



FINAL NAVAL AIR STATION ALAMEDA Restoration Advisory Board (RAB) Meeting Minutes

www.bracpmo.navy.mil

Building 1, Suite 140, Community Conference Center
Alameda Point
Alameda, California

December 3, 2009

The following participants attended the meeting:

Co-Chairs:

Derek Robinson Base Realignment and Closure (BRAC) Program Management Office (PMO) West, BRAC Environmental Coordinator (BEC), Navy Co-chair

Dale Smith Restoration Advisory Board (RAB) Community Co-chair

Attendees:

Richard Bangert Community member
Anna-Marie Cook U.S. Environmental Protection Agency (EPA)
Irene Dieter Community member
Stuart Freeman Community member
Melinda Garvey EPA
Catherine Haran Navy Remedial Project Manager (RPM)
Fred Hoffman RAB
George Humphreys RAB
Carolyn Hunter ChaduxTt
Joan Konrad RAB
James Leach RAB
Gretchen Lipow Community member
Dot Lofstrom California Environmental Protection Agency Department of Toxic Substances Control (DTSC)

Frank Matarrese	Alameda City Council
Bill McGinnis	Navy Lead RPM
John McMillan	Shaw Environmental, Inc. (Shaw)
Curtis Moss	Navy Project Manager (PM)
Marsha Pendergrass	RAB Facilitator
Peter Russell	Alameda Reuse and Redevelopment Authority (ARRA)
Bill Smith	Community member
Radhika Sreenivasan	ChaduxTt
Jean Sweeney	RAB
Jim Sweeney	RAB
Michael John Torrey	RAB
John West	San Francisco Bay Regional Water Quality Control Board (Water Board)

The meeting agenda is provided as Attachment A.

MEETING SUMMARY

Derek Robinson (Navy co-chair) called the December 2009 Former Naval Air Station Alameda (Alameda Point) RAB meeting to order at 6:35 p.m.

Mr. Robinson introduced Bill McGinnis as the new Navy Lead Remedial Project Manager (RPM) for Alameda Point. He added that Mr. McGinnis is an engineer and will be an asset to the team.

I. Approval of November 2009 RAB Meeting Minutes

Marsha Pendergrass (RAB facilitator) asked for comments on the November 2009 RAB meeting minutes. RAB members provided comments, which will be incorporated into the final set of minutes for November 2009.

The following comments were provided by George Humphreys (RAB):

- Page 1 of 13, list of attendees, the name “Susan Gallegan” will be corrected to, “Susan Galleymore.” A global change will be made in the minutes to correct Ms. Galleymore’s name.
- Page 2 of 13, meeting summary, second paragraph, “...and is looking forward to working the RAB” will be revised to, “...and is looking forward to working with the RAB.”

- Page 7 of 13, section III, second paragraph, first sentence, “Mr. Humphreys said that he is concerned about the large storm waves that carry the lead shot to the offshore side of Area 5” will be corrected to, “Mr. Humphreys said that he is concerned that the large storm waves might carry the lead shot to the offshore side of Area 5.”
- Page 7 of 13, section III, third paragraph, fifth sentence, “...and bringing it up to 8 feet above seal level” will be corrected to “and bringing it up to 8 feet above sea level.”
- Page 8 of 13, section III, first paragraph, sixth sentence, “He said any degradation products produced during situ chemical oxidation (ISCO)...” will be revised to, “He said any degradation products produced during in situ chemical oxidation (ISCO)...”
- Page 9 of 13, section IV, third paragraph, second sentence, “...the influent and effluent valves after...” will be corrected to, “...the influent and effluent values after...”
- Page 11 of 13, section VI, third paragraph, third sentence, “...the waste must contain radioactive material” will be revised to, “...the waste might contain radioactive material.”

The following comments were provided by Fred Hoffman (RAB):

- Page 8 of 13, section III, second paragraph, twelfth sentence, “...and Navy procedures and policy before for monitoring...,” will be revised to “...and Navy procedures and policy before monitoring....”

After discussion on the sentence, Mr. Hoffman reminded the Navy that time sensitive data that are not taken will be lost forever. Mr. Robinson responded that the Navy did not feel that the data were necessary and that, according to Mr. Murray Einarson (AMEC Earth & Environmental); elevated concentrations of the plume contaminants were not reaching San Francisco Bay. Mr. Hoffman requested Mr. Robinson to provide him with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) guidelines and Navy policy, which states that the groundwater plume cannot be monitored before a sampling and analysis plan (SAP) for the work is finalized. Mr. Robinson agreed to provide the CERCLA guidelines and Navy policies and procedures that require an approved sampling plan and laboratory for any sampling, except for an emergency response.

The following comments were provided by Dale Smith (RAB Community co-chair):

- Pages 5 of 13, section II, third paragraph, first sentence, “Mr. Robinson said that the television show *Trauma* was filmed on the runway...” will be corrected to, “Mr. Robinson said that the television show *Trauma* wanted to film on the runway....”

- Pages 5 of 13, section II, fourth paragraph, fourth sentence, “He said that the work was complete in a day...” will be revised to, “He said that the work was completed in a day....”

The following comments were provided by Peter Russell (Alameda Reuse and Redevelopment Authority [ARRA]):

- Page 6 of 13, section III, second paragraph, seventh sentence from the bottom, the numbered bullets will be revised to, “(1) to evaluate but not to rule out the presence of drums that might fail in the future, which would cause groundwater contamination not observable at present, and (2) to evaluate the volume of the waste.”
- Page 7 of 13, section III, third paragraph, last line, “Dr. Russell confirmed tests for dioxins and furans are included in the ROD” will be corrected to, “Dr. Russell confirmed tests for dioxins and furans are included in the work plan for pre-design sampling and investigation.”

