



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

[www.bracpmo.navy.mil](http://www.bracpmo.navy.mil)

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

February 4, 2010

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:

### RAB Members

Fred Hoffman	Jean Sweeney
George Humphreys	Michael John Torrey
James Leach	

### Community Members

Richard Bangert	Tina Rutsch
Gretchen Lipow	

### Navy Members

Bill McGinnis	Navy Lead Remedial Project Manager (RPM)
June Wheaton	Navy Project Manager (PM)

**City of Alameda and Public Representatives**

Doug Biggs	Alameda Public Collaborative
Frank Matarrese	Alameda City Council
Peter Russell	Alameda Reuse and Redevelopment Authority (ARRA)

**Regulatory Agencies**

Dot Lofstrom	California Environmental Protection Agency Department of Toxic Substances Control (DTSC)
John Kaiser	San Francisco Bay Regional Water Quality Control Board (Water Board)
Xuan-Mai Tran	U.S. Environmental Protection Agency (EPA)
John West	Water Board

**Contractors**

Jamie Eby	CH2M Hill
John McMillan	Shaw Environmental, Inc. (Shaw)
Marsha Pendergrass	RAB Facilitator
Radhika Sreenivasan	ChaduxTt
Tommie Jean Valmassy	ChaduxTt

The meeting agenda is provided as Attachment A.

**MEETING SUMMARY**

Dale Smith (RAB community co-chair) called the February 2010 former Naval Air Station Alameda (Alameda Point) RAB meeting to order at 6:35 p.m.

**I. Approval of January 2010 RAB Meeting Minutes**

Ms. Smith asked for comments on the January 2010 RAB meeting minutes. RAB members provided comments, which will be incorporated into the final set of minutes for January 2010.

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

- Page 3 of 11, section I, first bullet, last line, “...concentration of the plume contaminates...” will be revised to, “...concentration of the plume contaminants....”
- Page 5 of 11, section II, fifth paragraph, last line, “...building’s foundation filter and structural walls” will be corrected to, “...building’s foundation footer and structural walls.”
- Page 7 of 11, section IV, second paragraph, eighth sentence, “...preferentially channeling into the lower permeability areas” will be corrected to, “...preferentially channeling into the higher permeability areas.”
- Page 7 of 11, section IV, second paragraph, ninth sentence, “Contaminant rebound is assumed to be from higher permeability areas...” will be corrected to, “Contaminant rebound is assumed to be from lower permeability areas....”
- Page 7 of 11, section IV, second paragraph, tenth sentence, “...which limits treatment to areas that the injected solution cause quickly come in contact with” will be corrected to, “...which limits treatment to areas where the injected solution comes quickly into contact with the contaminant.”
- Page 7 of 11, section IV, third paragraph, eighth sentence, “...provided with the updated RA” will be corrected to, “...provided with the updated RA work plan.”
- Page 8 of 11, section IV, second paragraph, fourth sentence, “... no work has been done at the site, the line is open and...” will be revised to, “... no work is being done at the site, the line is exposed and....”
- Page 8 of 11, section IV, second paragraph, ninth sentence, “Ms. Smith asked about the soil piles...” will be changed to, “Ms. Smith and Mrs. Sweeney asked about the soil piles....”
- Page 9 of 11, section V, last paragraph, second sentence, “Mr. Robinson said that one side of the barge is 4 feet deep and...” will be revised to, “Mr. Robinson said that one side of the object is 4 feet deep and....”
- Page 10 of 11, action item #2, will be corrected to “Provide information on the large, submerged, unidentified object.”

The following comments were provided by Ms. Smith:

- Page 5 of 11, section II, third paragraph, last sentence, “...three other UST at the site and...” will be corrected to, “...three other USTs at the site and....”

- Page 9 of 11, section V, add the following comment, “Mr. Matarrese said that Upper Northwest Territory is not going to be a golf course and will probably be developed as a wetland.”

The January 2010 RAB meeting minutes were approved with the above modifications.

## II. Co-Chair Announcements

Derek Robinson (Navy co-chair) distributed the *Action Item Responses* (Attachment B-1) and requested that the RAB review the responses. He asked the RAB to let him know if the responses do not answer the questions.

Ms. Smith noted that she received two electronic communications: (1) letter from AMEC regarding Alameda Point, IR Site 1 VOC Groundwater Plume (Attachment B-2), and (2) response from RBF Consulting regarding Alameda Point, Building 400A (included in Attachment B-1). Ms. Smith said that she forwarded the Building 400A letter to James Leach (RAB) for his review. Mr. Leach said he felt a competent job was done by a respected structural engineer. Ms. Smith added that the RAB accepts the response from the structural engineer on Building 400A. Mr. West said that he did not receive the AMEC letter on the Site 1 groundwater plume. Mr. Robinson said that he will e-mail the letter to Mr. West and also attach it to the meeting minutes.

Ms. Smith said that she received only one document in January; the draft final Community Involvement Plan (CIP). The CIP states that the Navy will work on communications with the RAB and on incorporating community comments in the cleanup process at various sites. She added that the document asks the RAB to follow timelines and guidelines for base closure set by the U.S. Environmental Protection Agency (EPA) and Department of Defense (DoD) in 1992. Ms. Smith said that she also received the radiological study report and noted that the responses to regulatory comments on the document are due either March 1 or March 29. The due date depends on whether the regulators accept an expedited review request to accelerate the process.

Ms. Smith shared her list of upcoming documents of 2010 and their due dates for comment.

- Site 1: Investigation report will be submitted in fall 2010.
- Site 2: Dates for the proposed plan (PP) are not known.
- Plume 4-1: Project begins in April 2010 and the report should be available in January 2011.
- Site 24: Dates for the PP are not known.
- Site 27: Project is complete and the final assessment report is due in April or May 2010.

- Site 28: Remedial design (RD)/remedial action work plan (RAWP) document finalization date is not known.
- Site 32: Work plan begins in February and revised remedial investigation (RI)/feasibility study (FS) is due in September 2010.
- Site 34: Dates for the PP are not known.
- Operable Unit (OU)-1: Work plan document is due in September 2010.
- OU-2A: Date for the FS is not known
- OU-2A and 2B data gap sampling: Report date is not known.
- OU-2B: Pilot study (DoD Strategic Environmental Research and Development Program [SERDP] project) report is due in June 2010. Mr. Humphreys asked about the upcoming report, noting the OU-2B remediation work would take 2 years to complete. Ms. Smith said that the report is a preliminary study to evaluate whether in situ chemical oxidation (ISCO) using nano-zero valent iron would expedite the cleanup.
- OU-2C: Revised draft FS is due in April 2010.

Ms. Smith commended the Navy for cleaning up plume 5-3 and added that the RAB would like to see all sites cleaned up to the same level.

Ms. Smith said that she contacted the Veterans Administration (VA) about moving the Bay Trail and received little response. Ms. Smith noted that she also will contact the U.S. Fish and Wildlife Service regarding the Bay Trail. Ms. Smith said that she received a letter from the city about its stance on the Bay Trail. The city stated in its letter that the Bay Trail is necessary. Ms. Smith asked Peter Russell (Alameda Reuse and Redevelopment Authority [ARRA]) if the city received a response from Richard Crow (VA). Mr. Russell said the city did not receive a response. Mr. Robinson said that he has requested that Navy management convey that the community strongly recommends the Bay Trail.

### **III. Expanded Site Inspection Work Plan for Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B and FED-2C**

Mr. Robinson introduced June Wheaton (Navy project manager) to begin the presentation on the Draft Expanded Site Inspection (ESI) Work Plan for Transfer Parcels Economic Development Conveyance (EDC)-12, EDC-17, Federal (FED)-1A, FED-2B and FED-2C. Ms. Wheaton distributed the presentation handout (Attachment B-3).

During the review of Slide 7, Dot Lofstrom (DTSC) asked whether agencies had reviewed the site investigation (SI) reports for EDC-12 and EDC-17. Xuan-Mai Tran (EPA) confirmed that EPA had reviewed the SI. Ms. Wheaton added that recommendations in the Site Inspection (SI) reports for all transfer parcels as well as responses to comments on the draft SI report for FED-

1A, 2B, and 2C identified potential areas for further investigation and this ESI work plan addresses these areas.

