status of correspondance between DPH, Mr. Lowpensky and Mr. Vincent regarding the tanks. Mr. Brown also raised continued concerns about cooling towers located on the roof of Building 815 that were removed by the owner prior to investigation.

The conversation shifted to the questions raised by photos Maurice Campbell has sent to RASO and RAB members which suggest the presence of additional D series buidings in the off-base community area occupied by Mariners Villages residences. The photo's suggest the possibility of an NRDL laboratory at this site. Mr. Forman stated RASO has not been able to confirm this possibility because the photo is not dated. Mr. Campbell stated he provided the date and confirmed that the photos came from USGS. It was clarified for the committee members that D series buildings 19-21 were used for supply, administration and payroll. The presence of a building used for a laboratory in a residential area is of concern because of the possibility that low level radioactive waste may have entered the basewide storm water and sewer system. Mr. Forman asked that Mr. Campbell forward information of this nature to RASO as well as to Ralph Pearce, the lead Radiological RPM for the Shipyard. It was also emphasized that Mr. Vincent be kept in the loop because these sites are FUDs.

Mr. Forman gave an update on the use of Quonset huts that were used to house staff and people temporarily in the post world war II era. The additional D series buildings were probably Quonset huts. The huts were also used for visiting staff, scientists and officers. They came in 3 sizes and were expandable. Mr. Brown stated D series buildings occupied the IR-07 and IR-18 former submarine base region of Parcel B. Mr. Campbell provided the valuable insight that Building 101 at the Shipyard houses a layout map of the shipyard that can be used for historical correlary. Mr. Forman cautioned that shipyard maps are not often meant to be "all inclusive" and cannot be depended on to verify the identity and function of buildings.

Mr. Wiesick recalled that sheep and goats were housed on the shipyard in the region of the 800 buildings for animal experiments. Mr. Forman verified this as fact. Mr. Campbell stated that the historical archives in San Bruno confirm that thousands of pages of NRDL documents have been destroyed. Mr. Forman acknowledged that it was common practice to destroy non classified materials. Mr. DaCosta expressed concern about the lack of clear information about the investigation and remediation of off-base buildings in the community. He also referenced reports by community residents that "clouds" of smoke or vapor had been noted emanating from Building 815 in the past.

Dr. Sumchai suggested that Mr. Vincent formally address the RAB on the FUDs in August, along with Laurie Lowman. Mr. Vincent stated he was scheduled to be in Roswell, New Mexico at that time. The offer to have Mr. Vincent present to the RAB was left open to discussion. The remainder of the agenda focused on FUDs 820, 830 and 831. Additionally, Sumchai asked the Navy to clarify the Parcel F underwater impacted status of the births surrounding the Gun Mole Pier where Operations Crossroads activities were conducted.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

HUNTERS POINT SHIPYARD
RESTORATION ADVISORY BOARD

REPORTER'S TRANSCRIPT OF MEETING

July 22, 2004

Dago Mary's Restaurant
Hunters Point Shipyard, Building 916
Donahue Street at Hudson Avenue
San Francisco, California

Reported by Christine M. Niccoli, RPR, C.S.R. No. 4569

NICCOLI REPORTING
619 Pilgrim Drive
Foster City, CA 94404-1707
(650) 573-9339

CERTIFIED SHORTHAND REPORTERS SERVING THE BAY AREA

Page 1

1 RAB MEMBERS & REGULATORS [Cont.]:
2
3 LEA LOIZOS - Arc Ecology
4 JAMES MORRISON - Environmental Technology, R.O.S.E.S.
5 GEORGIA OLIVA - Communities for a Better Environment
6 (CBE), CCA member
7 KAREN G. PIERCE - Bayview Advocates, Bayview-Hunters
8 Point Democratic Club, Bayview-Hunters Point Health &
9 Environmental Assessment Program (HEAP)
10 JAMES D. PONTON - San Francisco Bay Regional Water
11 Quality Control Board
12 MELITA RINES - India Basin Neighborhood Association
13 AHIMSA PORTER SUMCHAI - Bayview-Hunters Point Health &
14 Environmental Resource Center (HERC)
15 KEITH TISELL - Hunters Point resident
16 MICHAEL WORK - U.S. Environmental Protection Agency (EPA)
17 LEHUANANI KEALAKAUILANIALOHILANILEILANI WRIGHT - JRM
18 Associates
19 ---oOo---

Page 3

1 PARTICIPANTS
2
3 FACILITATOR:
4 MARSHA PENDERGRASS - Pendergrass & Associates
5 CO-CHAIR:
6 MAURICE CAMPBELL - Business Development, Inc.
7 (BDD); Citizens Advisory Committee;
8 Community First Coalition (CFC); New
9 California Media; NEW BAYVIEW NEWSPAPER
10
11 RAB MEMBERS & REGULATORS
12
13 LANI ASHER - Communities for a Better Environment (CBE),
14 Community First Coalition (CFC)
15 AMY BROWNELL - San Francisco Department of Public Health
16 BARBARA BUSHNELL - Residents of the Southeast Sector
17 (R.O.S.E.S.), Silverview Terrace Homeowners
18 Association, resident
19 MARIE J. FRANKLIN - Shoreview Environmental Justice
20 Movement Inc.
21 CHRIS HANIF - Young Community Developers (YCD)
22 JACQUELINE ANN LANE - U.S. Environmental Protection
23 Agency (EPA)
24 TOM LANPHAR - California Department of Toxic Substances
25 Control (DTSC)

Page 2

1 AUDIENCE
2
3 JOHN ADAMS - SulTech
4 PATRICK BROOKS - United States Navy
5 ADON CAPOBRES - San Francisco Redevelopment Agency
6 GLENN CHRISTENSEN - United States Navy
7 TOMMIE JEAN DAMREL - SulTech
8 STEVE DICKSON - Young Community Developers
9 JENNIFER GIBSON - SulTech
10 CAROLYN HUNTER - SulTech
11 FRANK NICCOLI - The Village Gardener, Foothill College
12 RALPH PEARCE - United States Navy
13 DENNIS M. ROBINSON - Shaw Environmental &
14 Infrastructure, Inc.
15 LEE H. SAUNDERS - United States Navy
16 CLIFTON J. SMITH - C.J. Smith & Associates, Eagle
17 Environmental Construction
18 PETER STROGANOFF - United States Navy ROICC Office
19 ROBERT SURBER - Pendergrass & Associates
20 JULIA VETROMILE - SulTech
21 PETER WILSEY - San Francisco Department of Public Health

Page 4

1 SAN FRANCISCO, CALIFORNIA, THURSDAY, JULY 22, 2004
 2 6:01 P.M.
 3 ---oOo---

4 MS. PENDERGRASS: This meeting will now come to
 5 order. Welcome, everybody, to the Hunters Point
 6 Shipyard Restoration Advisory Board meeting for
 7 Thursday, the 22nd of July, 2004.

8 Thank you. You're welcome. Gosh, it's such a
 9 small crowd tonight, I'm going to have to keep it down,
 10 so -- keep the roar down.

11 Couple of things. I'm Marsha Pendergrass, and
 12 I'll be facilitating tonight, and I also want to
 13 introduce a colleague, Robert Surber. Robert will be
 14 facilitating our meeting next month, okay? So just
 15 wanted to let you know that.

16 As always, we'll start with introductions. And
 17 let's see. Where should we start tonight? Let's start
 18 with Miss Pierce.

19 MS. PIERCE: Karen Pierce, RAB member, here on
 20 time.

21 MS. LOIZOS: Me? Lea Loizos, RAB member. I
 22 represent Arc Ecology.

23 MS. OLIVA: Georgia Oliva, RAB member, artist
 24 at the Shipyard.

25 MS. PENDERGRASS: This way. Okay. All right.

Page 5

1 Remedial Project Manager.

2 MS. GIBSON: Jennifer Gibson with SulTech.

3 MS. DAMREL: Tommie Jean Damrel with SulTech.

4 MS. PENDERGRASS: Go ahead.

5 MR. ADAMS: John Adams, SulTech.

6 MS. LANE: Jackie Lane, community involvement,
 7 EPA.

8 MR. SMITH: Clifton Smith, consultant,
 9 technical adviser for CFC.

10 MR. ROBINSON: Dennis Robinson, Shaw
 11 Environmental.

12 MR. STROGANOFF: Peter Stroganoff with the Navy
 13 ROICC Office.

14 MR. SURBER: Robert Surber still.

15 MS. HUNTER: Carolyn Hunter, SulTech.

16 MS. VETROMILE: Julia Vetromile, SulTech.

17 MR. DICKSON: Steve Dickson, Young Community
 18 Developers.

19 MS. PENDERGRASS: Thank you so much. That's
 20 great.

21 Okay. Can I remind all the RAB members to
 22 please sign in; and if you have a designee, you need to
 23 make sure that you write that designation down as well.

24 All rightie.

25 Has everybody had a chance to review the

Page 7

1 Thank you. All right.

2 MR. CAMPBELL: Maurice Campbell, Community
 3 First Coalition.

4 MR. BROOKS: Pat Brooks, the Navy's lead
 5 Remedial Project Manager.

6 MS. WRIGHT:
 7 Lehuanikealakaualanialohilanleilani Wright, RAB member.

8 MR. WORK: Michael Work, U.S. EPA.

9 MR. PONTON: Jim Ponton, the Water Board,
 10 California.

11 MR. HANIF: Chris Hanif, RAB member, Young
 12 Community Developers.

13 MS. BUSHNELL: Barbara Bushnell, ROSES.

14 MS. PENDERGRASS: Welcome back, Barbara.

15 MS. BUSHNELL: Thank you.

16 MR. MORRISON: James Morrison, resident.

17 MS. PENDERGRASS: Now, can I just ask that the
 18 audience, when you introduce yourself, can you do it
 19 loudly and clear so that the reporter can catch your
 20 name? That will be great.

21 MR. NICCOLI: Frank Niccoli, married to the
 22 court reporter.

23 MR. PEARCE: Ralph Pearce, Remedial Project
 24 Manager for the Navy.

25 MR. CHRISTENSEN: Glenn Christensen, Navy

Page 6

1 agenda? Anybody not had a chance to review the agenda?
 2 All right. Everything all right? Any
 3 suggestions or changes or anything?

4 Great. We're going to just move right along
 5 with that. Why don't we just move to approval of the
 6 minutes? Has everybody had a chance to review the
 7 minutes from our meeting of June 24th?

8 MS. BUSHNELL: I have to say no.

9 MS. PENDERGRASS: I'm sorry?

10 MS. BUSHNELL: I have to say no. I haven't had
 11 a chance.

12 MS. PENDERGRASS: You haven't had a chance to
 13 see them.

14 Anybody have any issues with these minutes?
 15 Any changes? Lea?

16 Yes, sir.

17 MR. SMITH: At the -- at the last meeting, I --

18 THE REPORTER: I'm sorry. Can you reidentify
 19 yourself?

20 MR. SMITH: Clifton Smith.

21 At the last meeting, I asked the presenters,
 22 that zero-valent iron presentation, how far down were
 23 the sampling and the aquifer. I didn't see that
 24 mentioned in the minutes. And I asked them how deep had
 25 they measured the aquifer. I didn't see that in the