The November 2009 RAB meeting minutes were approved with the above modifications.

II. Co-Chair Announcements

Ms. Smith said that San Francisco Bay Conservation and Development Commission (BCDC) is holding a review board meeting concerning sea level rise at 6.30 p.m. on December 7, 2009, at the BCDC conference room in San Francisco (Attachment B-1). Ms. Smith suggested that interested RAB members should attend the meeting.

Mr. Robinson reviewed the action items. (See action item list at the end of these minutes.)

Action Items 1 through 5 – Pending.

Action Item 6 – The status of the action item was changed from completed to pending. The RAB will set up a technical meeting and the Navy and contractor will be invited.

Action Item 9 – Complete. The RAB comment letter on the Site 2 Proposed Plan (PP) is included as an attachment in the final October meeting minutes. Mr. Robinson added that the RAB comment letter on Site 1 will be included in the December meeting minutes (Attachment B-2).

Action Items 10 through 12 – Pending.

Regarding Action Item 12, Mr. Robinson said that the City of Alameda would typically have cleaned the storm drains already. He added that Doug Delong (Navy Caretaker Site Office) has contacted the city to find out when the last cleaning occurred. Mr. Robinson

said that the Navy may clean the drains if the city has not already done so. Mr. Humphreys requested a report or update after the storm drain cleanup work.

Action Item 13 – Completed. Original plume map of Site 27 is provided as a handout (Attachment B-3).

Ms. Smith said that the RAB received a document titled “Fact Sheet for Sites 6, 7, 8 and 16.” The fact sheet states that the Navy will provide a presentation before the comments due date, which is December 18, 2009. During the agenda setting for the December meeting, Ms. Smith asked if Mr. Robinson could give an update on the document. At the December meeting, Mr. Robinson apologized and said that he is not able to make a presentation at this meeting.

III. Community Co-Chair Elections

Marsha Pendergrass (RAB Facilitator) noted that Ms. Smith was nominated for the RAB community co-chair and Mr. Humphreys was nominated for the vice RAB community co-chair. Ms. Pendergrass called for a vote on the nominations. The RAB voted Ms. Smith as the community co-chair and Mr. Humphreys as the vice community co-chair.

IV. BRAC Cleanup Team Update

Anna-Marie Cook (U.S. Environmental Protection Agency [EPA]) introduced Malinda Garvi as a new employee at EPA and added that Ms. Garvi would be working on the Alameda project.

Ms. Cook distributed her end-of-year progress update handout (Attachment B-4). She said that the first pie chart shows the status of CERCLA projects (*Status of Alameda Point Investigation and Cleanup – December 2009*), while the other pie-chart shows the designated reuse of sites from the record of decision (ROD) (*Alameda Point Designated Reuse – December 2009*). Ms. Cook noted that the table (*Alameda Point Investigation, Cleanup and Transfer – December 2009*) is a summary of both pie charts.

In the CERCLA projects pie chart, Ms. Cook indicated that the 510 acres undergoing site investigation (SI) had not changed from last year. She added that the majority of this area is the federal to federal transfer parcel, which has not been a priority. The revised SI work plan is currently being reviewed by the agencies, and progress on these parcels should be made in the next year. Ms. Cook added that approximately 400 acres of the federal to federal transfer parcel will be taken out of the CERCLA process after the SI and will be ready for transfer with no further work. The rest will enter the remedial investigation (RI) phase. Ms. Smith asked if Site 2 is included in these 510 acres. Ms. Cook said Site 2 is in ROD stage and is not included in the SI acreage. Mr. Humphreys said that Mr. deHaan (Alameda City Council) mentioned during a conversation several years ago that the Navy allowed engine oils to drain on the runway. He asked if the runways will be a part of the SI. Ms. Cook agreed and added that areas that show dark staining or that have any history of a release will be investigated and sampled. Based on the results of the sampling, the area will move to cleanup.

Ms. Cook said that compared with 2008, a large area from the ROD table has been moved to remedial design (RD) and remedial action (RA). She added that CERCLA action is complete for approximately 360 acres and sites are ready for transfer and redevelopment. She said that in 2010 a number of other sites will finish the CERCLA cleanup or will enter into the active cleanup phase.

Referring to the reuse pie chart, Ms. Cook indicated that most of the sites at Alameda are being cleaned up to residential or unrestricted use. Mrs. Sweeney asked about the location of the sediment areas. Ms. Cook said that the sediment areas consist of Seaplane Lagoon, Site 24 (pier area), Site 29 (Oakland Inner Harbor), and the western bayside and breakwater beach. Ms. Smith commented that Site 16 groundwater is not being cleaned up to residential levels. Ms. Cook said that the Site 16 groundwater is being cleaned up to the maximum contaminant level (MCL) and is therefore being cleaned up for residential reuse. Ms. Smith said that the RD does not state that cleanup is to MCLs. Ms. Cook said that she will review the RD document to confirm cleanup to MCLs but was certain that the groundwater at Site 16 is being cleaned up to MCL, as stated in the ROD.

Mr. Leach noted that the total acreage in both charts is not the same. Ms. Cook said that the reuse chart includes sites that have gone beyond the ROD; the sites that are either at the SI or feasibility study (FS) stage are not included. Mr. Humphreys asked why there was a difference in acreage for the federal to federal transfer parcel in the two pie charts (510 acres versus 490 acres). After discussion, Ms. Cook said that she will provide a response to Mr. Humphreys based on her spread sheet.