Ms. Smith said that FED-1A has never been examined. Ms. Wheaton said that a site inspection was conducted at FED-1A, and the results have been reported in the draft SI report. Ms. Smith noted that the Navy overlooked a 2,000-gallon petroleum tank during the inspection. She added that the SI at FED-1A and FED-2B were not thorough and that no documentation was submitted in regard to the extent of the investigations at the two sites. Ms. Wheaton said that the Navy is planning additional sampling at some areas. She added that the additional sampling will fill data gaps. Mr. Robinson requested that Ms. Smith provide additional comments on the ESI work plan. He added that the comment period has been extended by 2 weeks for the RAB. Jean Sweeney (RAB member) stated that Ms. Smith said she suspects there are more fuel tanks near the Least Tern sanctuary. Ms. Wheaton said historical records showed that it was a 500-gallon tank that was removed and it was in a larger vault that also contained a burner. She added that the tank was removed in 2005 and the Navy is not aware of any other underground storage tanks (USTs) in that area. Ms. Wheaton requested that Ms. Smith provide any information she may have that indicates there may be more suspected tanks at that location. Ms. Smith noted that observations that she made while walking through this area that indicate potential USTs were the presence of similar vault structures that the removed UST was in and staining. Bill McGinnis (Navy lead remedial project manager) said that the site will be visually inspected to evaluate these vault structures. Ms. Smith also noted that there is a major wetland in FED-1A.

Ms. Smith said that Jim Polisini (DTSC toxicologist) requested a revision of the contaminant levels for metals in soil at FED-1A in 2006. She asked if Ms. Lofstrom could provide an update on the Navy's response to DTSC. Ms. Lofstrom said that the Navy has not responded or made changes to the Basewide background evaluation based on Mr. Polisini's letter. She indicated that Mr. Polisini completed a statistical analysis in 2006 and found issues with the Navy's background including that metals, which he considered outliers, should not be considered part of the background data population.

During the review of Slide 8, Mr. Humphreys said that the Navy should plan to collect samples at random points along both sides of the runway. Ms. Wheaton noted the suggestion. Ms. Smith asked about the investigation at Building 100. Ms. Wheaton said that the Navy plans to collect concrete chip samples from the building for analysis of polychlorinated biphenyls (PCBs).

During the review of Slide 11 discussing the Federal transfer parcels, Mr. Leach asked about the depth of a proposed borehole. Ms. Wheaton said the boreholes would generally extend 8 feet below ground surface or until groundwater is reached, whichever is shallower. Ms. Smith asked if the Navy will investigate the northern portion as part of the firefighting training area. Ms. Wheaton confirmed that the northern portion of FED-1A, known as Open Space III, will be evaluated as part of the firefighting training area. Ms. Smith asked which fire retardants were used at the site. Ms. Wheaton and Jamie Eby (CH2M Hill) stated that there are limited records of what was used in this area, but based on nearby IR Site 14 and the general timeframe, the Navy was able to determine that they did not likely use firefighting foams containing perfluorooctyl sulfonate (PFOAs). Mr. Humphreys suggested that carbon tetrachloride was

likely used as a suppressant and dry cleaning solvent. Ms. Wheaton and Mr. Eby noted that samples will be analyzed for volatile organic compounds (VOCs), which include carbon tetrachloride and perchloroethylene analysis.

Frank Matarrese (Alameda City Council) asked about the Navy budget for the SI. Ms. Wheaton said that the budget is approximately \$2.5 million and the Navy contractor is CH2M Hill. Mr. Matarrese asked how many staff would work on the SI. Ms. Wheaton and Mr. Eby said that 10 to 20 staff will work on the project.

#### **IV. Overview of RAB Purpose and Process**

Mr. Robinson started his RAB purpose and process presentation (Attachment B-4).

Mrs. Sweeney said that the community members in Alameda are unaware of the work under way at the base. She added that Richard Bangert (community) approached the ARRA with the idea of a presentation at the city council meeting that would show a series of before-and-after cleanup photographs. Mrs. Sweeney said that a graphics-heavy Power-Point presentation that shows all the cleanup work is needed. Mr. Bangert said that if the presentation is given at a city council meeting, it will be televised and a number of people can watch it from home. Mr. Matarrese said that the ARRA accepted an action item to work on a presentation and the city manager will be contacting the RAB, agencies, and the Navy. He added that the city discussed a presentation during the city council meeting or other special session that would also be televised in March or April 2010. He said that an ideal presentation would be 20 minutes followed by an hour of question and answer. Mr. Matarrese said that there should be an official announcement soon. Gretchen Lipow (community) supports the suggestion of televising the presentation as well as posting it on-line and in newspapers to educate the Alameda community about the cleanup at the base.

Ms. Smith said that the RAB was under the impression earlier that all comments need to be submitted in writing to be considered and receive a response. Ms. Smith noted that the CIP does not state that comments must be submitted in writing and asked Mr. Robinson to clarify whether the RAB comments during the meeting need to be written. Mr. Robinson said that comments on specific documents made during the document's comment period and during the community and RAB comment period will receive a formal response. He said that comments made on a presentation will not require written responses, as presentations are to aid the review process of a specific document.

#### **V. BCT update**

John West (Water Board) said that his office responded to a hazardous material spill at the SS Petersburg on January 24. He added that SS Petersburg is a fuel tanker berthed at Alameda Point. While the crew adjusted the fuel balances in the boiler, the ship expelled soot into the air. He added that there was a 200 - by 20-foot area of soot. Mr. West noted that NRC Environmental Services responded quickly and cleaned it up. He distributed a hazardous

material spill pamphlet for RAB to review. He added that the pamphlet provides guidance on how to report a spill. He will also e-mail the RAB the website address for spill reporting.

## **VI. Community and RAB Comment Period**

Fred Hoffman (RAB) addressed a letter (Attachment B-5) to the co-chairs and read it aloud to the RAB, tendering his resignation from the RAB. Mr. Humphreys said that Mr. Hoffman has contributed to the RAB and is sorry to see him resign.

Mr. Leach said he is sympathetic with Mr. Hoffman's comment that his input is not always being considered and that he has felt the same. Mr. Leach, Ms. Smith, Mr. West, and Ms. Lofstrom requested Mr. Hoffman reconsider his resignation. Mr. Hoffman appreciated the comments and said that working on the RAB has become a quality of life issue. Mr. Robinson thanked Mr. Hoffman for his service.

Mr. Humphreys said that he believes that the groundwater plume at Site 1 is close enough to the bay to receive a tidal effect so that sea water is flowing in and out and diluting the plume. He noticed in the AMEC letter that there is a contradiction, one stating that there has not been any intrusion, while the other noting the saline layer within the landfill.

Mr. Humphreys also said that based on the aerial photograph shown him by Ms. Smith, the unidentified object in the Seaplane Lagoon could be a seaplane mooring dock. He added that since the photograph showed six structures, there is a possibility that the remaining five are still to be discovered. Ms. Smith concurred with the comment.

Mr. Humphreys noted that Mrs. Sweeney's comment during the January 2010 meeting was not captured in the minutes. Mr. Humphreys noted the following as an insert into the minutes: "Mr. Humphreys asked Mrs. Sweeney if her concerns had ever been answered about the area where car repairs had been done. This area previously had been used to conduct car maintenance courses and also may have been used to dispose hazardous materials into drainage pits. Mrs. Sweeney said that area has since been paved over and her concerns have not been addressed."

Regarding the action item on the cleanup of lead from the storm drains; Mr. Humphreys asked whether the Navy intends to remediate the lead in storm drains beyond the cleanup efforts that were conducted previously by the city. Mr. Robinson said that during routine storm drain maintenance, the city has vacuum cleaned the sediments from the storm drains in question, and the assumption is that the bulk amounts of the contaminant have been removed. He added that the Navy will collect more samples as part of the Site 35 remedial action.

Mr. Bangert asked whether the sediment in the Seaplane Lagoon will be cleaned by the Navy, or if in the future it is possible that ferries will not be allowed in the lagoon to prevent disturbing the sediments. Mr. Robinson said that there are two areas (the northern corners) in the Seaplane Lagoon that pose an ecological risk and those areas will be addressed. Ms. Smith said that a

deep-draft ferry will not be able to enter the Seaplane Lagoon easily and the remainder of the lagoon will need to be dredged. She added that the Navy has had to dredge repeatedly in the past to allow deep draft vessels in the lagoon because the currents return the sediment. She added that the unknown object and the sunken barge need to be addressed to allow any deep vessels in the lagoon. She said that if dredging is deep enough, then the contaminated soil will be reached. Mr. Bangert said that it will be expensive to operate a ferry in the Seaplane Lagoon. Mr. Matarrese said that it will not be a problem since a ferry is not a deep draft vessel. Mr. Russell noted that Pat Brooks (former Navy co-chair) agreed to remove the barge (in the northwest corner of the lagoon) as part of debris removal. Michael John Torrey (RAB member) asked how the city would work in the lagoon when the nature of the object in the Seaplane Lagoon is not known. Mr. Robinson said that the Navy investigated the object to the extent possible and the object was found to be concrete and wood. He added that the Navy cannot use Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) funds to remove the object since it does not pose an environmental threat.