Page 8

<p>1 minutes.</p> <p>2 MS. PENDERGRASS: Okay. Let's see. I am not 3 sure if all of the questions are put in the minutes. 4 However, that brings up a great point, that all of the 5 minutes and the verbatim transcript is posted on the Web 6 site.</p> <p>7 And Carolyn, has that been done for June 24th?</p> <p>8 MS. HUNTER: As soon as it goes final, they 9 will be up on the Web site.</p> <p>10 MS. PENDERGRASS: So the verbatim transcript as 11 well as the revised minutes. So if there's no -- 12 nothing glaring missing, we'll go forward with that. 13 Thank you.</p> <p>14 All right. Barring no changes or additions or 15 deletions to the minutes, do we have a motion?</p> <p>16 MS. PIERCE: So moved.</p> <p>17 MS. PENDERGRASS: Do we have a motion?</p> <p>18 MS. PIERCE: So moved.</p> <p>19 MR. RAB MEMBER: So moved.</p> <p>20 MS. PENDERGRASS: Okay. We have a motion on 21 the floor to accept the minutes dated June 24th. 22 Second to that?</p> <p>23 MR. LOIZOS: Second.</p> <p>24 MS. PENDERGRASS: Okay. All in favor?</p> <p>25 THE BOARD: Aye.</p> <p style="text-align: right;">Page 9</p>	<p>1 subcommittee meeting.</p> <p>2 MS. PENDERGRASS: Okay. And who brought that 3 forward? Mr. Work, do you remember?</p> <p>4 MR. WORK: You mean --</p> <p>5 MS. PENDERGRASS: Wasn't that --?</p> <p>6 MR. WORK: -- an individual's name?</p> <p>7 MS. PENDERGRASS: Yeah. Okay. I just want to 8 make sure that was satisfied.</p> <p>9 MS. PIERCE: Yeah.</p> <p>10 MS. PENDERGRASS: Karen, was that -- does that 11 satisfy --?</p> <p>12 MS. PIERCE: Yeah, thank you.</p> <p>13 MS. PENDERGRASS: All right. So we'll be 14 removing that from the action item list, Miss Pierce?</p> <p>15 MS. PIERCE: Yes.</p> <p>16 MS. PENDERGRASS: Okay. The third action item 17 was the "RAB would like the Navy to consider arranging a 18 field trip to view the former ammunition storage bunker 19 located under the hill." And if I'm not mistaken, 20 didn't we do that on the break last month?</p> <p>21 MR. BROOKS: Yes, we did.</p> <p>22 MS. PENDERGRASS: And so that was resolved --</p> <p>23 MR. BROOKS: Was resolved.</p> <p>24 MS. PENDERGRASS: -- in terms of what it is and 25 where it is and whether or not we need a field trip?</p> <p style="text-align: right;">Page 11</p>
<p>1 MS. PENDERGRASS: Anybody opposed? Anybody 2 abstaining from that?</p> <p>3 MS. BUSHNELL: I will, 'cause I haven't read 4 it.</p> <p>5 MS. PENDERGRASS: Okay. Barbara's abstaining.</p> <p>6 All right. So the ayes have it, and we'll 7 accept those minutes as the actual record of what 8 happened last month.</p> <p>9 All right. Let's kind of review the action 10 items that we had for last month, and that is in the 11 last page.</p> <p>12 Okay. We had a couple carry-over items. First 13 one was the Navy was "to notify David Terzian and Navy 14 Caretaker Site Office prior to removal of" the "AMC's 15 cranes at Dry Dock 4." Is that still kind of pending?</p> <p>16 MR. BROOKS: Still pending. We have no 17 immediate plans for the cranes' removal.</p> <p>18 MS. PENDERGRASS: Is it all right to keep that 19 on as a carry-over until we know more?</p> <p>20 MR. BROOKS: Yes.</p> <p>21 MS. PENDERGRASS: All right. The second one is 22 Mr. Work was "to report to the Radiological/Health Risk 23 Subcommittee about which studies went into establishing 24 the PRGs for manganese."</p> <p>25 MR. WORK: Yes. That happened yesterday at the</p> <p style="text-align: right;">Page 10</p>	<p>1 Yes? No?</p> <p>2 MR. CAMPBELL: Yeah, I think it was resolved.</p> <p>3 MS. BUSHNELL: Yes, as far as I am --</p> <p>4 MS. PIERCE: No. If I recall, that went -- 5 people resolved that people still wanted a field trip.</p> <p>6 MS. PENDERGRASS: Okay.</p> <p>7 Mr. Brooks, did you want to -- have you had any 8 headway in planning for that field trip?</p> <p>9 MR. BROOKS: I assume that it was resolved, 10 because the ammunition bunker looks exactly like it does 11 on the photo; and then what was thought to be a bunker 12 beneath the hill is a buttress for a landslide on 13 Parcel A, and we --</p> <p>14 MS. ASHER: I would like to say something.</p> <p>15 MS. PENDERGRASS: Miss Asher?</p> <p>16 MS. ASHER: I would like go to the bunkers. 17 Those are obviously not the right ones. Thank you.</p> <p>18 MR. BROOKS: You -- Then you're --</p> <p>19 MS. ASHER: I would like to go to the bunkers.</p> <p>20 MR. BROOKS: Then you're going to have to show 21 me where those bunkers are --</p> <p>22 MS. ASHER: Oh, okay.</p> <p>23 MR. BROOKS: -- because I have only --</p> <p>24 MS. ASHER: Oh, okay.</p> <p>25 MR. BROOKS: -- one bunker that I know of. Do</p> <p style="text-align: right;">Page 12</p>

1 you know such bunkers? I can't plan a field trip for
2 some --

3 MS. ASHER: Why would I know if you wouldn't
4 know?

5 MR. BROOKS: Is that answer, then, no, that you
6 don't know?

7 MS. ASHER: I think it's not fair to ask just a
8 regular citizen where these bunkers would be. Why would
9 a regular citizen know the answer to that question?

10 That's a Navy question.

11 MR. BROOKS: They don't exist.

12 MS. ASHER: Oh, okay.

13 MR. BROOKS: I can't take you to something that
14 I -- I don't know of their existence.

15 MS. ASHER: Okay.

16 MS. PENDERGRASS: Chris, did you have something
17 to add to that?

18 MR. HANIF: I just wanted Mr. Pat Brooks to
19 repeat that you said it's a buttress for what?

20 MR. BROOKS: There's a landslide on Parcel A
21 that has a big concrete buttress behind Building 813.

22 It keeps the soil from slipping down --

23 MR. CAMPBELL: Right.

24 MR. BROOKS: -- into the parking lot.

25 MR. HANIF: Thank you. I just wanted to know

Page 13

1 MR. BROOKS: Sure. Why not?

2 MS. PENDERGRASS: Okay.

3 MS. OLIVA: Mr. Brooks?

4 MS. PENDERGRASS: Miss Oliva.

5 MS. OLIVA: If you stated if that's where you
6 think the bunker is, could there be any doors behind the
7 concrete wall?

8 MR. BROOKS: Not to my knowledge. The
9 structure is a buttress to prevent soil from sliding
10 down the hill. And I could take you out there at least
11 to this one feature, and I could explain to you the
12 different parts of it because I've seen landslide
13 buttresses before, and it's clearly a landslide
14 buttress.

15 MS. OLIVA: Well, Mr. Brown at one point had
16 said something about there being something on Parcel A
17 which children were playing in it, and I don't know
18 what -- where -- I wish Mr. Brown was here. Yes?

19 MS. PENDERGRASS: Before -- Miss Pierce had her
20 hand up, Mr. Campbell.

21 MS. PIERCE: I think the issue why people still
22 wanted to have the -- go out and visit the site is
23 because a number of people have identified places where
24 they think there are bunkers. And what we were trying
25 to do is be able to go out there, do this visit, have

Page 15

1 that.

2 MS. PENDERGRASS: Okay. So that was the one
3 that they went to on the break at the last meeting.

4 MR. BROOKS: It looks like -- From that
5 concrete structure, it looks like perhaps some doors can
6 open up and you can go into the side of the hill, but
7 that's not the case. It's concrete and it's a buttress
8 for a landslide.

9 MS. PENDERGRASS: Does that satisfy the RAB, or
10 is there --

11 MS. ASHER: No.

12 MS. PENDERGRASS: -- something else --

13 MS. ASHER: No.

14 MS. PENDERGRASS: -- that needs to take place?

15 MS. ASHER: I am not satisfied by that answer,
16 no.

17 MS. PENDERGRASS: What would you like to see
18 take place, Miss Asher?

19 MS. ASHER: I would like a visit to the
20 bunkers.

21 MR. BROOKS: I only know of the one bunker
22 which we showed photos of.

23 MS. PENDERGRASS: Okay. So it sounds like the
24 RAB is asking for a field trip to that bunker once again
25 as a group. Could that be arranged again, Mr. Brooks?

Page 14

1 those folks show us where they think it is, and get that
2 finally resolved.

3 What happened at the last meeting was during
4 the break, small group of people went out and looked at
5 the site that the Navy had identified and agreed that
6 that was not a bunker.

7 MR. BROOKS: No. The site was identified by
8 Jim --

9 MS. PIERCE: Right.

10 MR. BROOKS: I don't recall his last name.

11 MR. CAMPBELL: Ansbro, Ansbro.

12 MS. PIERCE: Right.

13 MR. BROOKS: So we went --

14 MS. PIERCE: Okay.

15 MR. BROOKS: -- to the site where he thought
16 there was a bunker.

17 MS. PIERCE: And there are other people who
18 have said that there are bunkers out there. So I think
19 we could resolve this by taking a tour, having those
20 folks who say there are bunkers show us where they think
21 the bunkers are. We can take a look, and then we can
22 finally feel comfortable.

23 MR. BROOKS: Can we schedule that for, say, an
24 hour or two before the next RAB meeting?

25 MS. PENDERGRASS: Mr. Campbell, could you --

Page 16

1 before we answer that question, did you have anything
2 else to add?

3 MR. CAMPBELL: Yeah. There was a newspaper
4 report, and I think that's what you were referring to
5 about children playing in the -- a bunker area.

6 Also, we have a statement on videotape that
7 somebody that worked at the Shipyard, one Tom Olson, and
8 we can provide you with the videotape talking about
9 bunkers in the Shipyard. And he was there for quite a
10 period of time.

11 So we'll provide you with a videotape and we'll
12 see, because a couple of the reporters did do some
13 stories on that, about the children playing in bunkers.

14 MS. PENDERGRASS: So at this point, we have a
15 proposal to meet before the next RAB meeting to make
16 that tour. That doesn't sound acceptable to the group.
17 Is there another time that would be acceptable?

18 MS. OLIVA: I think --

19 MS. PENDERGRASS: Ms. Oliva?

20 MS. OLIVA: I think what has to happen is the
21 information Mr. Campbell can give to Mr. Brooks, he
22 needs to digest that and see and then we discuss -- so
23 we know where they are. And then Step 2 is the date to
24 go out.

25 MS. PENDERGRASS: Does that sound fine with

Page 17

1 discuss whether or not that information was sufficient
2 to schedule a field trip. Does that make sense? Okay?
3 So we'll put that as the action item -- we'll replace
4 that. So the due date on that is for next month.

5 The new action item last month was the Navy was
6 "to arrange a field trip for RAB to view the zero-valent
7 iron treatability study site." Is that happening?

8 ATTENDEES: No.

9 MR. BROOKS: This one is ongoing, the reason
10 being: We're doing some -- we call it hydro-punch
11 groundwater sampling work where we're getting a better
12 understanding of the extent of the VOC plume there, and
13 that needs to take place before we do the injection.

14 MS. PENDERGRASS: Okay.

15 MR. BROOKS: So the injection's been postponed.
16 Therefore, the field trip's been postponed.

17 MS. PENDERGRASS: All right. So we'll leave
18 that item on the agenda and will be reviewed next month.
19 All right?

20 MS. LOIZOS: I'm sorry. But when I talked to
21 Ryan, it sounded like mid May might be when it -- I mean
22 mid August might be when it happens. Do you know if
23 that's still the case?

24 MR. BROOKS: We're thinking mid August, yeah.

25 MS. LOIZOS: In which case it might be before

Page 19

1 you?

2 MR. CAMPBELL: Yeah, I have no problem with
3 it --

4 MS. PENDERGRASS: Okay.

5 MR. CAMPBELL: -- with the videotape.

6 MS. PENDERGRASS: Mr. Brooks, is that all right
7 with you?

8 MR. BROOKS: That's fine with me.

9 MS. PENDERGRASS: Okay. So just for the
10 record, let's just make sure --

11 Miss Bushnell, did you have something else to
12 add to this discussion?

13 MS. BUSHNELL: Just as a suggestion, if there
14 are other people who think there are sites of bunkers,
15 if they could communicate that either through Maurice or
16 through the Navy so that the Navy would have more things
17 to deal with and could better prepare for a visit out
18 here.

19 MS. PENDERGRASS: Okay. So let's amend the
20 action item that we have right now, No. 3, to be that
21 Mr. Campbell and any other RAB member will provide
22 information about the site and location of existing
23 bunkers on the Parcel A, and we'll get that to
24 Mr. Campbell and Mr. Brooks.

25 And then at the next RAB meeting, we will

Page 18

1 the next RAB meeting. So I think we'll probably have to
2 communicate by e-mail --

3 MR. BROOKS: E-mail.

4 MS. LOIZOS: -- to get it set up.

5 MR. BROOKS: Can I just ask who would be
6 interested in that sort of field trip to see the
7 injection process?

8 (Attendees raise their hands.)

9 MR. BROOKS: Quite a few people there.

10 MS. PENDERGRASS: All right.

11 MR. BROOKS: Okay. Yeah, it's a neat process.

12 MS. PENDERGRASS: Okay.

13 All right. We have this gentleman here that is
14 diligently trying to get us to use the microphone for
15 better quality of capturing this as a recording, and
16 he's doing a such a wonderful job, and we're ignoring
17 him.