Dot Lofstrom (California Environmental Protection Agency Department of Toxic Substances Control [DTSC]) said that she has accepted a new position within DTSC as a supervisor of the geological service unit. She said that a new staff member from the Berkeley DTSC office will assume her current position at Alameda. The new staff member will attend the February RAB meeting. Ms. Lofstrom said that Mr. Henry Wong (DTSC) will take over the FISCA site.

V. Plume 4-1

Mr. Robinson requested Curtis Moss (Navy) to begin the presentation on Plume 4-1. Mr. Moss distributed the presentation handout (Attachment B-5).

During the review of slide 3, Mrs. Sweeney asked if dense nonaqueous phase liquid (DNAPL) is measured. Mr. Robinsons said that the DNAPL is measured from the source zone, which is contributing to the groundwater contamination in terms of flux change. He added that the mass from the DNAPL zone as well as the response (from the loss or destruction of the mass in the dissolved phase) downgradient is estimated. Mr. Humphreys asked if a cross-section will show a vertical or horizontal plane. Mr. Moss said that a well transect will be shown in vertical plane.

Ms. Lofstrom said that Michelle Dalrymple (geologist at DTSC) initially identified Plume 4-1 as a study area for the Strategic Environmental Research and Development Program (SERDP)

research project. She added that the data from this SERDP research project are not essential to the cleanup but would help in understanding the rationale for DNAPL cleanup in general. She said that it is a collaborative effort and the results can be used to facilitate cleanup.

During review of slide 4, Mrs. Sweeney said that utility lines are close to Atlantic Avenue. Mrs. Sweeney asked if it was safe to complete a well transect there. Mr. Moss said that the Navy will take proper precautions and will work with the city to assure safety.

Mr. Hoffman asked if the source area was the oil/water separator. Mr. Moss said it was not and added the source is a former rail spur 200 feet north of Building 360. Mr. Hoffman asked about the source. Mr. Moss replied that the source is not documented but is assumed to be a solvent release such as trichloroethylene potentially from a railroad car. Mr. Hoffman asked if the Navy is planning in situ chemical oxidation (ISCO) on the DNAPL plume. Mr. Moss said that more data will be collected to update the conceptual site model and the RD will detail the cleanup. Ms. Lofstrom noted that the SERDP research project has nothing to do with the remedy for the plume. Mr. Humphrey asked if treatment will occur simultaneously with the SERDP research project. Mr. Moss said it will not. Mr. Robinson said that the Navy will not be slowing the CERCLA process to await the results from the research project. He added that the result will help evaluate various remedies for the plume for the Record of Decision.

Ms. Smith noted that this investigation will extend 70 feet below ground surface (bgs) to the regional aquitard and that many multiple screen monitoring wells will be installed. She said that it is unclear why the downgradient plume is called a "plume" when it does not show DNAPL. Ms. Cook said the contaminants are in the dissolved phase in the downgradient plume.

VI. Community and RAB Comment Period

Mrs. Sweeney said that the drain pipes are being re-routed at historic Building 400A (IR Site 10) and one pipe that transects the middle of the building north to south will be capped. She added that, according to the Navy contractor, the pipe cannot be removed as it would compromise the integrity of the building. Mrs. Sweeney asked Mr. Robinson why the pipe will be capped rather than removed. Mr. Robinson said that the Navy structural engineer indicated that removing the pipe will damage the building. Mr. Leach asked Mr. Robinson to provide the name and license number of Navy's structural engineer. Mr. Leach said that, as a structural engineer, he could look at the structure drawings and determine within 5 minutes if the floor slab could be cut without damaging the structure.

Mr. Hoffman asked if the Site 1 plume monitoring well locations have been reviewed and approved by the regulatory agencies. Mr. Robinson said that the SAP was viewed and approved by the agencies. Ms. Lofstrom that that the plan is re-visited every year and well locations are re-evaluated. She added that the regulators will be reviewing the SAP in a month.

VII. Meeting Adjournment

The meeting was adjourned at 7:45 p.m. for the annual potluck party.

Action Items

Action Items:	Previous Item #/ Action Item Status/ Action Item Due Date:	Initiated By:	Responsible Person:
1. Request for Presentations: a. Bayport sewer systems and change in the plumes over time.	1./ Pending/ January 7, 2010.	RAB	Mr. Robinson
2. Provide information on the large, submerged, unidentified object and radium-226.	2./ Pending/ January 7, 2010	RAB	Mr. Robinson
3. Provide update on basewide radiological investigation by Radiological Affairs Support Office (RASO) and provide information on the bore, citing activity at the base. Also provide recommendations from the Radiological Assessment Report.	3./ Pending/ January 7, 2010.	RAB	Mr. Robinson
4. Informal discussion on “Methods of RAB communication of remedial work at Alameda to the community.”	4./ Pending/ January 7, 2010	Ms. Konrad	Ms. Lofstrom
5. Provide the RAB with the latest map on the extent of Marsh Crust.	5./ Pending/ January 7, 2010	Ms. Smith	Ms. Lofstrom
6. Schedule technical meeting on Site 27 remedial action and invite the Navy	6./ Pending/ January 7, 2010	Mr. Hoffman	Ms. Smith
7. Include the RAB comment letter on the Site 2 Proposed Plan in the October meeting minutes and provide it as a	9./ Completed/ NA	Ms. Smith	Mr. Robinson