Ms. Lipow asked if the Navy could provide updated plume maps for the base. Mr. Robinson said that the plume maps are updated every year as part of the basewide groundwater monitoring program. He said that a general plume map could be found in that report, while site-specific plume maps could be found in the site documents.

## VII. Meeting Adjournment

The meeting was adjourned at 8:50 p.m.

### Action Items

<b>Action Items:</b>	<b>Previous Item #/ Action Item Status/ Action Item Due Date:</b>	<b>Initiated By:</b>	<b>Responsible Person:</b>
1. Request for Presentations: <b>a.</b> Bayport sewer systems and change in the plumes over time. <b>b.</b> Site 26 cleanup.	1./ Pending/ March 4, 2010.	RAB	Mr. Robinson
2. Informal discussion on “Methods of RAB communication of remedial work at Alameda to the community.”	4./ Pending/ March 4, 2010	Ms. Konrad	Ms. Lofstrom
3. Provide the RAB with the latest map on the extent of Marsh Crust.	5./ Pending/ March 4, 2010	Ms. Smith	Ms. Lofstrom

<b>Action Items:</b>	<b>Previous Item #/ Action Item Status/ Action Item Due Date:</b>	<b>Initiated By:</b>	<b>Responsible Person:</b>
4. Provide information and map on the Navy ships that were buried at the base.	7./ Completed (See Attachment B-1)/NA	Mrs. Sweeney	Mr. Robinson
5. Provide information on any investigations of the firing range near the officer's housing area.	8./ Completed (See Attachment B-1)/NA	Mrs. Sweeney	Mr. Robinson
6. Discuss placement of the extraction and injection wells within the site 27 treatment modules with a remedial design engineer.	10./ Pending/March 4, 2010	Mr. Leach	RAB
7. Provide an explanation from the structural engineer on how excavating the Building 400 foundation to remove the drain pipe will affect the building's foundation footer and structural walls.	13./ Completed (See Attachment B-1)/NA	Mr. Leach and Ms. Smith	Mr. Robinson
8. Provide updated RAB contact list for Alameda Point.	14./ Completed (See Attachment B-1)/NA	Ms. Smith	Mr. Robinson
9. Provide RAB comment letter on OU-1 as attachment to the January 2010 meeting minutes.	15./ Completed (See Attachment B-1)/NA	Ms. Smith	Mr. Robinson
10. Provide the RAB with an electronic copy of the RTCs to RAB comments on the Site 26 as presented in the final RA work plan.	16./ Completed (See Attachment B-1)/NA	Ms. Smith	Mr. Robinson
11. Send RAB and Agencies an electronic copy of Site 1 groundwater plume letter and include the letter in the minutes.	0./ New/ March 4, 2010	Mr. West and RAB	Mr. Robinson

**ATTACHMENT A**

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

**February 4, 2010**

**(1 page)**

# ***RESTORATION ADVISORY BOARD***

***NAVAL AIR STATION, ALAMEDA***

## ***AGENDA***

**FEBRUARY 4, 2010, 6:30 PM**

**ALAMEDA POINT – BUILDING 1 – SUITE 140**

**COMMUNITY CONFERENCE ROOM**

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

<b><u>TIME</u></b>	<b><u>SUBJECT</u></b>	<b><u>PRESENTER</u></b>
<b>6:30 – 6:45</b>	<b>Approval of Minutes</b>	<b>Dale Smith</b>
<b>6:45 – 7:00</b>	<b>Co-Chair Announcements</b>	<b>Co-Chairs</b>
<b>7:00 – 7:30</b>	<b>Site Insp. Work Plan Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B, and FED-2C</b>	<b>June Wheaton</b>
<b>7:30– 8:00</b>	<b>Overview of RAB Purpose and Process</b>	<b>Derek Robinson</b>
<b>8:00 – 8:15</b>	<b>BCT Update</b>	<b>BCT Member</b>
<b>8:15 – 8:30</b>	<b>Community &amp; RAB Comment Period</b>	<b>Community &amp; RAB</b>
<b>8:30</b>	<b>RAB Meeting Adjournment</b>	

## **ATTACHMENT B**

### **NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS**

- B-1 Action Items. Distributed by Derek Robinson, Navy Co-Chair (9 pages)
- B-2 Alameda Point, IR Site 1 VOC Groundwater Plume letter by AMEC. Distributed by Dale Smith, RAB Co-Chair (2 pages)
- B-3 Draft Expanded Site Inspection Work Plan Transfer Parcels EDC-12, EDC-17, FED- 1A, FED-2B and FED-2C presentation handout. Distributed by June Wheaton, Navy PM (7 pages)
- B-4 RAB purpose and process presentation handout. Distributed by Derek Robinson, Navy Co-Chair (5 pages)
- B-5 Fred Hoffman's letter of resignation from the RAB. Distributed by Fred Hoffman, RAB (3 pages)

**ATTACHMENT B-1**

**ACTION ITEMS**

**(9 pages)**

ACTION ITEMS  
Alameda NAS RAB, February 4, 2010

Action Item #7: Provide information and map on the Navy ships that were buried at the base.

The short answer, we do not have a map and/or good information on these ships.

The long answer, I do have a copy of an article (The Carrier, Nov. 3 1950) indicating that decommissioned hulls were used as a breakwater and when the Navy purchased the land, "...all of these vessels were scrapped but one; it is still imbedded in the sand..." This article indicates that all the ships were removed and sent for scrap, but one (please see attached article).

There have been maps created in the past that tried to capture potential locations of ships, should they still remain. These maps do not take into account the article I obtained from our historical people and are strictly speculative in nature.

Action Item #8: Provide information on any investigations of the firing range near the officer's club.

Records do not exist of a firing range in the area described. Interviews with the Site Caretaker, Douglas DeLong, also confirm that a range in the area of the officer's club did not exist.

Action Item #13: Provide an explanation from the structural engineer on how digging the Building 400 foundation to remove the drain pipe will affect the building's foundation filter and structural walls.

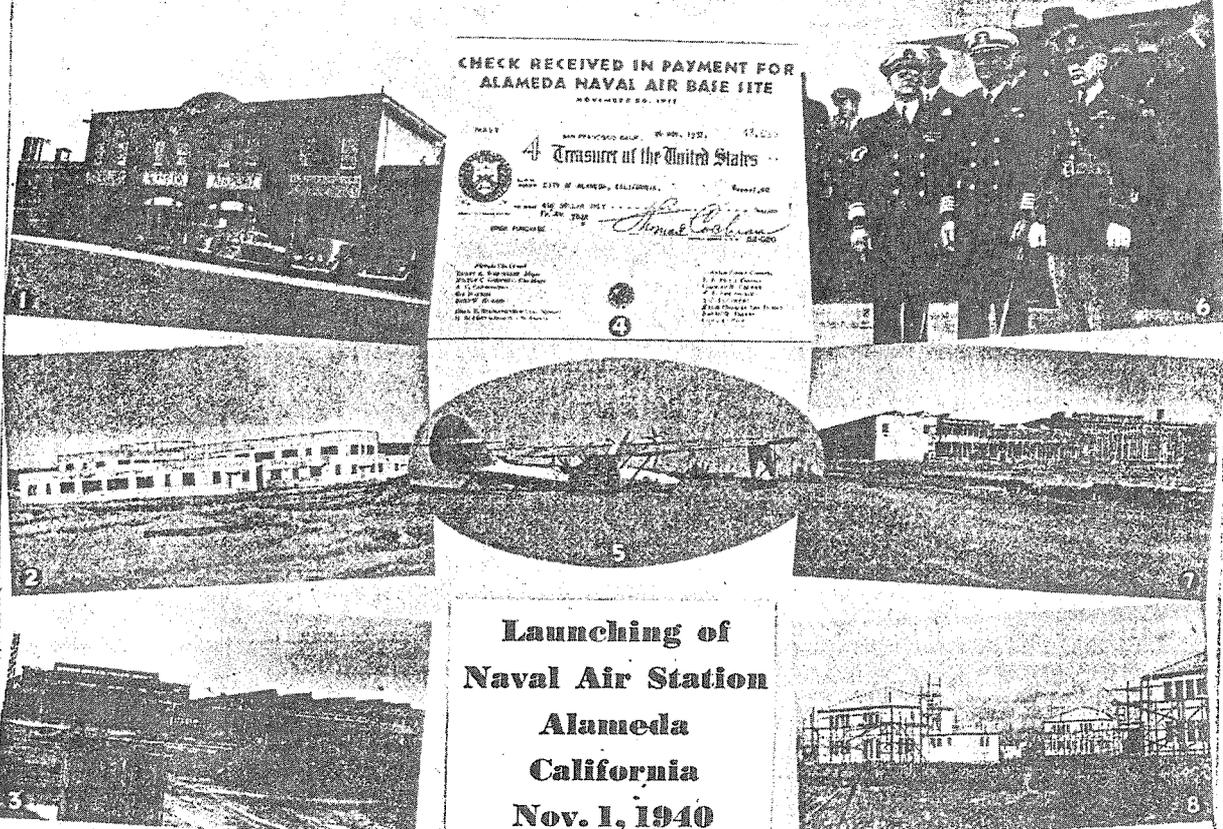
Please see the attached letter.