18 So can we pass this microphone as we speak?
19 That would just speed things up a little bit. Okay?

20 MS. WRIGHT: I don't need one.

21 MS. PENDERGRASS: Miss Wright, you're --

22 MS. WRIGHT: I can be louder than that.

23 MS. PENDERGRASS: Thank you so much.

24 All right, then. Shall we move on?

25 We have any announcements, Mr. Brooks, from the

Page 20

1 Navy?
 2 MR. BROOKS: Yes, we do. I just want to let
 3 you all know that I'm taking Keith Forman's place. He's
 4 off for two and a half weeks. He'll be in Idaho Falls,
 5 Idaho, and up around Flagstaff, Arizona, doing some
 6 warfare training as part of naval reserve duty.
 7 Then, number two, we sent out a draft agenda
 8 which had our Navy presentations in reverse order of the
 9 way you see them now. So those had been changed for
 10 this corrected agenda.
 11 Number three, we had a phone call -- Marsha and
 12 Maurice and myself had a phone call just to discuss some
 13 of the -- some RAB subjects. And we discussed perhaps a
 14 more equitable sharing of time so the subcommittee
 15 reports could have more of an equal footing with the
 16 Navy presentations. You'll see that the Navy
 17 presentations take a lot of time compared to the
 18 subcommittee reports.
 19 And we discussed some other particulars of how
 20 the subcommittee reports could be structured to identify
 21 and further investigate matters that are of interest to
 22 the RAB.
 23 And with that, I'd like to push that over to
 24 Marsha to kind of explain what we meant by the
 25 structuring of the subcommittee reports and how they

Page 21

1 MS. RINES: Just a qualifying that, it's not
 2 that they are not part of the -- not that they are not
 3 part of the record? They are just -- They are
 4 included, but they are in the administrative record
 5 previously. So now they are going to be part of the
 6 verbatim record?
 7 MS. HUNTER: They will be added to the final
 8 minutes package so that the subcommittee reports will be
 9 in there; so if people want to refer to them, they will
 10 be on the Web site and in the information repository.
 11 MS. RINES: Where were they previously?
 12 MS. PENDERGRASS: Just in the information
 13 repository.
 14 MS. HUNTER: Just in the administrative record.
 15 MS. RINES: That's -- Okay.
 16 MS. HUNTER: So we're just getting them out
 17 further to the rest of the community if you want to see
 18 them.
 19 MS. PENDERGRASS: Thank you, Miss Hunter, for
 20 clearing that up.
 21 Okay. Any other questions about that?
 22 And, you know, just to make sure, I'm a little
 23 heavy-handed, since we're starting with the new chair;
 24 and he's very clear with me that we would like to keep
 25 on schedule and to keep our questions, you know, to a

Page 23

1 might fit in the agenda to make the meeting run
 2 smoother.
 3 MS. PENDERGRASS: We discussed the fact that
 4 the subcommittees -- a lot of the work is being done at
 5 the subcommittee level. You guys are attending the
 6 meetings, and you're doing a lot of discussion, and then
 7 you're coming back to the RAB with recommendations.
 8 So -- and a lot of the groups are putting those in
 9 writing and submitting those out to folks, which is
 10 great. But I think that that needs to be part of the
 11 record as well so that we can go back and visit that.
 12 So those written minutes now or the notes from
 13 those subcommittee reports we'll be adding to the
 14 agenda. So that will be part of the agenda that's put
 15 on the Internet and part of the minutes so that people
 16 who aren't here will get -- have, you know, be -- have
 17 the benefit of the discussion in that. Does that make
 18 sense to everybody?
 19 So really what we're really looking to do is
 20 make sure that in your subcommittees that once you've
 21 done the discussion, if there's something that the whole
 22 RAB needs to make a, you know, motion on or put into
 23 play, you need to bring that as a recommendation in the
 24 form of a motion. Okay? Everybody kind of clear on
 25 that?

Page 22

1 minimal. And so, you know, short of a whip, I'm going
 2 to try to do a better job of keeping us within the time
 3 frame and keeping our questions.
 4 So if you all will do your part with asking no
 5 more than one question at a time and letting someone
 6 else have an opportunity to ask a question, that would
 7 be real nice. Okay? And, of course, the people we need
 8 to be talking to aren't here tonight. But at any rate,
 9 that's all right. We'll make sure that that goes
 10 forward. I didn't say that.
 11 Okay. Maurice, did you want to --?
 12 MR. CAMPBELL: Yeah. You know, all of the
 13 recommendations are fine. One of the recommendations
 14 very strongly is that when the Navy gives a
 15 presentation, that there is one question from the RAB
 16 member because what I'd like to do is hold a segment of
 17 the agenda for the community to have some input in; and
 18 it's fairly important so we can hear from the community
 19 what's important.
 20 If it's necessary the Navy personnel need to
 21 have further discussion, they will remain on site and
 22 have a further discussion; and then it can be passed to
 23 subcommittee after that for more information
 24 formalization.
 25 Another issue I'd like to bring up, there was a

Page 24

1 map index in Building 101 which Tetra Tech removed, and
 2 we understood it was to be -- pictures were to be taken
 3 of it.
 4 I wanted to ask Pat formally on the record, is
 5 that map index going to be put back?
 6 MR. BROOKS: Yeah, a good question. I'm not
 7 sure. We could -- I'm just not sure.
 8 MR. CAMPBELL: Okay.
 9 MS. BUSHNELL: Can I ask what a map index is?
 10 MR. CAMPBELL: Yeah. It's -- It was a layout
 11 of the Shipyard. It had all of -- many of the NRDL labs
 12 and many of the buildings, what the buildings were used
 13 for, et cetera. It was located in Building 101. We
 14 have --
 15 MS. OLIVA: Next to the office.
 16 MR. CAMPBELL: Next to the office.
 17 MS. BUSHNELL: Thank you.
 18 MR. CAMPBELL: Yeah.
 19 MS. OLIVA: I think it was circa about 1947.
 20 MR. CAMPBELL: Right.
 21 MS. OLIVA: Three very large.
 22 MS. PENDERGRASS: So are you asking for
 23 something to happen?
 24 MR. CAMPBELL: It was removed just recently.
 25 MS. PENDERGRASS: Oh. It was removed.

1 for information purposes only. Pro Se Services,
 2 Bouchard Industrial Metals. They were approached on the
 3 CAC subcommittees, and what they would like to do is a
 4 shipbreaking operation on Parcel 4. The Navy hasn't had
 5 time to study it yet.
 6 So if you get a chance, it will probably be
 7 coming up in some future agenda. But it might be
 8 worthwhile looking at, thinking about it from an
 9 environmental standpoint and also from a business
 10 standpoint.
 11 That concludes my remarks on that one.
 12 MS. PENDERGRASS: Mr. Brooks, did you have a
 13 chance to finish all of your announcements?
 14 MR. BROOKS: I did, yes.
 15 MS. PENDERGRASS: Okay. Very fine.
 16 All right, then. At this point --
 17 Miss Pierce, I'm so sorry.
 18 MS. PIERCE: I appreciate the fact that we're
 19 looking for ways to carve out time for public comment.
 20 But I'm a little unclear about this one question on the
 21 Navy reports.
 22 MR. CAMPBELL: One question per RAB member.
 23 MS. PIERCE: Okay. The reason why -- well, I'd
 24 like for us to consider that, to think about that a
 25 little bit, because there are RAB members who have a lot

1 MR. CAMPBELL: It was removed, because we had
 2 some discussion of it in the last RAB meeting.
 3 MS. PENDERGRASS: Okay.
 4 MR. CAMPBELL: And our understanding, it was
 5 removed to be photographed. So --
 6 MS. PENDERGRASS: Okay.
 7 MR. CAMPBELL: -- we're sure it doesn't take
 8 too long to photograph it.
 9 MS. PENDERGRASS: Oh, you want it back.
 10 MR. CAMPBELL: Sure.
 11 MS. PENDERGRASS: Okay. Great.
 12 MR. CAMPBELL: Because some of the artists were
 13 asking about it.
 14 MR. BROOKS: Yeah. I will check into it. It
 15 is Navy property --
 16 MR. CAMPBELL: Sure.
 17 MR. BROOKS: -- but I will check into it.
 18 MR. CAMPBELL: Sure. Building 101 is Navy
 19 property too, right.
 20 We think it's very, very important to balance
 21 the public time with the Navy time so the various
 22 subcommittees, if they have things that are very, very
 23 important -- and thanks, Marsha, for pointing that out.
 24 I think that's very important.
 25 There's a yellow document that's up here. It's

1 more knowledge and expertise than other RAB members in
 2 certain areas; and by allowing them to ask more than
 3 one -- ask a follow-up question, it often will just kind
 4 of turn on a light bulb in someone else's mind and get
 5 them to, one, better understand what the issues are or,
 6 two, realize that they have a question as well.
 7 So I don't want us to get so bogged down in
 8 procedure and trying to get through the agenda that we
 9 don't allow for this to be the best possible process,
 10 because this process is also a learning process. We
 11 want to be sure that we have the ability to have that
 12 exchange so we become better informed as we're moving
 13 along.
 14 MR. CAMPBELL: Agree.
 15 MS. PENDERGRASS: Okay. Very good. I think we
 16 could start the subcommittee reports. Oh, let's start
 17 with the Membership and Bylaws Committee.
 18 And as we're getting ready, is -- would it be
 19 all right if we actually listed the actual subcommittees
 20 on the agenda so that we can kind of keep track of the
 21 way they are, you know --?
 22 MR. BROOKS: Yes, we can do that.
 23 MS. PENDERGRASS: Is that okay? Okay, because
 24 we have had some shifting and so forth, so it would be
 25 helpful if we kind of identify which groups are now.

1 MS. RINES: Okay. Basically, we had a really
 2 good meeting. Carolyn took really good notes.
 3 Short and sweet of it, SFPD showed up. They
 4 still do not have term sheets 'cause the Navy needs to
 5 renegotiate the property as to market rate. So they
 6 have to figure out how much it's actually -- how much
 7 they want to charge or whatever, and then SFPD will
 8 decide whether they will actually stay there.
 9 Next month is we have to vote on the bylaws,
 10 okay? I will say that again: Next month we have to
 11 vote on the bylaws. This is the last chance.
 12 From what we have, the way we have it set up,
 13 it should be we shouldn't have to make any changes.
 14 MS. PENDERGRASS: Do you have any to distribute
 15 today, tonight?
 16 MS. RINES: It's the same ones we distributed
 17 from the last time, and they are the ones that are on
 18 the Web site too.
 19 So it's just basically changing it from 12 --
 20 changing it from calendar year to 12-month period. And
 21 also the other point is come September is when the new
 22 bylaws will be in effect.
 23 And what we're doing is as of September,
 24 everyone will have a clean slate. They will have no
 25 absences because we have to start everybody on the same

1 motions? I'm sorry?
 2 MS. PIERCE: Nothing.
 3 MS. PENDERGRASS: Okay. Are you completed with
 4 your report?
 5 MS. RINES: Yes.
 6 MS. WRIGHT: I have a question.
 7 MS. PENDERGRASS: Miss Wright.
 8 MS. WRIGHT: Can you do me a favor and explain
 9 that 12-month thing again? Because I don't remember
 10 what you said last month.
 11 MS. RINES: Okay. The way that it works is
 12 12 months back in time, the month of the current RAB
 13 meeting.
 14 So it is July. So to gauge four missed
 15 thing -- four missed meetings, you go from July this
 16 month back to July '03. That span is 12 months, the
 17 only way we can do that, 'cause it's basically a moving
 18 target is the period of time.
 19 MS. WRIGHT: So the 12 months start on your
 20 first absence?
 21 MS. RINES: Correct. And the first -- your
 22 first absence is when it is. It's not when your first
 23 absence is. It's from the month, the current month of
 24 the RAB meeting, back 12.
 25 So if you missed in June of '03, and from July

1 level, start all over, and we'll do it with the
 2 12-month-period format. So that's the biggest thing
 3 about it. That's the only way we can do this so that
 4 it's even for everybody.
 5 So our next meeting will be August 11th at the
 6 library, 6:30 to 8:00.
 7 MS. PENDERGRASS: Okay. Can I just suggest
 8 that just to make sure that we're following protocol
 9 that everybody needs to have -- at least have had a
 10 copy. And so if they weren't here last month, they may
 11 not. So can they just go out one more time?
 12 MS. RINES: Sure.
 13 MS. PENDERGRASS: Where's Miss Hunter?
 14 Can you make sure that they --
 15 MS. HUNTER: Yes.
 16 MS. PENDERGRASS: -- they go out one more time
 17 this week so that everybody has an opportunity?
 18 MS. HUNTER: Is e-mail okay, or would you like
 19 hard copies?
 20 MS. RAB MEMBER: No.
 21 MS. BUSHNELL: Hard copies.
 22 MS. RAB MEMBER: No.
 23 MS. HUNTER: Hard copies. Okay.
 24 MS. RINES: Thank you.
 25 MS. PENDERGRASS: Okay. Do we have any

1 of '03, we only going to -- back to Jul- -- from July-
 2 '04 to July '03. So that June one doesn't count.
 3 MS. WRIGHT: Thank you.
 4 MS. RINES: That's the only way we could figure
 5 out how to qualify four.
 6 MS. PENDERGRASS: Oh, let's try it for a year
 7 and see how it goes. You have an opportunity next year
 8 to do it again.
 9 Miss Bushnell.
 10 MS. BUSHNELL: Well, you know, I think they
 11 were written -- I was part of the group that wrote
 12 those. I mean, it would be very difficult for me. I
 13 can remember what I've done a few months back; but if I
 14 have to remember whether I went on vacation 12 months
 15 ago, I'm not going to be able to do it. And --
 16 MS. PENDERGRASS: All you have to do is
 17 remember her seven digits and make sure you call the
 18 bylaws. They should know. They should be keeping up
 19 with that.
 20 MS. BUSHNELL: It was easy to remember
 21 "calendar year." You know what you're doing in a
 22 calendar year.
 23 I don't see why it's being made difficult for
 24 people be RAB members. We need good RAB members. And
 25 what this law is, it makes you sort of responsible for

1 remembering what you did 12 months ago.
 2 MS. RINES: No, it doesn't.
 3 MS. PENDERGRASS: Well, the process is that if
 4 you have an alternative, that needs to be communicated
 5 through the Bylaws Committee, and that would have been
 6 incorporated and discussed at that time.
 7 At this point, that has been put into the
 8 agenda, and we will be voting on -- not the agenda. It
 9 will be put into the bylaws, and we will be voting on
 10 those new bylaws at the next meeting. If you don't
 11 approve or don't agree, then you would not vote
 12 positively for those bylaws.
 13 MS. BUSHNELL: I do have a consideration. If
 14 you say that these bylaws haven't been approved by the
 15 RAB yet or on the Web site, I say that's wrong.
 16 MS. RINES: I'm sorry. I mean to remove that.
 17 MS. BUSHNELL: All right.
 18 MS. RINES: I was wrong on that.
 19 MS. BUSHNELL: Thank you.
 20 MS. PENDERGRASS: Okay.
 21 MS. BUSHNELL: Thank you.
 22 MS. PENDERGRASS: So -- and so everyone will
 23 get a final copy one more time just to make sure that
 24 we're all on that.
 25 MS. BUSHNELL: We will have a formal vote on