Action Items:	Previous Item #/ Action Item Status/ Action Item Due Date:	Initiated By:	Responsible Person:
handout during the next RAB meeting.			
8. Provide information and map on the Navy ships that were buried at the base.	10./ Pending/ January 7, 2010	Mrs. Sweeney	Mr. Robinson
9. Provide information on any investigations of the firing range near the officer's club.	11./ Pending/ January 7, 2010	Mrs. Sweeney	Mr. Robinson
10. BCT will discuss the possibility of an emergency removal for the lead contamination in the storm drain at the BCT meeting and update the RAB on the discussion.	12./ Pending/ January 7, 2010	Mr. Humphreys	Mr. Robinson and Ms. Cook
11. Provide a map of original plume at Site 27.	13./ Completed/ NA	Mr. Hoffman	Ms. Hurst
12. Discuss placement of the extraction and injection wells within the Site 27 treatment modules with a remedial design engineer.	14./ Pending/ January 7, 2010	Mr. Leach	RAB
13. Provide an update on the Navy's use of concrete in the tern nesting area.	15./ Pending/ January 7, 2010	Ms. Smith	Mr. Robinson
14. Provide a copy of CERCLA guidelines and Navy policy and procedure.	0./ New/ January 7, 2010	Mr. Hoffman	Mr. Robinson

ATTACHMENT A

**NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING AGENDA**

December 3, 2009

(1 page)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

DECEMBER 3, 2009, 6:30 PM

ALAMEDA POINT – BUILDING 1 – SUITE 140

COMMUNITY CONFERENCE ROOM

(FROM PARKING LOT ON W MIDWAY AVE, ENTER THROUGH MIDDLE WING)

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 – 6:45	Approval of Minutes	Ms. Dale Smith
6:45 – 7:00	Co-Chair Announcements	Co-Chairs
7:00 – 7:05	Community Co-Chair Election	RAB
7:05 – 7:15	BCT Update	Anna-Marie Cook
7:15 – 7:45	Plume 4-1	Curtis Moss
7:45	RAB Meeting Adjournment and Holiday Party	

ATTACHMENT B

NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS

- B-1 San Francisco Bay Conservation and Development Commission meeting announcement. Distributed by Dale Smith, RAB Co-Chair (1 page)
- B-2 RAB comment letter on Site 1. Distributed by Derek Robinson, Navy Co-Chair (3 pages)
- B-3 Original plume map of Site 27. Distributed by Derek Robinson, Navy Co-Chair (2 pages)
- B-4 End of the year progress charts. Distributed by Anna Marie Cook, EPA (3 pages)
- B-5 Plume 4-1 presentation handouts. Distributed by Curtis Moss, Navy RPM (3 pages)

ATTACHMENT B-1

**SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION
MEETING ANNOUNCEMENT**

(2 pages)

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

50 California Street • Suite 2600 • San Francisco, California 94111 • (415) 352-3600 • Fax: (415) 352-3606 • www.bcdc.ca.gov

Meeting Notice

Design Review Board

December 7, 2009
BCDC Conference Room
50 California Street, 26th Floor
San Francisco
6:30 p.m.

NOTE: Board members should arrive at 6:00 p.m. for sandwich dinner. For information about the meeting, please call Brad McCrea at (415) 352-3615

Tentative Agenda

1. **Call to Order**
2. **Approval of Draft Minutes for the September 14, October 5 and November 9, 2009 Meetings**
3. **Sea Level Rise Briefing**
(Brad McCrea) [415/352-3615]

The Design Review Board will receive a briefing on the Commission's current planning and regulatory approach to anticipated sea level rise. The briefing will include an update on the currently proposed *San Francisco Bay Plan* amendment concerning climate change, an overview of the Commission's regulatory authority as it relates to sea level rise, and a short presentation on the 2009 Rising Tides International Design Competition, including the winning entries. The public is invited to attend.

4. **Potrero Hills Landfill, Phase II Expansion – Suisun Marsh, Solano County (First Review)**
(Ming Yeung) [415/352-3616]

The Design Review Board will hold a public hearing on a proposal for an approximately 57,000-square-foot public access overlook on the former Solano County Garbage Company landfill site, located approximately 1.3 miles southeast of Suisun City, near Fairfield and Highway 12, along Kildeer Road and Potrero Hills Lane. The proposed overlook would include an approximately 6,000-square-foot parking lot for six cars, bicycle parking, an approximately 1,950-foot-long trail to an overlook area, two viewing stations with seating, signage and a shade structure, and additional benches and trash cans at the site.

5. **Adjournment**



Making San Francisco Bay Better

Questions and Staff Reports. If you have any questions concerning an item on the agenda or would like to receive a staff report related to the item, please contact the staff member whose name and direct phone number are indicated in parentheses at the end of the agenda item.

Access to Meetings. Meeting facilities are accessible to persons with disabilities. If you require special assistance, please contact any staff member prior to the meeting. An interpreter for the deaf will also be made available upon request to the staff at least five days prior to the meeting.

Bagley-Keene Open Meeting Act. As a state agency, the Commission is governed by the Bagley-Keene Open Meeting Act which requires the Commission to (1) publish an agenda at least ten days in advance of any meeting; (2) describe specifically in that agenda the items to be transacted or discussed; and (3) refuse to add an item subsequent to the published agenda. In addition to these general requirements the Bagley-Keene Act includes other specific provisions about how meetings are to be announced and conducted.