Action Item #15: Provide RAB comment letter on OU-1 as attachment to the January meeting minutes.

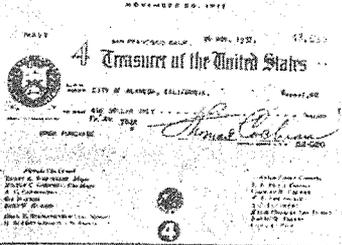
Please see the attached letter.

Action Item #16: Provide the RAB with an electronic copy of the RTCs to RAB comments on the Site 26 as presented in the final RA work plan.

There is no record of written comments to RAB concerns regarding the Site 26 remedial action and, therefore, no written responses to comments.



CHECK RECEIVED IN PAYMENT FOR ALAMEDA NAVAL AIR BASE SITE



## Launching of Naval Air Station Alameda California Nov. 1, 1940

**OUT OF THE MUD PUDDLE**—Ten years ago Naval Air Station Alameda was the dreariest place in the world. It took approximately 50,000 civilians and an almost equal number of military personnel to transform the station into one of the largest overhaul and repair bases in the world, and one of the most charmingly landscaped military establishments in the country. (1) A view of the Alameda Municipal Airport Building, formerly located where the main gate now is. (2) "Noth-

ing but a concrete shell in the middle of the sand dunes" was the station Administration Building during construction. (3) The old Assembly and Repair Building nears completion, built on solid foundation where the San Francisco Bay tides used toebb and flow. (4) A picture of the check that bought the station land for the Navy from the city of Alameda, drafted on the Open Purchase Fund for the total sum of \$1. Today, the station is credited with changing Alameda from a sleepy

little township of 30,000 persons to a bustling city of 85,000. (5) In the oval appears the first patrol bomber to come to NAS to be benched on the airplane ramps. (6) High ranking military leaders took part in the commissioning ceremonies, among them Admiral Arthur W. Radford, then the first Director of Construction, Captain Frank McCrary, who took command of the station, and General John De Witt, U. S. Army. (7) Another view of A&R during construction. (8) Officers' homes nearing completion.

# Alameda Sold Land To Navy For \$1

(Continued from Page 2)  
the terror of the San Francisco earthquake and fire.

Alameda was a serene little township in 1936 when the city sold the marshy west end of the island to the Navy for \$1. That was the year when President Roosevelt was re-elected by the largest popular endorsement in our political history. The year 1936 also marked the abdication of King Edward VIII and subsequent coronation of George VI. In 1936 there was much unrest in the Orient, and in Germany, Hitler decreed compulsory military training.

In 1937 Congress passed a bill appropriating \$15,000,000 to begin work. Investigating committees found a two-mile strip of swamp and tideland bordering an Italian truck farmer's vegetable garden and the crumbling ruins of the historical "20-Blue-Team" Borax soap factory. Meanwhile, the City of Alameda encountered a snag. Part of the land on which the Naval Air Station was to be erected had been leased to Curtis Wright for an airport. This firm subleased part of the property to Pan-American Airways. To clear the title Curtis had to be paid \$100,000 for improvements. The fund was raised through donations by various industries of the San Francisco Bay Area.

Benton Field, an Army base, was also under construction in the area that now includes bachelor officers' quarters. The two military departments arranged a trade with the Navy coming to Alameda and the Army going to Suisunvale.

Construction began Feb. 24, 1938, when dredgers anchored in the Bay began pumping to raise the surface above water level.

Far off rumblings of war were heard in 1938. Hitler purged Austria. In Alameda, an inspection and survey group of eight men began to build Alameda Naval Air Station from a mere mud puddle. These men were public works engineers—James Vance, Howard Randall, Kermit "Bob" Childress, Jack "Red" Hoffman, "Texas" Looney, William Withman, William Rosenstock, Leon "Buss" Bussel. Some of them are still with public works today.

An 8x16 shack their only shelter and mud and marshland, their only view. The shack had neither electricity, heat, nor floors, but "plenty of little black spiders," according to Vance.

Many times the men sank up to their waists in watery mud and had to be pulled out. Often they pushed planks ahead of them to walk on.

While pumping out the water they ran afoul of obstacles. Sending down a diver they discovered pieces of railway tracks and cars, still perfectly preserved. The pieces were sections of the first railroad in this part of the country, which ran out to where Pier 2 is today.

A row of obsolete and scuttled destroyers acted as a breakwall for the Pan-American Clippers landing at the end of the island. Small boys loved to play aboard the ships, pretending they were pirates. When the land was obtained, all these vessels were scrapped but one; it still is imbedded in the sand below one of the "igloos" housing ammunition.

Fifteen million cubic yards of fill—which, if poured over San Francisco's Civic Center, would make a creditable mountain—was required to raise the land above the tide heights. Gradually the 2200-acre marsh site was filled for the 75 million dollar Alameda Naval Air Station.

On Sept. 1, 1939, Britain declared war on Germany. Work speeded up here.

In May of 1940 the Germans attacked Norway was invaded. France collapsed, and a hostile army faced England across the channel. Prime Minister Winston Churchill grimly promised his people little but "blood, sweat, and tears."

On Nov. 1, 1940, Alameda Naval Air Station was commis-

sioned. Capt. Frank E. McCrary, USN, became the first commanding officer. He headed 200 military and civilian personnel. Some 65 of the civilian employees are still employed here.

With war nearing, construction was hurried. Naked steel frameworks of main buildings were silhouetted against the setting suns. Meanwhile, one lone wooden structure—The Shack—housed all departments as other buildings neared completion.

On Dec. 7, 1941, the Japanese bombed Pearl Harbor.

The station's five 500-foot runways were only partially completed. The field was usable, however, and flying was only moderately restricted.

In December of that year, 230,000 man hours were worked. A peak production, in July, 1945, 2,000,000 man hours were worked.

In 1942, U. S. troops arrived in Ireland. Doolittle fliers landed here for the bombing of Tokyo in April. In May, Corregidor was lost and General MacArthur vowed: "I shall return."

O&R was laboriously repairing and overhauling aircraft. Supply

department went into high gear. Public works crews continued with the unceasing job of filling, erecting, constructing, paying.

In January of 1943, President Roosevelt and Prime Minister Churchill met at Casablanca.

At Alameda Naval Air Station in 1943 an investigation was conducted of high rentals demanded of Navy personnel by Bay Area landlords. The Civil Employees' Welfare and Recreation Committee sponsored a mammoth "Take Off" dance at the Oakland Auditorium the first all-hands dance. William Woodall of O&R was, and still is, chairman of CEWRC.

The Naval Auxiliary Air Station at Fallon, Nev., was near completion. War bond sales totaled over a quarter of a million dollars. Harold V. La Jeunesse, now industrial relations officer (Comdr., USNR), was a junior grade lieutenant and assistant personnel officer. Captain McCrary was still commanding officer.

In July, 1943, Mussolini resigned.

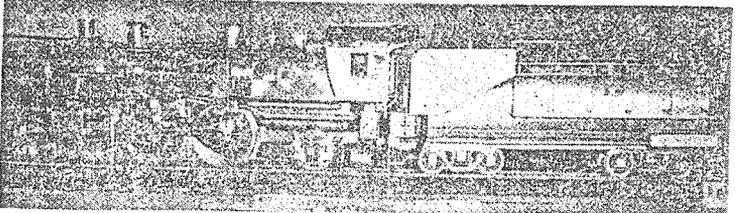
On Aug. 17, U. S. Army troops conquered Sicily.

The carrier began Dec. 3, when the "ship of news" was launched to "alter a course for the port of usefulness." Jerry Thrall, now editor of the Alameda Times Star, was at the helm.

St. Nicholas was mobbed by 509 children of military personnel when he landed on Christmas Eve aboard a military plane.

In January, 1944, the Mars—"a tried, tested, world-record smashing flying boat—arrived to enter Pacific service. The VR-2 squadron already had been commissioned in 1942.

Backed by station personnel who labored long and hard to (Continued on Page 4)



OL' ST STILL GOING STRONG—Oldest piece of equipment on the station is this elderly locomotive which rests on regular freight tracks alongside Building 170, whooshing out 10,000 pounds of live steam an hour to keep personnel in that building warm during chilly months. The 50-year-old engine did a long tour of duty with Santa Fe before assignment to present duties.