Page 33

1 them in greater detail and ask more questions.
 2 And maybe that will prevent, you know, spending
 3 as much time, and it will facilitate having more time,
 4 and this way it will be sort of more for the public as
 5 well rather than just for the RAB at the RAB meeting.
 6 I don't know if that's always going to be
 7 possible, but it's something that we are working
 8 towards.
 9 MS. PENDERGRASS: All right. Very good. Okay.
 10 MS. HUNTER: Do you have a meeting date for
 11 August?
 12 MS. LOIZOS: Oh.
 13 MS. PENDERGRASS: Thank you.
 14 MS. LOIZOS: Let's see. I'll come up with one.
 15 I don't want to waste time. Hold on.
 16 MS. PENDERGRASS: Okay. Miss Pierce, you don't
 17 have a subcommittee meeting?
 18 MS. PIERCE: I'm not a subcommittee chair
 19 anymore.
 20 MS. PENDERGRASS: Thank you so much.
 21 Dr. Sumchai?
 22 DR. SUMCHAI: The Lowman Radiological Risk
 23 Assessment Committee met yesterday. I wanted to thank
 24 Mr. Willie Ratcliff for being our host at the
 25 Greenhouse, and I wanted to thank the attendees:

Page 35

1 that.
 2 MS. PENDERGRASS: Okay? All right. Very fine.
 3 Let's move on to the next committee report.
 4 Lea, did you want to --?
 5 MS. LOIZOS: Sure. I --
 6 MS. PENDERGRASS: Now, what's your committee
 7 again? I'm just, like --
 8 MS. LOIZOS: Oh.
 9 MS. PENDERGRASS: -- confused on that.
 10 MS. LOIZOS: Technical Review Subcommittee.
 11 MS. PENDERGRASS: Okay.
 12 MS. LOIZOS: There was no meeting this month.
 13 But one thing I wanted to mention that we're considering
 14 doing to sort of help facilitate this, maybe help
 15 this -- well, on this topic of fewer questions and
 16 shortened presentations, we're looking into maybe having
 17 the Navy give presentations at the Technical
 18 Subcommittee meeting.
 19 So, say, this month we know they are doing this
 20 bioremediation treatability study. They're doing a
 21 presentation on that. So two weeks ago they would have
 22 come to my meeting, and we would have talked about this
 23 so that everybody knows, the presentations that are
 24 going to be discussed at the RAB will first be discussed
 25 at the Technical Subcommittee meeting so you can hear

Page 34

1 Francisco Da Costa, Michael Work from the EPA, Jackie
 2 Lane, Lea Loizos, Ralph Pearce, Dan Stralka, Maurice
 3 Campbell, and Patrick Brooks.
 4 The presentations started with a discussion by
 5 Dr. Dan Stralka, who is a Ph.D. in biochemistry with the
 6 EPA's Superfund division about the ongoing controversy
 7 over the PRGs and the HPALS that have been set for
 8 manganese.
 9 Manganese is a metallic substance that has been
 10 demonstrated to be elevated in its concentrations
 11 throughout much of Hunters Point Shipyard; and the
 12 arguments are whether or not it is naturally occurring,
 13 because it does occur in the underlying chert and basalt
 14 of the Shipyard.
 15 Additionally, manganese is a product of the
 16 combustion of fossil fuels and is seen in areas where
 17 power plants and, you know, fossil fuels combustion
 18 takes place. And for that reason, there has been a
 19 great deal of dialogue for several years now about
 20 whether or not it is truly ambient or naturally
 21 occurring.
 22 There's a manganese compound, MMT, that's used
 23 as an antiknock fuel additive in unleaded gasoline.
 24 So Dr. Stralka made it very clear that the role
 25 of the EPA is in setting up, you know, proper cleanup

Page 36

1 levels, and he discussed some background issues with
2 regard to how the PRGs were derived.

3 There are some studies that have looked at
4 manganese in drinking water in men and women from
5 Greece, and there are some studies that have looked at
6 manganese and its impact on health in inhaled substances
7 from mine workers in South Africa, and presumably those
8 populations are predominantly black populations.

9 There was some discussion about health effects.
10 There was discussion about cumulative and additive
11 effects.

12 There was -- It was made mention of the fact
13 that the PRGs are set for the most sensitive
14 populations, specifically children; and it was, you
15 know, emphasized that, you know, there is a need to have
16 further, you know, discussion about, you know, whether
17 or not the levels that have been demonstrated in soils
18 of the Shipyard are independent of the PRGs and the
19 HP- -- and HPALS, potential sources of adverse health
20 effects.

21 And there was also discussion about the types
22 of adverse health effects that are seen. They are
23 specifically neurological and involve things like gait
24 disorders and other kinds of neurological symptoms.

25 So the disposition on the issue was that we

Page 37

1 retained. Many of the buildings on Parcel A and B are
2 slated for demolition, and I had concerns about the
3 status of this building, and we'll ask Laurie Lowman to
4 address those also.

5 And then our final discussion centered on
6 prioritizing some agenda issues for the future, and we
7 will be revisiting some risk assessment analysis for
8 Parcels A and B as well as the radiological removal
9 action action report for the base and --

10 MS. PENDERGRASS: So, Dr. Sumchai, are you
11 going to make some recommendations about agenda items
12 that you would like to or you or your committee --
13 subcommittee would like to bring to the full RAB?

14 DR. SUMCHAI: Yes. The --

15 MS. PENDERGRASS: Okay.

16 DR. SUMCHAI: -- main recommendation was to
17 schedule in the near future a RAB presentation on
18 manganese and --

19 MS. PENDERGRASS: Do you have a date --

20 DR. SUMCHAI: -- Dr. --

21 MS. PENDERGRASS: -- for that now, or did you
22 want to just -- you're going to recommend that later, or
23 how did you want to do that?

24 DR. SUMCHAI: Well, as -- you know, I'm not
25 sure how the agendas for the future are stacked up, and

Page 39

1 would table in the near future a full RAB presentation
2 on manganese. We would review the current literature on
3 health effects. We would apply this graduated
4 understanding in view of the reuse plans for the
5 Shipyard and, you know, make some decisions about
6 whether or not, you know, it's safe to follow through
7 with some of the reuse plans.

8 The rest of the committee meeting focused on
9 some radiological issues, and we will be revisiting the
10 concerns that Maurice raised about the potential for
11 NRDL laboratory having been identified in the D series
12 buildings, and Miss Lowman can address that in August.

13 The Parcel A boundary change will be discussed
14 today as well as the status of Building 322.

15 I have some concerns about Building 103, which
16 in the HRA is identified as a former World War II wooden
17 barracks that was used as a personnel decontamination
18 center for Operation Crossroads. It's currently leased
19 to the San Francisco Redevelopment Agency, and The Point
20 artists are tenants there; and it is under
21 investigation.

22 My concerns are grounded in the fact that the
23 final Environmental Impact Report for Phase I
24 development of the Shipyard Parcels A and B has
25 determined that this is a building that will be

Page 38

1 it also depends on the availability of the presenter.
2 We extended an invitation to Dr. Stralka to -- you know,
3 to present. But certainly something in the near future.

4 MS. PENDERGRASS: Okay. So we could just
5 communicate that to the community co-chair, and he
6 should be able to schedule that in.

7 Is that okay --

8 DR. SUMCHAI: Yes.

9 MS. PENDERGRASS: -- Mr. Campbell?

10 MR. CAMPBELL: The Economic --? Yes. I'm
11 sorry.

12 MS. PENDERGRASS: Okay. I mean, is that --?

13 MR. CAMPBELL: Yeah, that's fine.

14 MS. PENDERGRASS: That's fine.

15 MR. CAMPBELL: Sure.

16 MS. PENDERGRASS: Are you --?

17 Do you have a date for your next meeting?

18 DR. SUMCHAI: Whatever the fourth Thursday is.
19 I believe that the -- let's see. Excuse me. Fourth
20 Wednesday.

21 MR. BROOKS: Fourth Wednesday.

22

23 MR. BROOKS: Twenty-fifth.

24 DR. SUMCHAI: Twenty-fifth? Okay. So
25 Wednesday, the 25th, from 3:00 to 5:00 at the

Page 40

1 Greenhouse; and we'll be, you know, discussing some of
 2 the issues that I raised as well as some issues that
 3 we'll want Laurie Lowman to address in her presentation
 4 on Thursday, the 26th, to the full RAB.
 5 MS. PENDERGRASS: Miss Lowman is making a
 6 presentation next month, then?
 7 DR. SUMCHAI: Yes.
 8 MS. PENDERGRASS: Okay. Very good, then. All
 9 right. Thank you.
 10 Mr. Campbell, now, are you still the chair of
 11 the Economic Development?
 12 MR. CAMPBELL: At the moment --
 13 MS. PENDERGRASS: Very good.
 14 MR. CAMPBELL: -- I'm acting chair.
 15 The Economic Committee didn't meet officially
 16 this month. We will be meeting on the 10th of next
 17 month at Young Community Developers, and that will be at
 18 2:30.
 19 Chris, can you give us the address of that?
 20 MR. HANIF: 1715 Yosemite Avenue on the corner
 21 of -- it's right off the corner of Third and Yosemite.
 22 You know you're there because there's a McDonald's right
 23 there.
 24 MR. CAMPBELL: Thank you.
 25 MS. PENDERGRASS: Free French fries? No.

1 Okay. We're going to take a ten-minute break
 2 and reconvene at ten minutes to 7:00. Okay.
 3 (Recess 6:42 p.m. to 6:52 p.m.)
 4 MS. PENDERGRASS: We'd like to reconvene.
 5 At this point, Mr. Christensen, Remedial
 6 Project Manager, will do a presentation on sequential
 7 bioremediation at Remedial Unit RU-C5, Building 134.
 8 Sounds fun, huh?
 9 MS. RINES: Woo-hoo!
 10 MR. CHRISTENSEN: Wasn't expecting that. It's
 11 a good time.
 12 MS. PENDERGRASS: You got to make this a lot
 13 sexier than it's down on paper.
 14 MR. CHRISTENSEN: I don't know how sexy it's
 15 going to be.
 16 MS. PENDERGRASS: Okay. And actually, if you'd
 17 like, kind of -- if want to come right up here --
 18 MR. CHRISTENSEN: Sure.
 19 MS. PENDERGRASS: -- in the middle, and you can
 20 watch the screen. You can chat.
 21 MR. CHRISTENSEN: I got a little pointer,
 22 so . . .
 23 MS. PENDERGRASS: Okay. And Mr. Brooks doesn't
 24 mind if your back is to him.
 25 MR. BROOKS: Not at all.

1 Anything else, Mr. Campbell? I guess not. All
 2 right. You have nothing else? You have nothing else?
 3 MR. CAMPBELL: No. We're going to say, what
 4 Pat has was part of this report for -- and bring it into
 5 the next Economic -- What we're going to do is bring
 6 the information on the year-to-date numbers and quarter
 7 to num- -- quarter-to-date numbers into the next
 8 Economic meeting, which will be on the 10th at 2:30 at
 9 YCD, and we will be prepared to give the community's
 10 portion of those numbers.
 11 MS. PENDERGRASS: Okay.
 12 MR. CAMPBELL: Thank you.
 13 MS. PENDERGRASS: We're just at a point where
 14 we can take a break, even though it's a little early.
 15 Is that going to work for you, Christine?
 16 THE REPORTER: Yes.
 17 MS. PENDERGRASS: Okay. One more question.
 18 MS. LOIZOS: I just wanted to give the date for
 19 the next Technical Review Subcommittee meeting. It will
 20 be on August -- Wednesday, August 18th, 6 p.m., at the
 21 Community Window on the Shipyard, 4634 Third Street.
 22 MS. PENDERGRASS: 4634 --
 23 MS. LOIZOS: -- -34, yeah.
 24 MS. PENDERGRASS: -- Third Street. Okay. Real
 25 good.

1 MS. PENDERGRASS: Okay.
 2 MR. CHRISTENSEN: Thank you. My talk is
 3 entitled "Groundwater Cleanup Using Bioremediation, A
 4 Treatability Study."
 5 MS. PENDERGRASS: And we just want to -- want
 6 you to be mindful of your time.
 7 MR. CHRISTENSEN: So this is a real short talk,
 8 so . . .
 9 MS. PENDERGRASS: Thank you.
 10 MR. CHRISTENSEN: Okay. Let's go on to the
 11 next one.
 12 The treatability study is going to be
 13 performed -- it's currently being performed at
 14 Building 134. This is a former marine machine shop, and
 15 it is located in Parcel C. Building 134 had a solvent
 16 degreaser pit and oil/water separator. The separator
 17 and degreaser pit were built in the foundation of the
 18 building. So there are permanent fixtures that we have
 19 since then broken out and removed.
 20 Soil and g- -- well, let's go back to the
 21 next -- last bullet there.
 22 Soil and groundwater at Building 134 are
 23 contaminated with solvents. We have done a series of
 24 tests and routine sampling events in this area, and we
 25 found this to be a -- the former degreaser pit and

1 separator were a source of groundwater contamination in
2 the area.

3 This is the purpose of our bioremediation
4 study. Existing monitoring data suggested, as I said,
5 that this area is contaminated with solvents. And
6 through our tests, we've found that these chemicals in
7 the groundwater are biologically degrading.