ATTACHMENT B-2

RAB COMMENT LETTER ON SITE 1

(3 pages)

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD

Mr. Derek Robinson
Department of the Navy
Base Realignment and Closure, Program Management Office West
1455 Frazee Road
San Diego 92108

November 18, 2009

Re: IR Site 1 Draft Work Plan for Pre-Design Sampling and Investigation

Dear Mr. Robinson,

Thank you for the opportunity to comment on the above document.

We, the RAB, are very pleased to see this project move forward and find the monitoring plan for Site 1 to be appropriate. However, it is difficult for the RAB to assess accurately the adequacy of the Work Plan and the remedies that will be proposed because of the lack of reliable information. With regard to Site 1, the Navy and regulators have made numerous inaccurate and misleading assertions.

Initially, we were told that there was no subgrade radioactivity present in Site 1. Had it not been for the scanning of the material excavated during the exploratory trenching, we would not have learned of the extensive and widespread presence of radium in the soil at Site 1 and Site 32. During our site tour in 2008, the BEC asserted that the absence of any waste materials could be attributed to the prior removal of most or all of the wastes for the expansion of the runway and its deposition in Site 2. When we pursued the matter, it was stated that this was speculation.

We had expressed concern that the contamination plume was flowing out into the beach area and the Bay. We were assured that we would be allowed to walk along the beach and inspect the adjacent shoreline bank for outflows, staining and odors. However, when we were finally granted access to Site 1 on the second scheduled tour in 2008, we found the beach was fenced off and inaccessible. The bank had been covered with pieces of concrete rubble and a chainlink fence erected.

In December 2008 the Navy and AMEC told us that the shoreline would be excavated and sloped back 200 feet. Clean backfill would be brought in to replace the excavated material. It is not obvious from the presentation at the November 2009 RAB meeting that this aspect of the remediation is still being contemplated.

Finally, we were told that a rodent barrier would be placed under the cap to prevent intrusion by ground squirrels and other burrowing animals. Now it is proposed to add two feet of cover, bringing the cover thickness to four feet. Ground squirrels are known to make much deeper holes (up to six feet) and are fond of cavorting among rocks placed on shore slopes. We suggest that someone inspect the infestation of ground squirrels along the banks of Bay Farm Island and the rodent damage that has caused degradation of the Delta levee system.

Specific comments

AMEC should sample under the riprap at the shoreline. The exploratory trench immediately adjacent to the Bay in the waste cell by the firing range berm showed "all RAD contaminated". The riprap was placed on this portion of the shore in early 2008 around the time frame of the first aborted RAB tour of Site 1. At that time we were told that the rubble was derived from demolition of concrete during the storm drain removal/replacement associated with buildings 5 and 400. Concrete debris was also placed there from the removal of the firing range berm, as stated in the Final Time-Critical Removal Action Post-Construction Report IR Sites 1, 2, and 32. At the last RAB meeting it was revealed that the Navy has also been placing riprap in Site 2. These actions were apparently taken without a remedial design, work plan or fill permit. Filling in the sinkhole in the wildlife refuge with debris is another example of this "cowboy" mentality. Concrete rubble placed along the shoreline banks is unlikely to be effective either in preventing the escape of contaminants or the intrusion of Bay waters because of the gaps between the concrete pieces. It has not been shown that these shorelines will be seismically stable with or without this concrete debris. Previous seismic analyses by Foster Wheeler showed large lateral displacements in the event of a design basis earthquake. The slippage occurred 15 or 20 feet below the surface along the interface with the Younger Bay Mud unit. Surface remedies such as riprap or excavating four feet of surface material may not have any appreciable effect on the danger of lateral slippage. It appears that the dual motivations for such undisclosed riprap placements were to dispose of concrete rubble and to preclude sampling access to these potentially contaminated areas. In Site 1 such placement has provided an excuse for telling the consultant, AMEC, not to sample or stabilize the shoreline slope facing the Bay. Note that the excavation and sloping will occur behind the shoreline and riprap, leaving a precarious slender ridge between the shoreline and the backfill.

The Work Plan does not chemically or radioactively characterize the wastes within the waste cells in Area 1A. It appears that the Navy is proceeding with the ostensible remedy of placing a porous soil cover over unknown materials within unlined waste pits adjacent to the Bay.

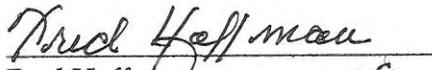
At the November 2009 RAB meeting it was implied by the Navy's consultants that the height of the berm around the landfill might be designed to prevent inundation by a 50 year sea level rise. Estimated rates of sea level rise are increasing as the rates of Arctic Ocean ice cap and glacial melting escalate. If the government can't afford to remedy adequately Site 1 at this time, it is unlikely it will be able to finance such a remedy at future inflated costs. Such future remediation would have to compete with many other projects to protect low-lying areas from inundation. The uncharacterized wastes in sites 1 and 2 are likely to be inundated by future sea level rises and become analogous to mercury-contaminated sediments from the gold rush era, which are hazardous to humans and the ecology but too expensive to remedy. If we posit a future situation in which Site 1 has become inundated by rising sea levels, decision makers seeking a remedy will be confronted with a dilemma. Because the wastes within the cells have never been properly characterized, it will be difficult if not impossible for them to assess the risks. Because the waste cells would be under water, it would be extremely difficult to reliably sample the material.