January 7, 2010

JN 35-100706.004

Vincent M. Richards  
Principal Geoscientist  
Tetra Tech EC, Inc,  
1940 E. Deere Ave, Suite 200  
Santa Ana, CA 92705

Subject: Alameda Naval Air Station, Building 400A  
January 6, 2010 Site Visit

Dear Vincent:

Chad Harden (RBF) visited the site January 6, 2010 with both yourself and Mark Kylo of Tetra Tech. The purpose of the visit was to evaluate the potential structural impacts to Building 400A ("the building") due to removal and/or replacement of existing subdrains within the building and underneath the south wall.

This letter is intended to comment on the general configuration of the building and potential impacts due to the proposed work within the building and below the foundation. Please note that suggestions and opinions expressed in this letter are based on partial information only and a brief site visit. The following record drawings, titled "Electrical & Electronic Overhaul Building / Second Increment," related to the building construction were available for review, dated 1958:

Sheet 1 of 32: Yard Piping / Plan & Details

Sheet 18 of 32: Hangar Building / Foundation Plan

Sheet 19 of 32: Hanger [sic] Building / Foundation Details

Sheet 20 of 32: Hangar Building / Foundation & Misc. Concrete Details

Sheet 26 of 32: Utility Piping / Plan & Details

A large portion of the existing building's south, east and west walls consist of large rolling doors. The roll-away doors of the south wall are supported on a strip footing approximately 3'-4" deep x 6'-9<sup>3</sup>/<sub>4</sub>" wide (Footing "C", Exhibit A). The strip footing is supported by a pair of 15" piles at approximately 21' spacing. A concrete trench approximately 3' deep by 1' wide runs the roughly 188' length adjacent to the strip footing. The plans indicate the piles are reinforced with a steel cage only in the upper 10' of the pile, with a single bar centered in the pile continuing the remainder of the length.

The plans available do not indicate foundation data, the length of piles or the intended function of the pile (such as end-bearing, friction pile, etc.).

Larger foundations (Footing "B", Exhibit A) at each end of the south wall support the doors at the fully "open" position, and appear to also support the building vertical load. These larger footings are also pile supported by the same piles as Footing "C", and have three "shear keys" below the foundation. The function of the shear keys is not known, but is assumed to provide resistance against sliding during a wind or seismic event.

The interior floor of the building consists of an 8", wire reinforced slab on grade. Lateral support of the building is provided by a combination of steel bracing at the south, east and west walls, and steel braced

PLANNING ■ DESIGN ■ CONSTRUCTION

14725 Alton Parkway, Irvine, CA 92618-2027 ■ P.O. Box 57057, Irvine, CA 92619-7057 ■ 949.472.3505 ■ FAX 949.472.8373

Offices located throughout California, Arizona & Nevada ■ [www.RBF.com](http://www.RBF.com)

frames at the north wall. The roof is constructed of steel deck on vertical steel trusses. Lateral support of the roof is provided through steel braced frames.

It is RBF's understanding the following work is proposed:

- Removal of drain system underneath the slab on grade.
- Removal of concrete trench parallel to south concrete footing. It is RBF's understanding the excavation for removal of the trench and subsequent soil testing is anticipated to be 6' deep and 8' wide. This will likely expose the interior piles adjacent to the trench.
- Removal of 27" RCP and concrete vault. Flow from the trench and piping system runs to a concrete vault located just east of column line 4 at the south footing. The 27" RCP, with invert at eight feet below top of slab, exits the vault and building under the south footing. It is RBF's understanding the excavation for removal of the pipe and vault, and subsequent soil testing is anticipated to be a trench parallel to the pipe 15' deep and 36' wide at the top, sloping down to approximately 6' wide at the base. This excavation will likely expose at least 3 pairs of piles. It is not expected the larger foundations (Footing "B", Exhibit A), pile groups and shear keys located at the east and west ends of the south wall will be undermined by the anticipated excavation limits.
- Scabbling of concrete piles. Concrete below grade, which will remain in place, will be scanned for contamination and "scabbled" where concrete is removed (typically less than an inch) and rescanned until all contaminated concrete is removed.

The proposed excavation and testing operations related to the proposed work could impact the structural integrity of the existing building if certain precautions are not taken. The following suggested measures to maintain the structural integrity of the building are concepts provided for preliminary use only, and will require final design prior to any work performed. Additionally, due to the unknown function of the concrete piles, unless further information is discovered with regard to the geotechnical and structural intent of the piles, any temporary support system for the foundations must be assumed to work without depending on the capacity of the existing piles.

- Removal of the drain system underneath the slab on grade will not impact the existing building as long as excavations do not undermine the existing building foundations. The slab on grade will need to be replaced in kind.
- The excavation and testing operations for the concrete trench and pipe should be staged so as not to overlap. Work will need to be staged along the south perimeter foundation, limiting the length of footing undermined at any one time. This length will need to be evaluated prior to start of work.
- When excavating for the trench, if exposing more than 2 or 3 piles, or more than 1 pair of piles, a foundation underpinning system should be installed to provide vertical support of the footing (Footing "C", Exhibit A). The underpinning system will need to be evaluated prior to start of work.
- When excavating for the pipe and vault, a temporary vertical support system should be installed to provide vertical support of the footing (Footing "C", Exhibit A). This vertical support system would possibly consist of a series of steel beams spanning over the 36' excavation, or some other alternative method. The support system will need to be evaluated prior to start of work.
- Soil replaced around piles needs to be compacted to 95% or must use sand cement slurry up to bottom of footing.
- Depending on depth of excavation and length of footing undermined by excavation and testing operations, it may be necessary to provide a bracing system between piles.
- Extent of pile concrete surface removal at any one time will be limited and needs to be determined prior to start of scabbling.
- Any scabbling of piles must have concrete replaced with sound concrete well bonded to existing.

- If the excavation for the concrete trench, pipe or vault undermines the larger footings or piles at the east and west ends of the south wall (Footing "B", Exhibit A), a vertical support system will be required. This vertical support system would possibly consist of foundation underpinning, a series of steel beams supporting the concrete footing or some other method. Additionally, exposing transverse shear keys more than one at a time will impact lateral resistance and may need a temporary bracing system or CIDH pile system at the ends of the building.

Should you or your staff have any questions, please do not hesitate to contact me at (949) 855-7058.