8 We have excavated the sump and degreaser pit.
9 We have installed the large-diameter extraction well in
10 the former oil/water separator outside of Building 134
11 and monitoring wells within the former degreaser pit.

12 During removal of the degreaser pit, we've also
13 overexcavated the area. The former floor of the
14 degreaser pit was done to about 4 feet below surface,
15 and we excavated down about 8 feet. So we wanted to
16 take out all the contaminated soil above the water
17 table.

18 In the study, we have proposed to evaluate this
19 enhanced bioremediation to treat the contaminated
20 groundwater. So it's kind of a test study to see if
21 this procedure will work. And since we already start
22 to -- we have already started to see some biological
23 degradation in the area, we're sure that it is, and we
24 would look towards this as a larger scale remediation in
25 other areas of the base.

Page 45

1 red circle here is the groundwater plume that we found
2 by monitoring a series of wells in the area. And we
3 have delineated non-detects around this plume edge.

4 So this is where the highest concentrations
5 are; and as I said, it's really due to the source, that
6 former degreaser pit.

7 This picture on the left is -- this is the
8 degreaser pit inside Building 134 which we overexcavated
9 and backfilled. And that's a compacter on the backhoe.
10 That's compacting it back up to level surface.

11 This is the extraction well we installed. This
12 is outside obviously of Building 134. It's in a former
13 oil/water separator. It's a large-diameter extraction
14 well that we've installed to control groundwater
15 movement in our test cell.

16 Here's a picture inside the degreaser pit as
17 the compacting is done. It's brought back up to level
18 surface. We have some forms here. These are for
19 groundwater monitoring wells.

20 This is the ejection well. And I think -- it's
21 a little hard to see, but they have a grid work of
22 rebar, and they are pouring concrete in there, and this
23 fellow is spreading it out so it's all level surface.

24 These are what the wells look like. This is
25 outside of the Building 134. They are all flush-mounted

Page 47

1 This is a slide, kind of shows a little bit
2 about the process which it involves. In situ
3 bioremediation is a process that destroys contaminants
4 in place with by -- with naturally occurring bacteria.

5 The bacteria is, as I said, naturally
6 occurring. It's already in the aquifer. And as it
7 eats -- what we do is we feed it a food source, and it
8 in turns eats the contaminants and breaks them down to
9 nontoxic form.

10 It's a similar process that we find in making
11 of beer or wine. And that picture on the bottom there
12 is the bacteria.

13 MR. BROOKS: This is our bug.

14 MR. CHRISTENSEN: That's our bug. Should put a
15 little Navy flag on it or something. It's called the
16 Dehalococcoides, and it's a naturally occurring
17 bacteria.

18 THE REPORTER: Spell that.

19 MR. CHRISTENSEN: D-i-a-c-h-o-i-d-i-e-s [sic]?

20 MR. BROOKS: A spelling bee.

21 MR. CHRISTENSEN: Close.

22 Here's a picture. We wanted to show where the
23 plume is located. Going to kind of get my pointer out.

24 This brown rectangle is the former sump and
25 degreaser pit. Of course, this is Building 134. This

Page 46

1 4-inch monitoring wells, and this is just smoothing out
2 the surface.

3 This is inside the building. We had some forms
4 where we poured the concrete around the forms; and after
5 that set, we installed vaults to protect the surface.
6 And that's all he's doing is leveling out the vault
7 before they pour the concrete, make them permanent
8 wells.

9 This is the process. It's an -- It's called a
10 sequential anaerobic-aerobic bioremediation process.
11 These are con- -- These are the contaminants we found
12 in the groundwater, tetrachloroethene and

13 trichloroethene. Acronyms are PCE and TCE. And those
14 are found to degrade without oxygen, and that would be
15 the anaerobic part of this test study.

16 Other contaminants which degrade with oxygen,
17 or aerobic, under aerobic conditions, would be such as
18 benzene, petroleum hydrocarbons, or semivolatile
19 hydrocarbons. And some contaminants just don't care,
20 could be either. But those would be -- couple examples
21 there, vinyl chloride or chlorobenzene.

22 This is how kind of the process works, the
23 bioremediation process. It creates favorable conditions
24 for the biodegradation of contaminants and also talks
25 about kind of our schedule here: Our Stage 1 anaerobic

Page 48

1 bioremediation stage started April 14th, and it
2 continues through November 28th of this year at which
3 time we will switch to the aerobic portion of this
4 study, and we'd start that December 1st and go through
5 April of 2005.

6 We're going to conduct the anaerobic
7 biodegradation first. As I said, the anaerobic
8 biodegradation is already occurring. We are seeing that
9 from by-products of the PCE and TCE being broken down to
10 vinyl chloride and ethene.

11 And we've also done our testing for that bug
12 that we saw here in the lower right corner. There's a
13 sufficient colony of the bacteria which exists in this
14 area, so we don't have to further populate the area of
15 bacteria. They are already occurring. They already
16 exist.

17 What we are going to do is we're going to
18 inject a food source into the aquifer, and the food
19 source is a sodium lactate, which promotes growth,
20 energy, promotes a food source for the bacteria to grow
21 and enhance their activity which they will in turn eat
22 up the contaminants, such as PCE and TCE, breaking those
23 down to a vinyl chloride and ethene.

24 And the last bullet there, ethene is a
25 nontoxic, and concentrations are far below the lower

Page 49

1 petroleum hydrocarbon contamination there. And you saw
2 from one of Glenn's previous slides the petroleum
3 hydrocarbons like to degrade aerobically. So they use
4 oxygen as they degrade. And what's happened is, those
5 petroleum hydrocarbons have degraded; and while they
6 have degraded, they have used up the oxygen in the
7 groundwater. So they have created those nice favorable
8 conditions that we need to degrade the PCE and the TCE.

9 MR. CHRISTENSEN: Let's go to the next one.

10 All right. This is the aerobic part. It's
11 Stage 2 of our treatability study where we would add
12 oxygen back into the contaminated aquifer. A different
13 type of bacteria would eat up or degrade the remaining
14 contaminants. It's a different type of bacteria that
15 exist and thrive on oxygen, and they would complete the
16 destruction of any remaining contaminants in the
17 groundwater.

18 As I said, these contaminants are degraded to a
19 nontoxic form, and by-products would be carbon dioxide,
20 water, and chloride ions.

21 This is kind of a cool slide, let things kind
22 of slide into place here. Okay. This is inside
23 Building 134. This here is our mixing tank that we
24 would pull groundwater out and amend with the sodium
25 lactate.

Page 51

1 explosive limit. We had a LEL of around 30,000 ppm, and
2 our concentrations of ethene will at highest be around
3 7 ppm's, so we will be well below the LEL.

4 Yes.

5 MS. PIERCE: Can you explain? I don't
6 understand how the anaerobic portion works. How do you
7 get the oxygen out and put in a aquifer? Isn't an
8 aquifer the water, and doesn't water have oxygen? So
9 I'm just really confused.

10 MR. CHRISTENSEN: Could -- Would you mi- --?
11 Can we just take the questions after the presentation
12 or --?

13 MS. PIERCE: Okay. I just wanted to ask, since
14 you were here.

15 MR. CHRISTENSEN: All right. The environment
16 is anaerobic currently. So these bacteria thrive in an
17 anaerobic environment. That's when we know they exist.

18 We have tested that, and what we do is we pump
19 water out of the aquifer into a tank, and we amend the
20 extracted groundwater with the sodium lactate before we
21 reinject it. And next couple of slides we'll see a
22 cross section of the system and kind of how it works.

23 MR. BROOKS: Glenn, let me just follow up on
24 that.

25 Site 25 is right near Site 6, and we have some

Page 50

1 This area here, the excavation, is the former
2 degreaser pit. So we have left the side walls, flooring
3 as it is here, and the back wall are sort of barriers
4 and form a containment cell. Depth of groundwater is
5 about 8 feet here below surface.

6 This is some of the geology. We had label
7 piers as silty sand, silty clay, some clay here, more
8 silts and clays.

9 This is a lower aquifer in A2 zone, but we do
10 have a deeper well. Eventually it makes its way in
11 here. All right.

12 This is the extraction well that's in the
13 former oil/water separator. This is actually outside of
14 Building 134. Shows here inside, but that's actually
15 outside of. And this is the injection well.

16 We have three monitoring wells, this one here.
17 So we're actually treating the A1 zone, which is the
18 lower -- or excuse me -- the upper aquifer here, and
19 we're also testing for constituents in the lower aquifer
20 to make sure we are not having any vertical migration.

21 And as the water is pumped out of the
22 extraction well, it goes through a line here all in the
23 subsurface inside the test cell and then back into the
24 injection well. So we get kind of a cycle of
25 groundwater through here.

Page 52

1 Go to the next one.
 2 Okay. This is -- I wanted to show a couple
 3 graphs, not too many. But this is some of the samples
 4 we have collected from March 25th until as of July 12th.
 5 Six separate events. And day zero here is April 15th,
 6 and that was the first day of injection and
 7 recirculation of the sodium lactate. So we have some
 8 fairly high concentrations here, and this is our
 9 baseline sample.
 10 So we are already starting to see some
 11 breakdown of the PCE and a rise in the vinyl chloride,
 12 which we would expect.
 13 This is a real sharp decline of 1,2-DCE and --
 14 which we would expect to see a bit of a rise in vinyl
 15 chloride here and then eventually that taper off; and
 16 ethene here, the blue dot, we would expect to increase.
 17 And that's 54A. That's the next well in line
 18 from the injection well.
 19 This is the actual injection well. So we're
 20 actually pulling some contaminants out of not only the
 21 groundwater, but the soil too. So we are seeing a high
 22 spike of 1,2-DCE. As that fades off, you see a rise in
 23 vinyl chloride, and eventually we should see an increase
 24 here of ethene. So it's a little early to see that yet,
 25 but we think that that's what's going to happen.

Page 53

1 respiratory disorders are a problem. Although you're
 2 working 8 feet below surface --
 3 MR. CHRISTENSEN: This is all in the sub- --
 4 DR. SUMCHAI: Yes --
 5 MR. CHRISTENSEN: -- surface --
 6 DR. SUMCHAI: -- but they communi- --
 7 MR. CHRISTENSEN: -- all in situ.
 8 DR. SUMCHAI: -- cate with the outfalls into
 9 the bay.
 10 MR. CHRISTENSEN: I understand.
 11 DR. SUMCHAI: And I don't know if your
 12 monitoring wells are all -- at all times capped. They
 13 are not. So, you know, there is some potential for
 14 diffusion into air.
 15 And --
 16 MR. CHRISTENSEN: We do have caps on all those
 17 wells. They are all sealed up at the surface.
 18 DR. SUMCHAI: Okay. There are the alcohols, of
 19 course, that the groundwater communicates with the --
 20 you know, the bay.
 21 And, you know, similarly, the -- you know, the
 22 formation of compounds, like -- you know, like chloride,
 23 I mean, there's -- in the air-monitoring studies of the
 24 Shipyard has always detected air core chloroform, carbon
 25 tetrachloride.

Page 55

1 And I think we have one more here. This is
 2 53A. We are kind of seeing that same trend: sharp
 3 increase of 1,2-DCE. As it falls off vinyl chloride and
 4 as that falls off, we are starting to see some real good
 5 ethene concentrations here.
 6 So as I said, the purpose of this is just --
 7 it's just a treatability study just to see if this
 8 procedure will work and if we can implement it in a
 9 larger scale out at the base.
 10 Questions?
 11 MS. PENDERGRASS: All right. Well, let's start
 12 with Dr. Sumchai, the first question; and second, do we
 13 have anyone else with questions? And then Maurice.
 14 DR. SUMCHAI: It's just --
 15 MR. CHRISTENSEN: Okay.
 16 DR. SUMCHAI: -- I had --
 17 MR. CHRISTENSEN: Yes.
 18 DR. SUMCHAI: -- some questions about the
 19 volatilization of compounds that you may be, you know,
 20 conjugating as a result of the chemical reactions.
 21 I wanted to correct you. Carbon dioxide is a
 22 global warming gas; and if it's in sufficient quantity,
 23 it'd come out of solution and is, you know, free to
 24 diffuse into air; then it has a warming effect. And
 25 that's very important in this community where

Page 54

1 So the formation of organochlorides, you know,
 2 is just a concern to me. And, you know, similarly, you
 3 know, ethene can conjugate, you know, with benzene.
 4 MS. PENDERGRASS: Did you have a question,
 5 Dr. Sumchai?
 6 DR. SUMCHAI: Well, I'm asking about --
 7 MR. CHRISTENSEN: We realize the ethene is a
 8 concern, and that's why I wanted to mention what we
 9 think -- what -- we believe our max concentrations
 10 will be well below the LEL.
 11 DR. SUMCHAI: Okay. Well, this was raised the
 12 last time when we had a technical discussion about, you
 13 know, air-monitoring data. Is it being collected? Is
 14 it being -- you know, is it being monitored for?
 15 MR. CHRISTENSEN: Air monitoring? We do air
 16 monitoring for health and safety of all our workers out
 17 there at all times.
 18 DR. SUMCHAI: Okay.
 19 MS. PENDERGRASS: Miss Rines?
 20 MS. RINES: The second bacteria, well, is that
 21 there too? Is that naturally forming?
 22 MR. CHRISTENSEN: That's naturally occurring as
 23 well. All these bacteria exist in the aquifer.
 24 MS. RINES: So why wouldn't it have been --? I
 25 just don't understand why it wouldn't -- I'm sorry. I

Page 56

1 don't understand why it wouldn't have done this by
 2 itself if they are already naturally occurring, if one
 3 eats the contaminants --
 4 MR. CHRISTENSEN: We are trying to speed up the
 5 process.
 6 MS. RINES: Oh.
 7 MR. CHRISTENSEN: They would. It would take
 8 some -- take quite a bit of time.
 9 MS. PENDERGRASS: Okay. We have Mr. Campbell
 10 and then . . .
 11 MR. CAMPBELL: Well, my question is somewhat
 12 off of on Dr. Sunchai's question. You know, we have
 13 ethene and we have methane. They do have a cause and
 14 effect on the ozone layer, and we know that we are -- we
 15 are along the methane on Parcel E to go into the
 16 atmosphere already, and we are looking at potentials of
 17 global warming.
 18 So I wondered if you guys had any sort of
 19 response to that question.
 20 MR. BROOKS: That would have a miniscule
 21 effect, less than a miniscule effect.
 22 MS. PENDERGRASS: Can you speak up, Mr. --
 23 MR. CHRISTENSEN: Can't hear you.
 24 MS. PENDERGRASS: -- Brooks?
 25 Thank you.