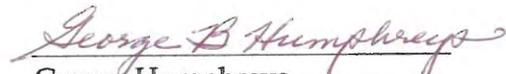
Work on re-characterizing the Site 1 solvent, hydrocarbon and DNAPL plume in Area 1A should begin immediately. The excuse given for meager sampling and delayed remediation since 1992 is that the plume is "slow moving" and did not constitute an immediate risk to the environment. If the sampling

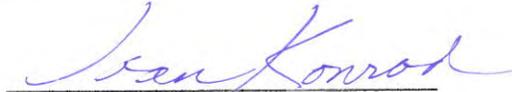
contemplated by the work plan shows that contaminant levels have dropped substantially, that will show that such procrastination has resulted in the release of the contaminants into the Bay during the prolonged neglect since 1992. The elongated shape of the Site 1 contaminant plume indicates that the flow of contaminants is toward and into the Bay. The edge of the plume as depicted is very close to the edge of the Bay, within 30 feet at high tide. It is likely that diurnal tidal influences are causing sea water to flow back into the plume, diluting the contamination. Any decrease over the last 17 years in the concentrations of solvents, hydrocarbons and DNAPLs could be attributable to dilution and discharge, not due to degradation processes. Given that there are no sampling locations within the shoreline area due to riprap and concrete debris, this cannot be definitively disproved.

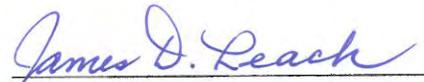
Again, thank you for the opportunity to comment on this document.

Yours

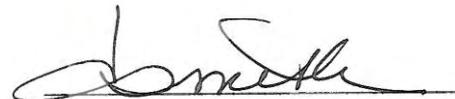

Fred Hoffman

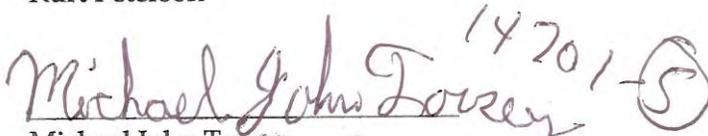

George Humphreys


Joan Konrad


Jim Leach


Kurt Peterson


Dale Smith


Michael John Torrey

- Copies:
- Councilmembers Mataresse and deHaan
 - Peter Russell, Russell Resources
 - Christy Smith, US Fish and Wildlife
 - Kay Goodie, US Fish and Wildlife
 - Anna-Marie Cook, US EPA
 - Dot Lofstrom, Cal EPA DTSC
 - Charles Ridenour, Cal EPA DTSC
 - Jim Polisini, Cal EPA DTSC
 - John West, SF RWQCB

ATTACHMENT B-3
ORIGINAL PLUME MAP OF SITE 27
(2 pages)

**FINAL
REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN**

INSTALLATION RESTORATION SITE 27

**ALAMEDA POINT
ALAMEDA, CALIFORNIA**

**Contract Number N68711-01-D-6009
Task Order 0019
DCN: BATL-6009-0019-0005**

Prepared For:



**Base Realignment and Closure Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310**

Prepared By:

Battelle
The Business of Innovation

**Environmental Restoration Department
505 King Avenue
Columbus, OH 43201**

June 2009

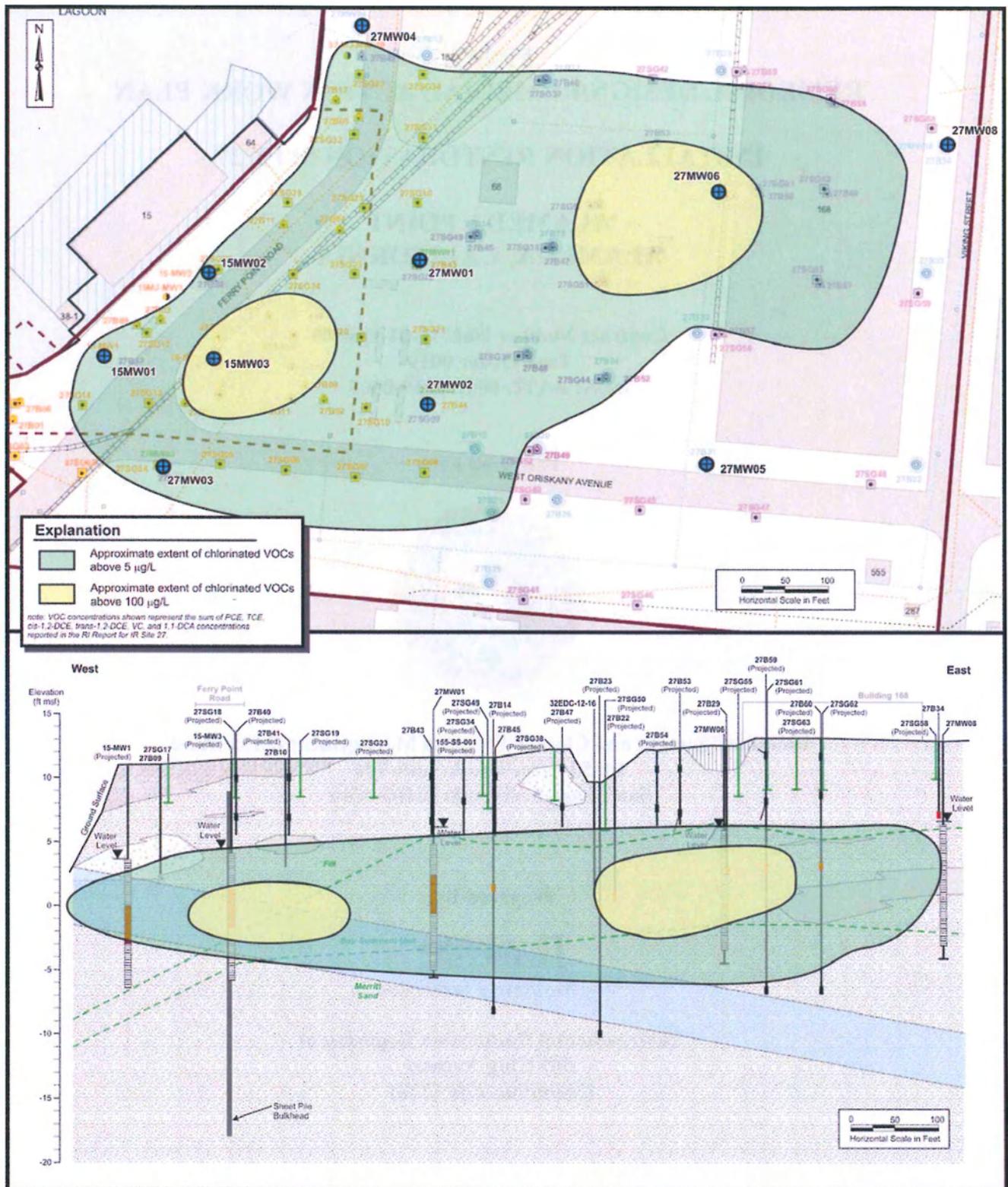


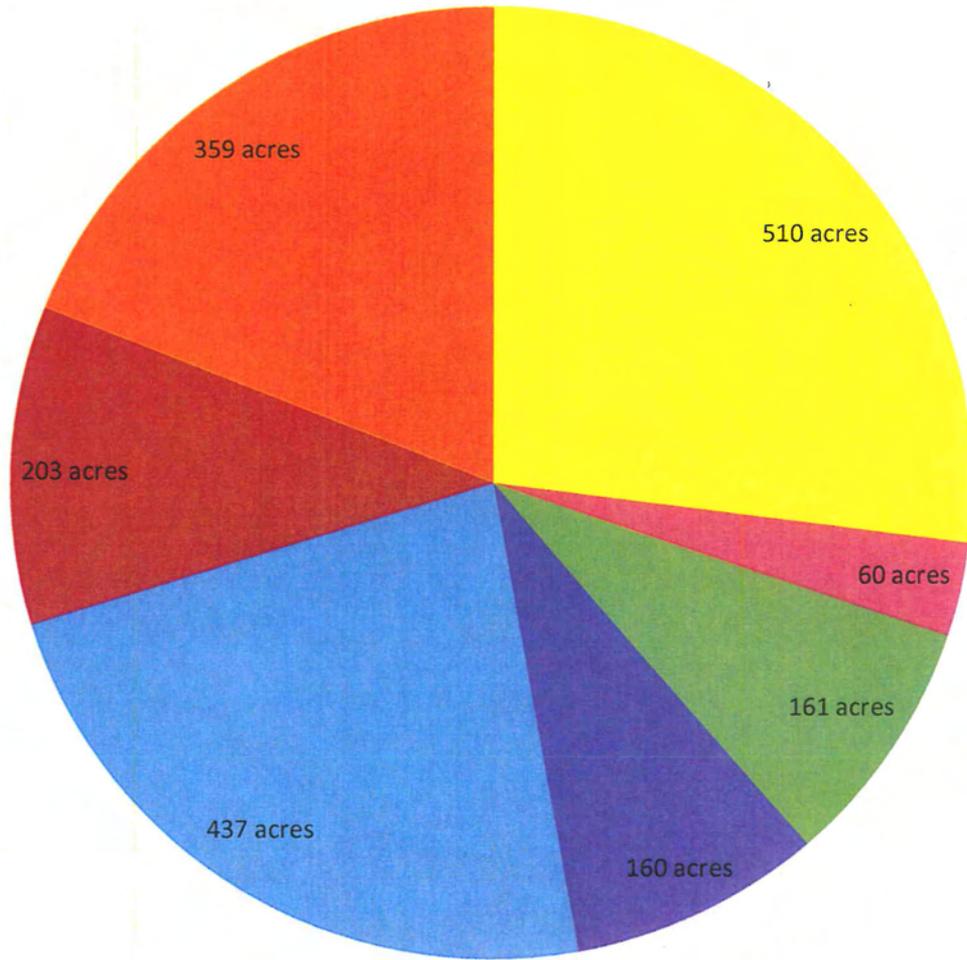
Figure 8. Approximate Lateral and Vertical Extent of Chlorinated VOCs in Groundwater at IR Site 27 Based on RI Data