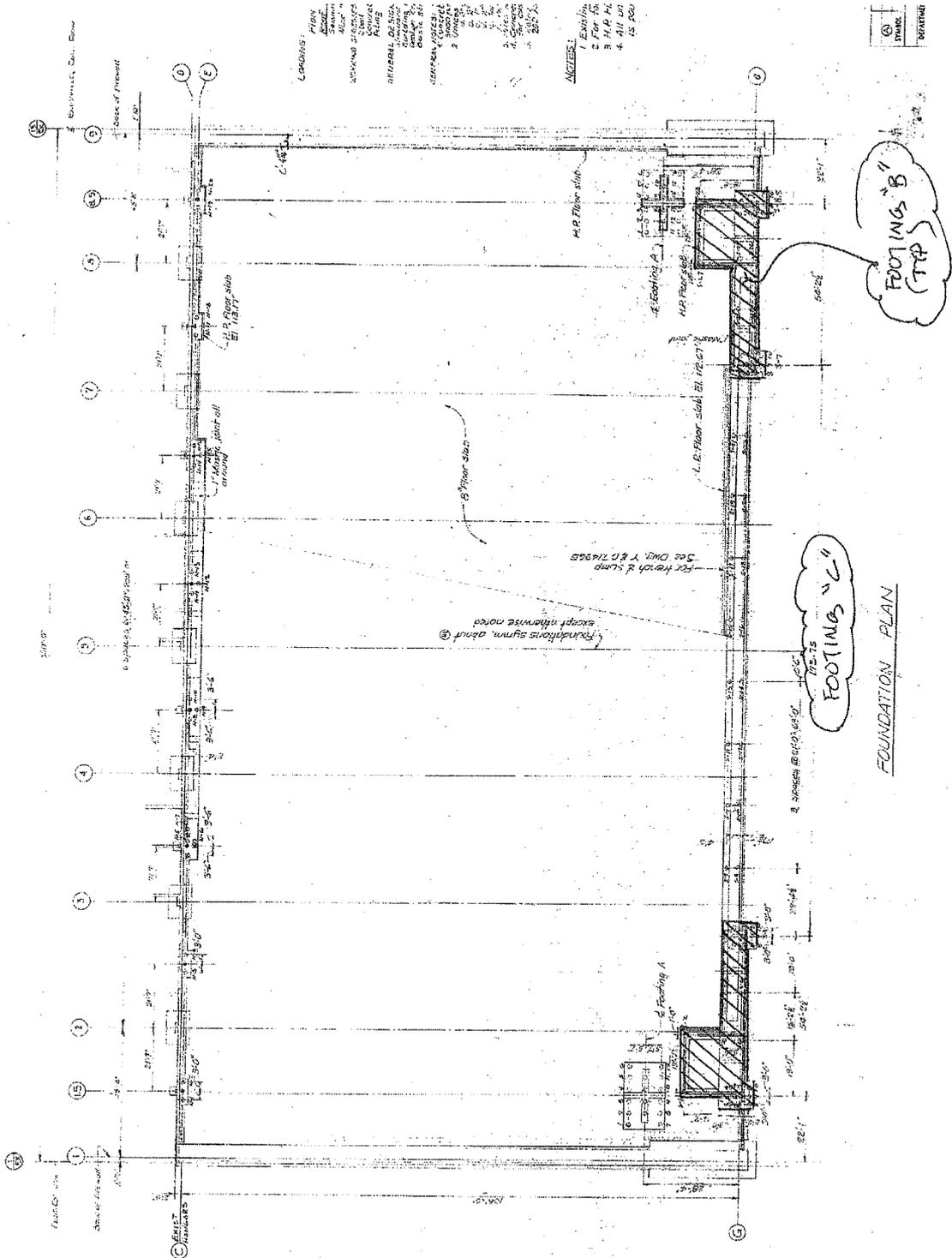
Sincerely,



Chad W. Harden, S.E.  
Associate, Project Engineer

Attachments:

Exhibit A – Foundation Plan



- LEGENDS:**
- 1. FLOOR
  - 2. WALL
  - 3. ROOF
  - 4. CEILING
  - 5. EXTERIOR FINISH
  - 6. INTERIOR FINISH
  - 7. EXTERIOR GRADE
  - 8. INTERIOR GRADE
  - 9. EXTERIOR FINISH
  - 10. INTERIOR FINISH
  - 11. EXTERIOR GRADE
  - 12. INTERIOR GRADE
  - 13. EXTERIOR FINISH
  - 14. INTERIOR FINISH
  - 15. EXTERIOR GRADE
  - 16. INTERIOR GRADE

- NOTES:**
1. Foundation
  2. For 15'
  3. For 15'
  4. All in 15' 00"
  5. 15' 00"

1	FOOTING
2	FOUNDATION

FOOTINGS "B"  
(TOP)

FOOTINGS "C"

FOUNDATION PLAN

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

December 18, 2009

Re: Fact sheet dated November 2009 and the Draft Final Remedial Action Work Plan/Remedial Design, OU1, IR Sites 6, 7, 8 and 16

Dear Mr. Robinson,

Thank you for the opportunity to comment on the above documents. The Draft RAWP/RD were issued, but no presentation was given and the Draft Final documents were issued without discussion.

We find the process by which this plan is moving forward to have the potential for error and not to be in compliance with CERCLA policy. The documents' release has proceeded before comments from the regulators have been incorporated. Final design for Site 6 has not been completed, yet there is a request for approval of the remedial action. The document has not been reviewed and revised; yet Site 7 remediation is almost complete. It is unclear why there has been such a rush to move forward outside the conventional process. If work begins, as it has at Site 7, before these documents are final, changes requested by the regulators might not be included. This could lead to decisions that are not in the best interest of the Navy or the community. It is noted by the Navy in its response to comments that the final documents have not yet been produced but that comments received will be incorporated or responded to in the final documents.

The following comments are applicable to the Fact Sheet, the RAWP and the RD drafts.

Site 7

It is noted that there is elevated arsenic at the site. This could have been mobilized and transported by petroleum hydrocarbons from the former fuel station. This possibility does not appear to have been considered. If this is the case, the level of contamination is not a result of background conditions, rather the result of usage.

The extent of excavation should be extended to the end of the depth of contamination, not five feet only. As stated in George Humphreys' comment letter of May 24, 2006 on the Proposed Plan, this area is designated to be residential. If residential buildings are intended for the site, excavation will undoubtedly extend into the remaining contamination. The soil contamination may extend to the west under the adjacent building, which appears to be in severe disrepair and likely have to be demolished. Soil samples should be taken in that area to determine whether the excavation area should be extended.

Site 8

Members have observed that paint is peeling off Building 114. This is of concern because this paint likely contains lead. Therefore, lead contamination could be present in the soil. It is unclear whether this soil was ever tested for lead contamination, but presumably not.

Dale Smith and George Humphreys  
Naval Air Station Alameda Alameda Restoration Advisory Board  
950 West Mall Square, Alameda, CA

Site 16

It is not clear from the document that groundwater will be cleaned up to residential standards. The Remedial Design document states on page 10 that

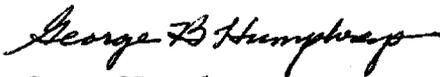
...the FWBZ in the central and southeastern portion of Alameda Point is classified by U.S. EPA as a Federal Class II aquifer, making it a potential drinking water source. However, groundwater beneath OU-1 IR Sites 6, 7, 8, and 16 is not currently used for drinking water, irrigation, or industrial supply, and it is unlikely that it will be at any time. Drinking water is supplied to Alameda Point by the East Bay Municipal Utilities District. In addition, U.S. EPA has stated that non-maximum contaminant level (MCL) cleanup levels would be acceptable for this area on the condition that any contaminated groundwater beneath Sites 5, 6, 8, 10 and 12 is remediated to levels such that the threats posed by such exposures as inhalation (groundwater vapors into soils and from soils to residences), dermal contact, and those associated with irrigation use are eliminated, and any significant ongoing degradation of the groundwater from contaminant migration is prevented.

Although groundwater at OU-1 IR Site 16 is considered Federal Class II, both the San Francisco Bay RWQCB and U.S. EPA have agreed that groundwater beneath OU-1 IR Site 16 is not likely to be a potential source of drinking water. However, the FWBZ in the southeastern region of Alameda Point where OU-1 IR Site 16 is located is contiguous to a Class II groundwater aquifer (Merritt Sand) that is being used as an irrigation supply by off-base residents. There are no limitations on the use of these off-base irrigation wells and the U.S. EPA Well Head Protection Area model indicates that plume capture at an off-base well is possible at pumping rates of 3 gallons per minute (gpm).

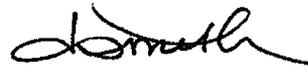
The document both states that clean up to drinking water standards is not necessary at the site and that there are wells offsite that could easily draw water from the plume area for agricultural and personal uses, such as car washing that would lead to exposure to chemicals in the groundwater. This area is east of Saratoga Street and should be cleaned up to residential levels. The RAOs for the site do not mention offsite use of the groundwater. Yet it is acknowledged that there are wells in the residential neighborhood adjacent to Site 16 that could be impacted by contamination.

We feel that proceeding with the work plan is generally acceptable. However, we feel regulator comments and changes should be incorporated and our concerns should be addressed. Again, thank you for the opportunity to comment on this document.

Yours



George Humphreys  
Assistant co-chair



Dale Smith  
Community Co-chair

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

Dale Smith and George Humphreys  
Naval Air Station Alameda Alameda Restoration Advisory Board  
950 West Mall Square, Alameda, CA



**ATTACHMENT B-2**

**ALAMEDA POINT, IR SITE 1 VOC GROUNDWATER PLUME LETTER BY AMEC**

**(2 pages)**



January 8, 2010

Mr. Derek J. Robinson, PE  
BRAC Environmental Coordinator  
BRAC PMO West  
1455 Frazee Road, Suite 900  
San Diego, CA 92108

**Re: Alameda Point, IR Site 1 VOC Groundwater Plume**

Dear Mr. Robinson,

I understand that clarification about my comments made in RAB meetings and other venues regarding the occurrence and migration of dissolved volatile organic compounds (VOCs) in the "Groundwater Plume" portion of Site 1, Alameda Point has been requested.

That topic is one that I spent a considerable time investigating over a decade ago when I assisted the University of Waterloo in a research project where a sequential permeable reactive barrier (PRB) was installed to treat a portion of the dissolved VOC plume at Site 1. High-resolution mapping of the dissolved VOC using direct push (DP) equipment 10 years ago identified a plume of mixed VOCs (chlorinated ethenes and petroleum hydrocarbons) that was flowing west within shallow artificial sand fill towards San Francisco Bay. The westward flow of groundwater in the Site 1 area was and is impeded by large buried objects (e.g., sunken barges) that were reportedly used as revetment during hydraulic emplacement of the artificial fill. The presence of large buried objects adjacent to the Bay in the Site 1 area was confirmed when advancement of our DP borings met with refusal many times during our subsurface investigations. Further, our work documented significant increases in salinity in the lower portion of the artificial fill unit. That is not surprising considering the proximity of Site 1 to the Bay. The presence of a saline layer that likely thickens westward further impedes the westward movement of the VOC plume.