1 solution. Are you tr- --? What are you --? What
 2 you're trying to do, is it to increase the population,
 3 then you get them hungry, and then they go out to the
 4 other contaminants after they --?
 5 MR. CHRISTENSEN: Well, it increases their
 6 energy production.
 7 MR. LANPHAR: Their energy production --
 8 MR. CHRISTENSEN: We're not --
 9 MR. LANPHAR: -- in numbers --
 10 MR. CHRISTENSEN: We didn't have to enhance --
 11 MR. LANPHAR: -- or they just pump them up?
 12 MR. CHRISTENSEN: We didn't have to enhance the
 13 colony of bacteria.
 14 MR. BROOKS: But they do reproduce. When you
 15 give them food, they do reproduce.
 16 MR. LANPHAR: I can't hear that.
 17 MS. PENDERGRASS: Mr. Brooks, you're going to
 18 have to speak into the microphone, please.
 19 MR. BROOKS: When you do feed the bacteria,
 20 like we give them the sodium lactate, then they do
 21 reproduce, and the colonies do grow in numbers.
 22 And it's a one-time injection. And so you
 23 inject them. And what you say is true, they find all
 24 this fine food there for them to eat. Sodium lactate. I
 25 think sodium lactate is in Snickers bars and different

1 MR. BROOKS: Our treatability study will have a
 2 less than a miniscule effect on the global warming on
 3 any CO2 that we produce.
 4 MR. CAMPBELL: Are you just talking about this
 5 area, or are you taking in combination with Parcel E
 6 that's what's being vented?
 7 MR. BROOKS: Yeah, I could combine Parcel E on
 8 that. One of the biggest methane producers in the
 9 United States is cattle industry. I don't know if you
 10 know that.
 11 MR. CAMPBELL: Yeah, I know.
 12 MR. BROOKS: One good way if you want to
 13 eliminate some methane is everybody starts eating a
 14 vegetarian diet. But yeah, just extremely miniscule --
 15 less than miniscule effect. If we treated every
 16 contaminant plume on the Shipyard with bioremediation
 17 and producing -- or degrading our contaminants to CO2 --
 18 MS. PENDERGRASS: Okay.
 19 MR. CAMPBELL: Thank you.
 20 MR. BROOKS: -- no effect.
 21 MS. PENDERGRASS: Yes, sir.
 22 MR. LANPHAR: Yeah. Perhaps the energy used to
 23 run the pumps might have a greater greenhouse effect.
 24 I'm not sure. But energy's a big one.
 25 My question was on the feeding of the lactate

1 places like that.
 2 So, you know, they are having a fine time, and
 3 then they begin to run out of food, and then, yeah, they
 4 do, they go for the contamination.
 5 MR. LANPHAR: Okay. Thank you.
 6 MS. PENDERGRASS: Miss Asher and then
 7 Mr. Niccoli, please.
 8 MS. ASHER: Is this a method that you're using
 9 to remediate other sites onto other bases?
 10 MR. CHRISTENSEN: We have used it successfully
 11 at two other bases.
 12 THE REPORTER: I'm sorry. I can't hear.
 13 MR. CHRISTENSEN: We have used it successfully
 14 at two other Navy bases.
 15 MS. ASHER: Which bases are those?
 16 MR. CHRISTENSEN: Point Mugu and Treasure
 17 Island.
 18 MR. BROOKS: And actually, there are bases even
 19 beyond that that use this process. But these particular
 20 bases are projects that our contractor, Shaw
 21 Environmental, has done work on. And so those are the
 22 two that we have all the data for right at hand.
 23 MS. ASHER: And when they are -- I have a
 24 microphone now.
 25 And when they are hungrily eating all these

1 contaminants, are there other contaminants that they
2 don't eat that are still in the aquifer?
3 MR. CHRISTENSEN: We are looking at -- The
4 highest contaminants in this area are the PCE.
5 MS. PENDERGRASS: Can you use the microphone,
6 please?
7 MR. CHRISTENSEN: Sure.
8 MS. PENDERGRASS: Thank you.
9 MR. CHRISTENSEN: We are looking at the PCE and
10 TCE are the highest contaminants in this area. And on
11 one of those slides, it showed some of the other
12 constituents which are also anaerobically and
13 aerobically, and we do have those.
14 MS. ASHER: All right. And I just -- and the
15 decision to treat these particular class of contaminants
16 is through the BCT, or how does that get decided?
17 Through the --?
18 MR. CHRISTENSEN: It is gone through the BCT.
19 MS. ASHER: Okay. All right. Thanks.
20 MR. CHRISTENSEN: And the RAB as well we've
21 submitted these work plans --
22 MS. PENDERGRASS: Okay. We have three --
23 MR. CHRISTENSEN: -- for review.
24 MS. PENDERGRASS: -- more questions here. We
25 have Mr. Niccoli and then Mr. Campbell, okay.

Page 61

1 MR. SMITH: Temperature, dissolved oxygen,
2 those kinds of things?
3 MR. CHRISTENSEN: DO, temperature, right, those
4 are all parameters.
5 MR. SMITH: And are you basing this on some
6 previous published research?
7 MR. CHRISTENSEN: There's lots of published
8 research on this technology and prior knowledge from the
9 other bases. Actually, our contractor brought the
10 equipment, which they successfully used on Point Mugu,
11 to Hunters Point.
12 MS. PENDERGRASS: Okay. Lea and then Miss
13 Asher.
14 MS. OLIVA: Oh, I'm -- Lea [indicating].
15 MS. LOIZOS: I was just curious why you do the
16 circular motion of the groundwater that you described,
17 the repumping and extracting through.
18 MR. CHRISTENSEN: We wanted to get the sodium
19 lactate evenly distributed throughout the test cell, and
20 we wanted to install a large-diameter extraction well to
21 influence the groundwater flow.
22 MS. PENDERGRASS: Miss Oliva? I'm sorry.
23 MR. CHRISTENSEN: And once we see the sodium
24 lactate in the extraction well, we shut it off. That is
25 a one-time injection.

Page 63

1 And then Lea, did you have a question as well?
2 MS. LOIZOS: If there's time.
3 MS. PENDERGRASS: There will. Okay.
4 MR. CHRISTENSEN: Okay. Who's first?
5 MR. NICCOLI: When you inject with a sodium
6 lactate, you increase the anaerobic processes in the
7 soil which will decrease the aerobic processes. Are you
8 going to reinject aerobic bacteria in, or it's just
9 strictly oxygen base? You're just going to feed
10 oxygen --?
11 MR. CHRISTENSEN: We are just going to inject
12 the oxygen.
13 MS. PENDERGRASS: Okay.
14 All right. Mr. Smith?
15 MR. SMITH: Okay. I'd like to ask you, how did
16 you establish the baseline conditions before you started
17 this project, and what parameters did you measure?
18 MR. CHRISTENSEN: We went out and collected
19 groundwater samples from a whole host of groundwater
20 monitoring wells in the area. We already have knowledge
21 of the PCE and TCE concentrations. We measured and took
22 samples for the bacteria which are naturally occurring.
23 I wanted to see if there was a sufficient colony in the
24 area to degrade, and our lead science project manager
25 told us there is.

Page 62

1 MS. OLIVA: In the process of the contaminants
2 being eaten or eaten, is that --
3 MR. CHRISTENSEN: That's correct.
4 MS. OLIVA: -- that correct?
5 Are there any side effects, residues that are
6 created, gases in the process of this?
7 MR. CHRISTENSEN: No. The by-products would be
8 the carbon dioxide, water, and ethene.
9 MS. OLIVA: And the ethene, which you said is
10 not explosive but will increase in -- it's going to
11 increase?
12 MR. CHRISTENSEN: It will gradually increase.
13 It's a nontoxic constituent.
14 MS. OLIVA: But you had mentioned some sort of
15 explosive.
16 MR. CHRISTENSEN: It's well below that. Ethene
17 is an explosive gas.
18 MS. OLIVA: Well, how high --?
19 MR. CHRISTENSEN: But we wanted to measure our
20 max concentration that was -- we thought it at 7 ppm,
21 and the LEL for ethene is 30,000.
22 MS. OLIVA: Well, in the process of this until
23 2005, how high will the ethane reach?
24 MR. CHRISTENSEN: Seven parts per --
25 MS. OLIVA: Max?

Page 64

1 MR. CHRISTENSEN: -- million. That's what we
2 have calculated.
3 MS. OLIVA: What if it goes above that?
4 MR. CHRISTENSEN: It would have to go
5 considerably higher than that to get to the LEL.
6 MS. OLIVA: Thank you.
7 MR. LANPHAR: What's the LEL?
8 MR. CHRISTENSEN: 30,000 lower explosive limit.
9 MR. BROOKS: So you need at least 30,000 parts
10 per million to cause an explosion using ethene. So it's
11 like trying to go to the car lot and buying a \$30,000
12 car with seven bucks.
13 MS. PENDERGRASS: All right.
14 MS. OLIVA: Your analogy --
15 MS. PENDERGRASS: Well, thank you,
16 Mr. Christensen. Thank you for your presentation.
17 All right, now, Mr. Brooks?
18 MR. BROOKS: I'm up.
19 MS. PENDERGRASS: You're up. Oh, I'm sorry.
20 Mr. Hanif, do you have a question?
21 MS. WRIGHT: Here, use this microphone.
22 MR. HANIF: Not to be disrespectful to -- I'm
23 sorry, Mr. -- Glenn, tossing out terms like UEL [sic],
24 LEL, UFL [sic], LFL [sic], unless you've studied
25 hazardous materials, it does a disservice to the people

Page 65

1 in the room.
2 MS. PIERCE: Thank you.
3 MR. HANIF: And you're just talking over their
4 head. It's like talking about, you know, part per
5 million. I know what that is, but be- -- only because
6 I'm familiar with that. But if you haven't studied it,
7 it makes no sense at all.
8 MS. PENDERGRASS: Good point.
9 All right. All right. Mr. Brooks is up next.
10 MR. BROOKS: Okay. We do a lot to try to bring
11 these presentations down to an easily understandable
12 level. And the same presentation is given at the BCT
13 meeting, and it's considerably more scientific content,
14 considerably more complicated. So we do a lot to bring
15 these down to a general public audience.
16 MS. PENDERGRASS: That makes us feel so stupid
17 now. Thank you so much. Thank you.
18 Can we all just stand up a minute so we can
19 just get a little blood here, get a little blood.
20 It's the way you said it, Pat.
21 MR. BROOKS: Chris is saying that our
22 presentations mean nothing, but we do a lot.
23 MS. PENDERGRASS: He didn't say that.
24 MR. HANIF: No, no.
25 MS. PENDERGRASS: You missed the point.

Page 66

1 MR. HANIF: Excuse me. Pat?
2 MS. PENDERGRASS: He said the acronyms that you
3 were --
4 MR. HANIF: The acronyms, yeah.
5 MS. PENDERGRASS: -- using were not helping us
6 to understand. That's what he said.
7 MR. BROOKS: Ah.
8 MS. PENDERGRASS: So take it in the spirit --
9 MR. HANIF: That --
10 MS. PENDERGRASS: -- it was given.
11 MR. HANIF: That's like saying PEL [sic], LFL
12 [sic], ppm, TWA. I mean, PPE? I mean --
13 MS. PENDERGRASS: I know what a PPOE [sic] is
14 now, finally.
15 DR. SUMCHAI: Can I just --
16 MS. PENDERGRASS: Okay.
17 DR. SUMCHAI: -- very quickly and with
18 relevance that when I first -- my first RAB meeting in
19 September of the year 2000, we were -- or you were
20 producing a list of acronyms and their definition. That
21 was a handout. And it probably is, you know, something
22 sexy to think about, you know, doing that as standard
23 procedure.
24 MS. PENDERGRASS: All right.
25 MR. HANIF: No offense.