ATTACHMENT B-4

END OF THE YEAR PROGRESS CHARTS

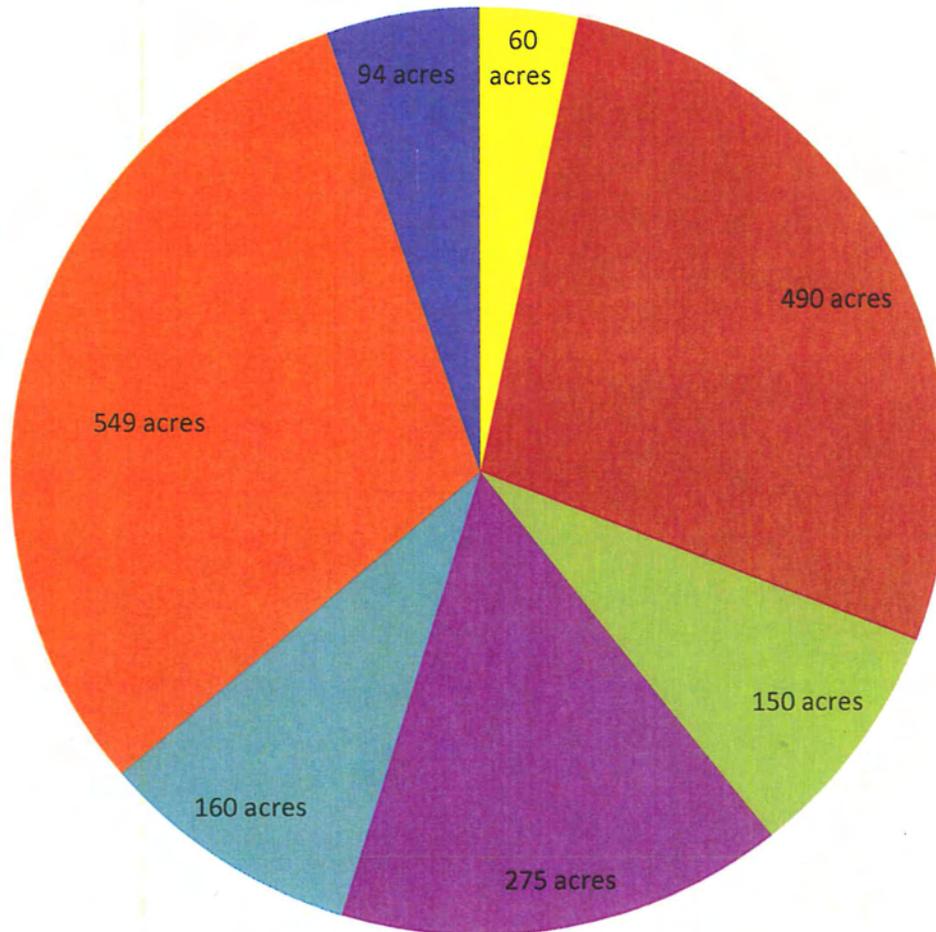
(3 pages)

Status of Alameda Point Investigation and Cleanup - December 2009



- Site Investigations
- Remedial Investigations
- Feasibility Studies
- RODs
- Remedial Design
- Remedial Action Underway
- CERCLA Actions Complete

Alameda Point Designated Reuse-December 2009



- Ready for transfer - residential use
- Undergoing remediation - residential reuse
- Undergoing remediation - restricted reuse
- Sediment ready for transfer - no restrictions
- Sediment undergoing remediation - no restrictions
- Fed-to-Fed Transfer
- Transferred - residential

Alameda Point Investigation, Cleanup and Transfer
December 2009

Site ^a	RI ^s	FSS	RODs	RDs	RA ^s	TCRA Complete	TCRA On going	CERCLA Process Complete	Transferred
TP EDC-12	Site 32	Site 3	Site 2	Site 1	OU-5	Site 1	Site 5 ^d	Site 15	Estuary Park
TP EDC-17		Site 4	Site 24	Site 35	Site 6	Site 2	Site 10	Site 20	PBC-1
TP FED-1A		Site 5 ^b			Site 7	Site 5 ^c		Site 25	Site 31
TP FED-2B		Site 9			Site 8	Site 17		Site 29	
TP FED-2C		Site 10 ^b			Site 14	Site 32		Site 30	
		Site 11			Site 16			Site 31	
		Site 12 ^b			Site 17			WBS & BWB	
		Site 13			Site 26				
		Site 21			Site 27				
		Site 22			Site 28				
		Site 23							
		Site 34							

a Portions of transfer parcels will move into RI for further evaluation

b Draft Final Feasibility Study

c DNAPL removal

d Storm drain radiological removal

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

DNAPL Dense Non-Aqueous Phase Liquid

FS Feasibility Study

OU Operable Unit

PBC Public Benefit Conveyance

PP Proposed Plan

RD/RA Remedial Design/Remedial Action

RI Remedial Investigation

ROD Record of Decision

SI Site Inspection

TCRA Time Critical Removal Action

TP EDC Transfer Parcel Economic Development Conveyance

TP FED Transfer Parcel Federal Agency

WBS & BWB Western Bayside & Breakwater Beach

ATTACHMENT B-5

PLUME 4-1 PRESENTATION HANDOUT

(3 pages)



SERDP/NAVY COLLABORATION

BRAC
PMO

Plume 4-1 study participants:

- Strategic Environmental Research & Development Program
- U. of Florida & Purdue Dept. Environmental Engineering
- U.S. EPA National Risk Management Research Laboratory
- BCT
- Navy

More information can be found at:
<http://www.serdp.org>
<http://www.serdp.org/Research/upload/ER-1613.pdf>
<http://www.epa.gov/ada/about.html>



STUDY OVERVIEW

BRAC
PMO

SERDP chose DNAPL sites across U.S. based on three main requirements:

- 1) Historical data for initial estimate of flux (previous pilot studies)
- 2) Heterogeneous geology/soils (i.e. silt, clay)
- 3) Source zone treatment scheduled within two years to measure plume response

SERDP Objective:

Develop mass flux model to more accurately predict the effects of using aggressive source zone treatment technologies

Potential Navy Benefits...



COMMUNITY IMPACTS

**BRAC
PMO**

Fieldwork anticipated to begin April 2010:

- **Drilling/monitoring well installation**
- **Groundwater recovery system**
- **Minimal traffic impacts**
 - Atlantic Avenue eastbound may be briefly redirected

4



THANK YOU

**BRAC
PMO**

COMMENTS?

QUESTIONS?

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