There is strong geochemical evidence that the Site 1 VOC plume was and is biodegrading as it flows westward. Reductive dechlorination of chlorinated ethenes is fueled by the anaerobic oxidation of petroleum hydrocarbons and other organic material bound up in the soil matrix. I reviewed the recent monitoring data from Well M028-E and note that the concentrations of biodegradation byproducts have not decreased significantly in the last 10 years. As a result, I believe that natural in-situ biodegradation of the chlorinated VOCs remains a robust process that reduces the dissolved mass flux of those compounds along the groundwater flow path. Further, rates of biodegradation likely increase as the VOC plume approaches the Bay due to enhanced mixing that occurs in the intertidal zone.

As you are aware, much more information about the Site 1 VOC plume will be generated when the supplemental assessment of the Site 1 VOC plume begins in mid 2010. AMEC and the Navy have proposed a comprehensive subsurface characterization program that is intended to thoroughly assess the current location, composition and strength of the VOC plume at Site 1.

AMEC Geomatrix, Inc.  
2101 Webster Street, 12th Floor  
Oakland, California  
USA 94612-3066  
Tel (510) 663-4100  
Fax (510) 663-4141  
[www.amecgeomatrixinc.com](http://www.amecgeomatrixinc.com)

DCN AMEC-8816-0002-0031

Mr. Derek Robinson  
BRAC PMO West  
January 8, 2009  
Page 2

The goal of this supplemental assessment is to support the remedial design to further decrease dissolved VOC mass flux. In my opinion, our current approach of a comprehensive and well-planned sampling and characterization effort is the most appropriate way to fully characterize the Site 1 VOC plume.

Please feel free to contact me if you would like to discuss this matter further.

Sincerely yours,

AMEC Geomatrix, Inc.



Murray Einarson, P.G., CEG, CHG  
Principal Hydrogeologist

cc: Catherine Haran, PE, Navy Project Manager  
Eric Reitter, PE, AMEC Program Manager  
Dan Kwiecinski, PE, AMEC Project Manager

**ATTACHMENT B-3**

**DRAFT EXPANDED SITE INSPECTION WORK PLAN TRANSFER PARCELS EDC-12, EDC-17, FED- 1A, FED-2B AND FED-2C PRESENTATION HANDOUT**

**(7 pages)**



# Draft Expanded Site Inspection Work Plan for Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B, and FED-2C

RAB Meeting  
Alameda Point  
February 4, 2010

Prepared by: June Wheaton, Navy PM and CH2M HILL



## PRESENTATION OUTLINE

- Purpose**
- Work Plan Outline**
- Site Description**
- Expanded Site Inspection (SI) Objectives**
- General Investigation Approach**
- Summary of Proposed Sampling**
- Schedule**
- Questions**



## PURPOSE

**Provide Outline of Draft Expanded SI to  
Assist in RAB Member Review**

3



## EXPANDED SI WORK PLAN OUTLINE

**Introduction - Site Background**

**Objectives**

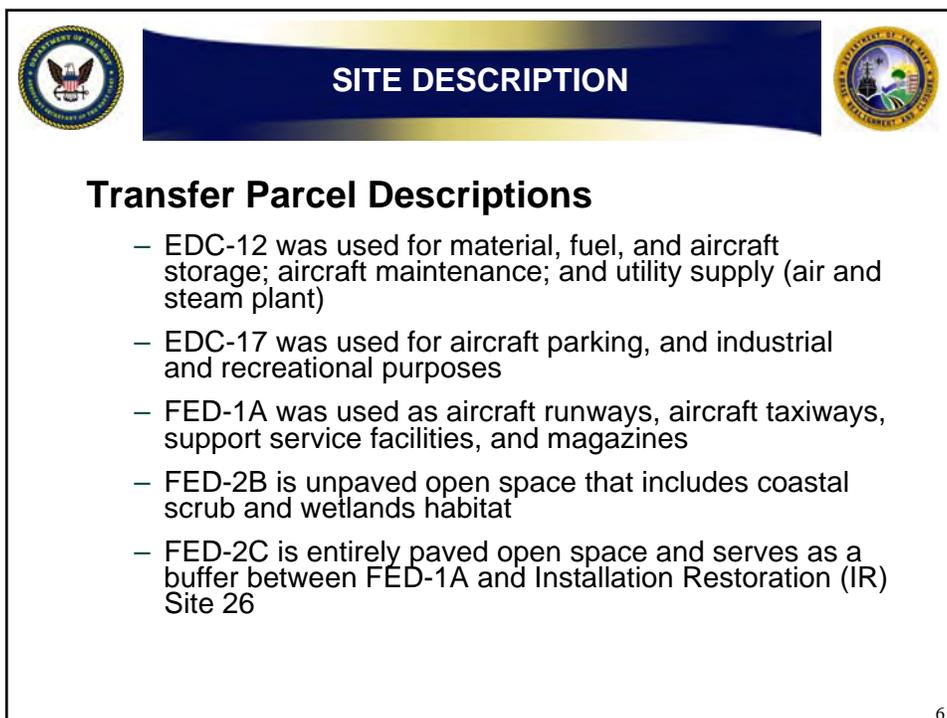
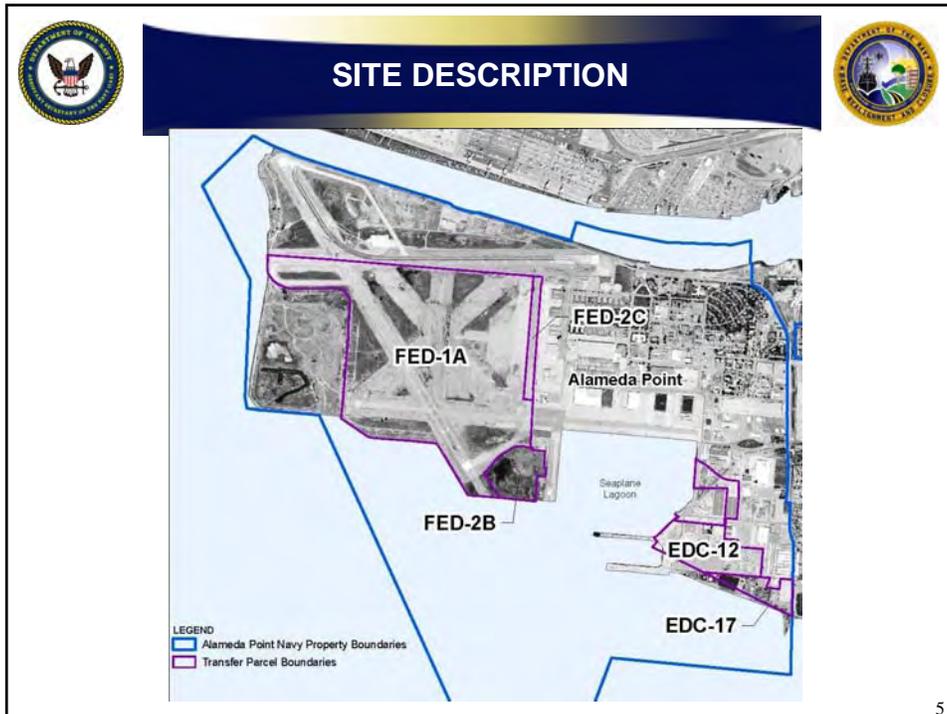
**Data Collection and Analysis**

- **Transfer Parcel EDC-12**
- **Transfer Parcel EDC-17**
- **Transfer Parcels FED-1A, 2B, and 2C**

**Data Evaluation Tasks**

**References**

4





## EXPANDED SI OBJECTIVES



- Collect sufficient data to make recommendations (e.g., no further action, remedial investigation, interim removal action, or refine investigation area boundaries)
- Address data gaps identified in Final SI Reports for Transfer Parcels EDC-12 and EDC-17, and Draft SI Report for FED-1A, 2B, and 2C
- Facilitate property transfer of parcels

7



## STAINING INVESTIGATION APPROACH



- Further evaluate areas within transfer parcels where aircraft parking/maintenance occurred and/or areas showing signs of staining
  - Historical Review, including review of historical aerial photographs, historical data, and site reconnaissance
  - Select boreholes advanced based on results of Historical Review and select boreholes converted to temporary groundwater monitoring points

8



## SUMMARY OF PROPOSED SAMPLING



### Transfer Parcel EDC-12

- 6 Areas of Concern (AOCs)
- 143 Soil Samples from 46 Boreholes
- 34 Discrete-Depth Groundwater Samples
- Evaluation of Aircraft Parking and Staining in Approximately 55 Acres