Page 67

1 MR. BROOKS: No offense taken.
2 MS. PIERCE: Well, you were absolutely right.
3 Don't apologize. It's not about dumbing down for
4 anybody. You can have --
5 MS. PENDERGRASS: All right. We're going to
6 get off schedule if you continue on this vein. Let's
7 let Mr. Brooks have the floor. Thank you. Thank you.
8 MR. BROOKS: Parcel A Finding of Suitability to
9 Transfer, the FOST.
10 MS. PENDERGRASS: Can you use the microphone,
11 Mr. --?
12 MR. BROOKS: The government lives and dies with
13 acronyms.
14 MS. PENDERGRASS: Mr. Brooks, can I invite you
15 to use the microphone? Thank you so much.
16 MR. BROOKS: I can't be heard with just my
17 voice?
18 MS. PENDERGRASS: No, sir.
19 MR. BROOKS: Okay.
20 Before I start on the presentation, 'cause this
21 is mostly about the FOST and Building 322, I want to
22 talk about the boundary changes that have occurred on
23 Parcel A and why they have occurred.
24 And I want to make certain that the RAB knows
25 that the Navy's objective on the Shipyard is to clean up

Page 68

1 the parcels so they are suitable for transfer and then
2 productive reuse. That is our main objective. That is
3 what we are all about. We want to clean the Shipyard
4 parcels up. We want to transfer them. We'd like to see
5 them get back into their productive reuse.

6 So the parcel boundaries were drawn, based on
7 the information that we knew at the time, to help us
8 with that transfer. And as we learn more about the
9 conditions of the Shipyard, if it seems reasonable to us
10 to change the boundaries of those parcels to help us get
11 this land transferred, then that's exactly what we're
12 going to do.

13 And that's what we have done over here on
14 Parcel A. Got my laser pointer. And you can see the
15 latest change here where we carved out this big area
16 here, over here, and that contains Building 813 and
17 Building 819. That's the sewage pump station and NRDL
18 building.

19 Those buildings in the draft HRA that came out
20 last March, I think, were considered impacted. The 813
21 had a report that a strontium source in some piece of
22 test equipment may have leaked, and RASO wants to go
23 back in there and check it out.

24 Building 819, the sewage pump station, and
25 could have received radioactive waste from some drain

1 square from Parcel A and just taken a little bit more
2 time to transfer Parcel A, or we could have done the
3 survey and any remediation if it had been necessary.
4 And what we chose to do was this survey and remediation
5 if it would have been necessary, but it turns out it
6 wasn't.

7 So we have been working with the EPA. We have
8 been working with the State Department of Health
9 Services to release this building site. It's no longer
10 a building. There's just dirt of what was beneath the
11 building.

12 Then we want to submit the final FOST, and that
13 will have the Building 322 results of all the survey
14 work that we have done.

15 And the final objective's no secret: We want
16 to transfer property, and we'd like to see it put back
17 into productive reuse.

18 Next slide.

19 Now, that's what it looked like a couple of
20 months ago. Building 322, former guard shack, former
21 NRDL instrument storage area or storage building for
22 some of the instruments that the NRDL used had been on
23 Parcel D. We had thought it had been demolished, but
24 what in fact had happened is, they picked it up and
25 moved it over here to Parcel A.

1 lines, especially that have come over here from Parcel C
2 where we had a radium paint shop, okay?

3 So those were taken out. Those are going to
4 need some extra work. We want to transfer Parcel A.
5 That's no secret to anybody. So we take these problem
6 areas out of Parcel A. That's why we do it. We're not
7 trying to hide anything. We're not trying to be
8 devious. We're all about cleaning up the Shipyard and
9 transferring the property so it can go back in the
10 productive reuse.

11 So with that, I want to just start my
12 presentation here, kind of an outline here with
13 objectives. What we have done over here at
14 Building 322, I think over the last couple of months
15 everybody who's been watching this corner have seen the
16 changes that have occurred. The EPA has recently come
17 out and inspected the soil beneath the Building 322
18 concrete slab.

19 I want to talk a bit about the Parcel A Finding
20 of Suitability to Transfer and then the path forward
21 that we are looking at.

22 So the objectives here, we want to document the
23 evaluation of the Building 322 for any radiation
24 impacts. We had the opportunity or we had a choice of
25 whether or not we could have just removed that little

1 Next slide.

2 So what did we do? We did a radiation survey
3 of Building 322. We surveyed the furniture. We
4 surveyed the floor. We surveyed the entire building.
5 Where there was more than one layer of flooring, we
6 surveyed every layer of flooring.

7 We then reviewed those survey results, and we
8 got the okay to demolish the building and then dispose
9 of the building at a regular landfill. It was a regular
10 building, so it went to a regular landfill.

11 Then after the building was gone, we did the
12 concrete slab survey. We evaluated that data, found
13 that it was not contaminated, and we broke it up, and we
14 disposed of the concrete slab.

15 The next thing we went out to do was a
16 footprint survey, and that's the footprint or the soil
17 that was beneath the slab, beneath the concrete slab of
18 the building.

19 Now, there was an independent inspection by the
20 EPA. EPA took their own instruments out, and they did
21 their own survey. And to kind of cut to the chase, no
22 radiation above background.

23 There's the site as it is today. The
24 building's demolished, and the surveys are complete.

25 EPA performed a field inspection on June 30th.

1 These are the instruments they used. They evaluated
 2 that area there beneath the slab -- and this comes
 3 from -- actually, it's an e-mail that was sent to us by
 4 the EPA representative, found that everything looked
 5 like it was within background, found no evidence of any
 6 fissionable products.
 7 Next slide.
 8 Concluded that there's no radiological
 9 contamination impacting the environment at Hunters Point
 10 Shipyard due to the activities previously conducted at
 11 the Building 322. Concluded that further radiological
 12 investigation wasn't warranted and that the site of
 13 former Building 322 would be eligible for release in
 14 unrestricted use.
 15 Now, we still have one more thing to do, and
 16 that's put our own report together and give it to review
 17 for the California Department of Health Services. And
 18 we'll get the release letters, and those are going to be
 19 appended to the final FOST.
 20 So we're going to finalize that survey report
 21 after RASO completes their review, Laurie Lowman
 22 completes her review.
 23 We're going to allow regulatory review of the
 24 survey report. We don't see any problem with obtaining
 25 the Department of Health Services' release of the

Page 73

1 building -- the former building, the dirt beneath the
 2 building.
 3 We're going to identify any unresolved comments
 4 with the regulatory agencies.
 5 We're going to prepare a draft final FOST.
 6 This is Revision 3. It's going to be virtually
 7 identical to the FOST that went out last time except it
 8 will have a description of the work we did on building --
 9 excuse me -- Building 322, and it will also have the
 10 letters for free release like we have in the FOST now
 11 for other buildings that have been released by DHS. It
 12 will have a 30-day comment period.
 13 Next slide.
 14 I'm almost finished.
 15 MS. OLIVA: End of slide.
 16 MR. BROOKS: Oh, I am finished.
 17 MS. PENDERGRASS: Okay. So are you finished
 18 with your presentation?
 19 MR. BROOKS: I am.
 20 MS. PENDERGRASS: All right. So let's start --
 21 MR. BROOKS: And I'm not accepting any
 22 questions.
 23 MS. PENDERGRASS: I beg to differ with you.
 24 We'll start with Miss Oliva, and we want to --
 25 MS. OLIVA: Thank you.

Page 74

1 MS. PENDERGRASS: -- Miss Pierce and then on to
 2 Dr. Sumchai.
 3 MS. OLIVA: Mr. Brooks, we spoke about this
 4 before when you were going to get me all this stuff.
 5 Anyway, the building itself you used gamma
 6 scintillation probe?
 7 MR. BROOKS: No. This is the EPA.
 8 MS. OLIVA: Okay. What did you use to
 9 determine there was no fission products in the wood and
 10 the actual building? Not the slab, 'cause the slab was
 11 probably new, since we moved the building.
 12 MR. BROOKS: We used the same device for the
 13 entire survey.
 14 MS. OLIVA: And when will those --? When
 15 will -- When can I see those?
 16 MR. BROOKS: When will that report be out?
 17 MS. OLIVA: Yes.
 18 MR. BROOKS: I believe that report is due out
 19 Tuesday, this Tuesday.
 20 MS. OLIVA: And how can I get a copy of that?
 21 MR. BROOKS: You need only ask.
 22 MS. OLIVA: Okay. I --
 23 MS. PENDERGRASS: Great.
 24 MS. OLIVA: The other question I have is --
 25 MS. PENDERGRASS: We said one question at a

Page 75

1 time.
 2 MS. OLIVA: Oh, can I just ask him what they
 3 did with the building?
 4 MS. PENDERGRASS: Well, if everybody --
 5 MR. BROOKS: I said in my presentation we took
 6 it to the landslide.
 7 MS. OLIVA: You took it to Parcel E?
 8 MS. BROWNELL: No, no, no, no.
 9 MS. PIERCE: Yeah, of course.
 10 MS. OLIVA: Did you really?
 11 MR. ATTENDEE: No, no.
 12 MR. BROOKS: A former landfill.
 13 MS. OLIVA: Okay. Where did you take it?
 14 MR. BROOKS: I'm not sure of the landfill.
 15 It's a municipal landfill.
 16 MS. OLIVA: In the county?
 17 MR. BROOKS: I'm not sure. I'm not sure.
 18 MS. OLIVA: You should know those things.
 19 MR. BROOKS: I'm not sure.
 20 MS. OLIVA: Okay.
 21 MR. BROOKS: It's construction waste. I don't
 22 know where it went.
 23 MS. PIERCE: You're going to love this one.
 24 This says that the site -- the former
 25 Building 322 is eligible for release.

Page 76

1 However, if I understand the whole
2 presentation, there are two former sites of former
3 Building 322. So how are we going to be able to track
4 this to make sure that when you get to the original
5 former site of Building 322 that we know what we want
6 you to look for?

7 MR. BROOKS: It's in the HRA.

8 MS. PIERCE: What's it called?

9 MR. BROOKS: Former site of Building 322

10 MS. PIERCE: "Former site of Building 322."

11 Okay. You -- This is --

12 MR. BROOKS: It's in Parcel D. It has a
13 recommended survey associated with that building site.

14 MS. PIERCE: But I would ask EPA to clarify
15 this and say, "former site in Parcel A of Building 322."

16 MR. BROOKS: Well, this is just my
17 presentation.

18 MS. PIERCE: Okay.

19 MR. BROOKS: So you can't hold the EPA to
20 correct my presentation.

21 MS. PIERCE: No. I can ask them, 'cause they
22 are here, so that we can be sure --

23 MR. BROOKS: But I wrote that.

24 MS. PENDERGRASS: Mr. Brooks, stop being
25 defensive. Stop being defensive.

Page 77

1 joking when you said that Parcel A is now down to
2 50 acres?

3 MR. BROOKS: That was you who said Parcel A is
4 down to 50 acres.

5 DR. SUMCHAI: Oh, so that's not accurate?

6 MR. BROOKS: That was what you said.

7 DR. SUMCHAI: Oh, okay. No, I just wondered if
8 there had been, you know, whittling down more than what
9 was --

10 MR. BROOKS: No, no, no no.

11 DR. SUMCHAI: Okay. All right. I
12 misunderstood that, 'cause I was thinking that if
13 you could whittle it down to 40 acres and add a mule,
14 you could give it to me for what my ancestors were
15 supposed to get after slavery, okay?

16 MS. PENDERGRASS: Okay. Stay on track --

17 DR. SUMCHAI: No. In all seriousness --

18 MS. PENDERGRASS: -- here, Dr. Sumchai. Okay.

19 DR. SUMCHAI: In all seriousness --

20 MS. PENDERGRASS: Okay.

21 DR. SUMCHAI: -- I also have really big
22 concerns about --

23 MR. BROOKS: I know where you can get a mule.

24 DR. SUMCHAI: You're using them to get rid of
25 the weeds, though.

Page 79

1 MS. PIERCE: He's not being defensive. We're
2 having fun.

3 MS. PENDERGRASS: Stop being offensive. Thank
4 you.

5 MS. PIERCE: I resemble that [sic].

6 DR. SUMCHAI: Okay. Well --

7 MS. PENDERGRASS: We can move on.

8 DR. SUMCHAI: Yeah, I got a couple of questions
9 for you. One, you just said in your presentation,
10 Mr. Brooks, that you didn't remediate the building. You
11 demolished it. Okay?

12 MR. BROOKS: Didn't require remediation.

13 DR. SUMCHAI: Why did you demolish the
14 building? Were you hiding evidence? Why did you
15 demolish the building? Tell me that.

16 MR. BROOKS: Okay. Seriously, the reason the
17 building had to come down was because we had to survey
18 the slab.

19 DR. SUMCHAI: Okay. All right.

20 MR. BROOKS: And we had to survey the soil
21 beneath the slab.

22 DR. SUMCHAI: Okay. I understand that. Okay.

23 MR. BROOKS: So that stuff had to go.

24 DR. SUMCHAI: Okay. Now, the other thing is
25 that yesterday you in the meeting joked -- were you

Page 78

1 MS. PENDERGRASS: Can we stay on track?

2 DR. SUMCHAI: So, you know, the background
3 count of 16,700 counts per minute and 18,300 counts per
4 minute, I have some concerns about that because I've
5 read where, you know, counts greater than 10,000 are
6 significant other places.

7 What does this mean in relationship to the
8 counts per minute at San Francisco beach?

9 And then the last question is about --

10 MR. BROOKS: One question. One question.

11 MS. PENDERGRASS: Wait, wait, wait, wait.

12 Let's just answer that one first.

13 Can you --? Did you get the question?

14 MR. BROOKS: I need a drink of water here.

15 MS. PENDERGRASS: Did you get that question,
16 Mr. Brooks?

17 MR. BROOKS: Yeah. What do the counts mean.

18 The counts meant that those counts represent
19 background.

20 DR. SUMCHAI: At Hunters Point Shipyard?

21 MR. BROOKS: No. Over at Building 322, former
22 Building 322 site.

23 DR. SUMCHAI: In some grassy area that you used
24 as a reference?

25 MR. BROOKS: You know, we're really going to

Page 80

1 I have to review where the background readings were taken
 2 and stuff like that.
 3 DR. SUMCHAI: You know --
 4 MR. BROOKS: But it's in the area, Dr. Sumchai.
 5 DR. SUMCHAI: I know.
 6 MR. BROOKS: When you do the radio radiation
 7 survey, you choose an area that's uncontaminated. You
 8 get a good background, and then you compare your
 9 readings from the site that you're investigating.
 10 DR. SUMCHAI: But, you know, like background
 11 level in Denver, Colorado, of 10,000 counts per minute
 12 in the study I was looking at was considered high.
 13 MR. BROOKS: Yes.
 14 DR. SUMCHAI: So, you know, is this
 15 background --
 16 MR. BROOKS: As we discussed --
 17 DR. SUMCHAI: -- it's Hunters Point Shipyard
 18 background?
 19 MR. BROOKS: As we discussed with concrete, for
 20 example, if you get a different mix of concrete, the
 21 background can change in that concrete due to the
 22 content of the sand and gravel because of the natural
 23 radioactive materials that occur in the earth's crust.
 24 MS. PENDERGRASS: But wasn't the question,
 25 though, what did you base your --?

1 DR. SUMCHAI: You did. You did.
 2 MR. BROOKS: No. I reviewed the e-mail.
 3 DR. SUMCHAI: Okay. All right.
 4 MR. BROOKS: I'm assuming that there's a
 5 background level of gamma radiation. I don't know. I
 6 assume there is.
 7 DR. SUMCHAI: Okay.
 8 MS. PENDERGRASS: So I hear -- there are two
 9 questions that you were given, assuming -- and I think.
 10 Is there going to be some follow-up to that, or how are
 11 we going to handle that to have a definitive response?
 12 MR. BROOKS: The survey report will be issued
 13 this Tuesday.
 14 DR. SUMCHAI: Okay.
 15 MR. BROOKS: Would you like a copy?
 16 MS. PIERCE: Yes.
 17 DR. SUMCHAI: Yes. Georgia and I will review
 18 it.
 19 MS. PENDERGRASS: All right. We have a
 20 question over here with Mr. Campbell. Is there any
 21 other question over there? Okay.
 22 Miss Bushnell, you didn't have a question?
 23 MR. CAMPBELL: Mr. Brooks --
 24 MR. BROOKS: Yes, Mr. Campbell.
 25 MR. CAMPBELL: -- Dr. Sumchai had a very good

1 DR. SUMCHAI: Yeah, what is the background at
 2 San Francisco beach, for example, or downtown San
 3 Francisco?
 4 MR. BROOKS: I don't know anything about
 5 downtown San Francisco or the beach.
 6 MS. PENDERGRASS: So is that in the background
 7 report?
 8 DR. SUMCHAI: Okay. All right. Background at
 9 Hunters Point Shipyard is a big nebulous void to me. As
 10 long as I've chaired this committee, it remains a big
 11 nebulous void unless you can translate 18,300 counts per
 12 minute or 20,000 counts per minute at Hunters Point
 13 Shipyard into something that would -- you know,
 14 confidence says it's not going to hurt people; it just
 15 sounds suspicious.
 16 I mean, to someone who's not trained --
 17 MR. BROOKS: Well --
 18 DR. SUMCHAI: -- 20,000 counts per minute
 19 sounds like a lot of particle radiation.
 20 And then my final question, did you detect any
 21 gamma waves at all? You said here, "no evidence of
 22 fissionable products." Was there any gamma activity
 23 that was detected?
 24 MR. BROOKS: I would have to review the report
 25 and --

1 point. Maybe we can find out what the background
 2 standard is supposed to be for this space and in regards
 3 to other surrounding areas.
 4 MR. BROOKS: Okay. The background level does
 5 change across the base. Depends on whether you're
 6 looking at soil or asphalt or concrete.
 7 MS. PENDERGRASS: Okay, but they are looking
 8 for --
 9 MR. CAMPBELL: Right.
 10 MR. BROOKS: -- the changes.
 11 MR. CAMPBELL: Yeah, we understand that you're
 12 going to get a higher reading on concrete and things
 13 like that. But we want a general rule of thumb on the
 14 background, naturally occurring.
 15 MR. BROOKS: I'll see if the experts believe
 16 that that's an accurate way to portray background. From
 17 what I've heard, I don't think so. Perhaps a range.
 18 MR. CAMPBELL: Yeah, maybe a range with certain
 19 identifiable markers and a matrix. I think that can be
 20 understood. I, you know --
 21 MS. PENDERGRASS: So is that an action item I
 22 hear that we're adding?
 23 MS. PIERCE: Please. Yes, please.
 24 MR. CAMPBELL: Thank you.
 25 DR. SUMCHAI: And some San Francisco reference.

1 MS. PENDERGRASS: Okay. Wait a minute. Wait a
 2 minute. So I hear an action item of reference --
 3 DR. SUMCHAI: Right.
 4 MS. PENDERGRASS: -- background --
 5 MR. CAMPBELL: Right.
 6 MS. PENDERGRASS: -- information as it relates
 7 to somewhere in San Francisco that's identifiable.
 8 MR. BROOKS: We can --
 9 MS. PENDERGRASS: Mr. Brooks, can you take that
 10 on?
 11 MR. BROOKS: We can provide a range of
 12 background readings on the Shipyard.
 13 MS. PENDERGRASS: Okay.
 14 MR. BROOKS: We don't really have access to all
 15 the data that may have been collected within the city of
 16 San Francisco.
 17 MS. PENDERGRASS: Oh, we just kind of like to
 18 keep it as local as possible.
 19 MR. BROOKS: But I can do it for the Shipyard
 20 based on the work our contractors have done.
 21 DR. SUMCHAI: And in the history of mankind,
 22 someone in the City has an idea of radiation
 23 backgrounds.
 24 MR. CAMPBELL: Yeah, I would think the EPA
 25 would have some data possibly.

Page 85

1 MS. PIERCE: Yeah, that's what I was thinking.
 2 MR. BROOKS: We could ask EPA if they have such
 3 information.
 4 MS. PENDERGRASS: Mr. Work, does that sound
 5 like we can add you to this action item?
 6 MR. WORK: Yes, you can.
 7 MR. CAMPBELL: Thank you.
 8 MS. PENDERGRASS: Very fine. So I will trust
 9 that you and Mr. Brooks will coordinate your action item
 10 response for next month?
 11 MR. BROOKS: We shall.
 12 MS. PENDERGRASS: Thank you so much.
 13 Are there any other questions of this
 14 presentation? which was so nicely done.
 15 MS. PIERCE: Thank you.
 16 (Applause.)
 17 MS. PENDERGRASS: All right.
 18 MR. BROOKS: Thank you, everyone.
 19 MS. PENDERGRASS: All right. Are there any
 20 questions from the audience tonight about anything that
 21 has transpired at this meeting today?
 22 MR. HANIF: Questions?
 23 MS. PENDERGRASS: Any questions? Yes?
 24 MR. HANIF: No. Just . . .
 25 MS. PENDERGRASS: Okay.

Page 86

1 Any future agenda topics that we might need to
 2 add? Dr. Sumchai has added one, but it has no definite
 3 date at this point. Was there any other agenda items?
 4 DR. SUMCHAI: Also --
 5 MS. PENDERGRASS: Mr. Hanif.
 6 MR. HANIF: Not more agenda items, but more of
 7 a -- not more of a agenda item. More of an -- I guess,
 8 an offer to the RAB.
 9 MS. PENDERGRASS: Certainly, Mr. Hanif. Can
 10 you do that?
 11 MR. HANIF: We're getting ready to run a
 12 hazardous waste training program starting in September.
 13 At the end of that program, actually, I'd like to take
 14 the participants of it, since they've gone through the
 15 training --
 16 MS. PENDERGRASS: Slow down.
 17 MR. HANIF: On September 1st, we are going to
 18 begin to run our hazardous waste training program.
 19 It'll have radiation training as well.
 20 And at the end of it, I'd like to offer to the
 21 RAB for those who are interested an option to have some
 22 of the graduates from that class actually do an
 23 informational on some of the terminology that's utilized
 24 here at the RAB, like LEL, UFL [sic], LE- -- you know --
 25 MS. PENDERGRASS: Whatever.

Page 87

1 MR. HANIF: -- all that type of stuff.
 2 MS. PENDERGRASS: Sounds great.
 3 MR. HANIF: So anyone's interested in that,
 4 I'll actually have dates coming up for that, and I'll
 5 also be announcing dates for the orientation for that
 6 actual training itself.
 7 MS. PENDERGRASS: All right. Okay.
 8 DR. SUMCHAI: We had also extended an
 9 invitation to Gerald Vincent from Army Corps of
 10 Engineers to address the RAB, and he can't do it in
 11 August. So that is an open invitation, and I will
 12 follow up with him to see when he's available about
 13 FUDS.
 14 MS. PENDERGRASS: Mr. Capobres?
 15 MR. CAPOBRES: Nervous. Just wanted to make
 16 the announcement to the RAB that this is my last RAB
 17 meeting representing the Redevelopment Agency. I'm
 18 going to be leaving the Redevelopment Agency as of
 19 August 13th.
 20 MS. PENDERGRASS: Oh, we wouldn't have anyone
 21 else to pick on.
 22 MR. CAPOBRES: Well, you will have someone to
 23 pick on. I'm sure of that. So I'll be in direct
 24 contact with the community co-chair, Mr. Campbell, and
 25 the Navy and communicating through Miss Brownell as to

Page 88

1 who your new contact person will be on this.
2 But I wanted to say I enjoyed the three and a
3 half or so years here, and I look forward to the fruits
4 of your labor, and thank you for kind of keeping the
5 pressure on and making sure we all do the right thing.
6 So thanks a lot.
7 MS. PENDERGRASS: Might we ask where you're
8 going?
9 (Applause.)
10 MR. CAPOBRES: I'm going back to the dark side
11 and joining the private sector again, Shea Homes,
12 Northern California. And the decision is really
13 primarily a personal decision. My family is changing,
14 and I'm expecting a baby girl in four and a half months
15 or five months or so. So --
16 (Applause.)
17 MS. PENDERGRASS: You're going to get as far
18 away from the Shipyard as possible.
19 Okay. Any other questions or comments? Would
20 you like to have a closing comment?
21 DR. SUMCHAI: I wanted to emphasize how
22 important a resource to the community the Anna B. Waden
23 Library is, and I think that the Navy should make every
24 effort to make sure that its library of documents,
25 public documents, is as thoroughly stocked as the main

Page 89

1 library, as is the Community, you know, Window on the
2 Shipyard.
3 There is just no reason why we can't be able to
4 go to the community library and find a current document
5 that's important, especially if it is available at off
6 site. I mean, there just is no justification for that.
7 MR. BROOKS: Oh, I need to find my switch. But
8 I'll just say it without a microphone. They don't have
9 the space. They do not have the space. We would
10 overwhelm the library. They have given us the space
11 they have given us. And if you want to look at the full
12 record, you have to go down to the main library.
13 MS. PENDERGRASS: So that's something you'd
14 have to talk with the local officials around the library
15 about.
16 MR. BROOKS: I mean, do you remember the --
17 MS. PENDERGRASS: Okay.
18 MR. BROOKS: -- the report you said had to be
19 transferred by U-Haul? That's just one.
20 DR. SUMCHAI: Okay.
21 MS. PENDERGRASS: All right. We have a closing
22 comment from Mr. Campbell.
23 I'm sorry. We have one more comment from
24 Mr. Smith.
25 MR. SMITH: I could suggest that you could --

Page 90

1 you put these records on CD and make those available,
2 and that way you take up minimal amount of space and
3 have a complete copy.
4 MR. BROOKS: For the stuff we have on CD,
5 that's a great suggestion, Clifton, and I think, yeah,
6 we'll take that on, 'cause that is -- that's easy for us
7 to do. Like you say, it takes up very little space.
8 I know some people don't have the computers and
9 the software and stuff --
10 MS. PENDERGRASS: But the library does.
11 MR. CAMPBELL: The library does.
12 MS. PENDERGRASS: But the library does.
13 MR. BROOKS: They do?
14 MR. CAMPBELL: Yeah.
15 MR. BROOKS: Okay, yeah. That's a terrific
16 idea.
17 MS. PENDERGRASS: Thank you, Mr. Smith.
18 MR. CAMPBELL: My only closing comment is,
19 there's going to be a lot more concentration on the
20 subcommittees and recommendations coming out of there.
21 So we're asking all of you to participate in the
22 subcommittees. Thank you.
23 MS. PENDERGRASS: All right. We are adjourned.
24 (Off record at 7:48 p.m., 7/22/04.)
25 ---oOo---

Page 91

CERTIFICATE OF REPORTER

I, CHRISTINE M. NICCOLI, Certified Shorthand
Reporter of the State of California, do hereby certify
that the foregoing meeting was reported by me
stenographically to the best of my ability at the time
and place aforementioned.

IN WITNESS WHEREOF I have hereunto set my hand
this 6th day of August, 2004

Christine M. Niccoli

CHRISTINE M. NICCOLI, C.S.R. NO. 4569

Page 92