9



## SUMMARY OF PROPOSED SAMPLING



### Transfer Parcel EDC-17

- 3 AOCs and 1 Investigation Area
- 48 Soil Samples from 21 Boreholes
- 22 Discrete-Depth Groundwater Samples
- Evaluation of Aircraft Parking and Staining in Approximately 17 Acres

10



## SUMMARY OF PROPOSED SAMPLING



### Transfer Parcels FED-1A, 2B, and 2C

- 1 IR Site, 3 AOCs, 12 Solid Waste Management Unit (SWMU) Above-ground Storage Tanks (ASTs), and 5 Investigation Areas
- 335 Soil Samples from 105 Boreholes
- 14 Discrete-Depth Groundwater Samples
- 6 Composite Concrete Chip Samples
- Evaluation of Aircraft Parking and Staining in Approximately 412 Acres

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## SCHEDULE



- November 11, 2009 – Issued Draft Expanded SI Work Plan for Agency Review
- February 1, 2010 – Received Agency Comments on Draft Expanded SI Work Plan
- February 16, 2010 – Last Day to Comment on Draft Expanded SI Work Plan for RAB Members
- March 7, 2010 – Issue Final Expanded SI Work Plan

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## Draft Expanded Site Inspection Work Plan



**QUESTIONS?**

**ATTACHMENT B-4**

**RAB PURPOSE AND PROCESS PRESENTATION HANDOUT**

**(5 pages)**



## Alameda Point NAS



### Overview of the Restoration Advisory Board's Purpose and Process

Derek J Robinson  
February 4, 2010

1



## OUTLINE OF PRESENTATION



PURPOSE  
CERCLA HISTORY  
RAB FORMATION  
BEC POSITION  
HOW DO WE HELP EACH OTHER?  
RAB INPUT  
UPCOMING DOCUMENTS  
FINAL COMMENTS / QUESTIONS

2



## CERCLA HISTORY



December 11, 1980 - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was Enacted by Congress

- Provided broad Federal authority to respond directly to releases or threatened releases of hazardous substances.
- Allows for two types of response actions:
  - Short-term removals, to address releases or threatened releases requiring prompt response
  - Long-term remedial response actions

October 17, 1986 - Superfund Amendments and Reauthorization Act (SARA)

- Required Superfund actions to consider the standards and requirements found in other State and Federal environmental laws and regulations
- Encouraged greater citizen participation in making decisions on how sites should be cleaned up

3



## RAB FORMATION



In 1990, NCP Amendment, Requiring Community Relations Plan -> agreement and formalized Joint Guidelines for Restoration Advisory Board Implementation (September 1994, US DoD and EPA)

“DoD is creating RABs to ensure that all stakeholders have a voice and can actively participate in a timely and thorough manner in the review of restoration documents.” <http://www.epa.gov/fedfac/documents/rab.htm>

DERP (1986), OPNAVINST (1994), MCO (1998), etc.

In 2006, Code of Federal Regulations (Title 32 CFR, Part 202) - Established regulations regarding the Restoration Advisory Boards (RABs)

Alameda RAB Rules of Operation (May 7, 2009)

4



## BEC POSITION



On July 2, 1993, President Clinton announced a five-part program to speed economic recovery at communities where military bases are slated to close.

- Part of this plan was the establishment of BRAC Cleanup Teams (BCTs) for closed bases

DoD Guidance created the BRAC Environmental Coordinator (BEC) position. Key responsibilities include:

- Integrate environmental cleanup with property transfer
- Conduct the BCT and RAB
- Signature authority for legal documents

5



## HOW DO WE HELP EACH OTHER?



### RAB Members

- Provide advise and comment on restoration issues and concerns
- Represent their community and communicate interests and concerns
- Act as a conduit for the exchange of information between the community and DoN/Regulatory Agencies
- Review/evaluate/comment on environmental documents

### BEC

- Keep RAB informed of documents, issues, and progress
- Provide presentations, notifications, forum for comments/questions
- Transmit community comments/questions to RPMs
- Respond to public inquiries

6



## RAB INPUT



### Alameda Program

- 12 meetings w/~2 presentations per meeting
- 30 Open IR Sites + TCRAs
  - Multiple documents per action
  - Limited Time/Resources

### Opportunities for RAB comments

- Document review period
- RAB Meetings
- Ideas?

7



## UPCOMING DOCUMENTS



- Draft Expanded SI for Transfer Parcels EDC-12, EDC-17, FED-1A, FED-1B, and FED-1C submitted awaiting comments
- Draft FS for OU-2A submitted awaiting comments
- Draft FS for OU-2B – March 2010
- Revised Draft FS for OU-2C – April 2010
- Draft Remedial Design and Remedial Action WP for Site 1 – April 2010

8



## FINAL COMMENTS / QUESTIONS



**ATTACHMENT B-5**

**FRED HOFFMAN'S LETTER OF RESIGNATION**

**(3 pages)**

Fred Hoffman  
Contaminant Hydrogeologist  
Alameda Point Remediation Advisory Board Member  
February 4, 2010

RAB Community Co-Chair  
Dale Smith

RAB Navy Co-Chair  
Derek Robinson

I came to the Remediation Advisory Board, after a 35 year career as a Contaminant Hydrogeologist, first with the Environmental Protection Agency in San Francisco, and then I built and led the Superfund ground water investigation and cleanup at Lawrence Livermore National Laboratory, among the most successful ground water cleanup sites in the world. I am a CA Professional Geologist and Certified Hydrogeologist. I thought that by joining the RAB, I would be able to provide my experience and expertise to the Navy toward the end of improving the efficacy and efficiency of the ground water cleanup at Alameda Point.

I have little interest in the CERCLA process, but an abiding interest in ensuring that a science-based process is fundamental in the characterization of the subsurface, the design of the ground water remediation systems, and the deployment and operations of those systems. During the two years that I have been a RAB member it has become clear, at least to me, that the Navy and the regulators are only interested in having the RAB provide the required public participation in the CERCLA Process and that neither the Navy nor the regulators are interested in technical input from the public. That being the case, I hereby tender my resignation to the RAB.

In parting I would like to reiterate the five areas of concern that I have regarding the approach to solving the ground water problems at the point.

• **Data Collection and use**

The continuum of Data – Information – Knowledge – Understanding – Wisdom breaks down if there is a gap at any point along the way. But it cannot even get started without the timely collection of data. The Navy has stated in a recent RAB meeting that they do not need time sensitive data, because it is their opinion that contaminants were not reaching San Francisco Bay 50 meters away. An opinion without data is just an unsupported opinion. The Department of Toxic Substances Control stated in a recent RAB meeting that in recent years the Department had noticed that much of the data that was being collected was not being used. Their shocking response to this was not to insist that the data be used, to move along the continuum, but to reduce the collection of data.

It is important to move along the continuum, because only when we achieve wisdom, can we predict what will happen when we deploy a candidate technology and then be able to design the most effective remediation. Today we have powerful tools that allow us to analyze and interpret data. These include database mining techniques and

ground water contaminant fate and transport modeling. Utilizing these tools provides us with defensible science-based decision-making. Without them, we can only guess at what's in the subsurface and what will happen to it when we stress it.

- **Subsurface Characterization**

It is a function of subsurface investigations that we can never know everything that we would like to know about what is beneath the ground surface. We can only know for certain what we have at the points at which we take measurements. Therefore, we never have "enough" data. However, if we carefully gather data regarding the geology, the chemistry, the hydrology, and information regarding the hydraulics we can make some science-based predictions as to the characterization of the subsurface between data points. All of these points must be taken into account when selecting a subsurface data collection technique or sampling method. In addition, we must be prepared to change course should the data indicate that another technique might be more useful. Characterization of a site begins with the first site visit and doesn't end until the site is closed. Incoming data throughout the investigation and cleanup phases must be continuously evaluated and appropriate operational changes made as our understanding of the site changes.

- **Selection of a Remedy**

The Navy has stated in a RAB meeting that it is a Navy policy to not use Pump and Treat ground water remediation. Unfortunately there are certain situations in which pump and treat is the most effective and efficient ground water remedy known. Some of the ground water contaminant plumes at Alameda Point may fall into this category. Equally disturbing is that this mindset against pump and treat appears to have blinded the Navy to the use of pump and treat as a means of hydraulic control while deploying other technologies such as ISCO. Combining technologies may provide the best of all worlds. Limiting the technologies that are acceptable at Navy sites can also put a damper on consultants creativity thus preventing consideration of the most effective technology or combination of technologies.

- **In-situ injections**

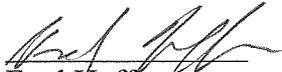
The Navy has made it clear that In-Situ technologies are their preferred remedies. When designing systems that inject reactants into ground water contaminant plumes, there are certain factors that must be taken into account. The Navy has shown little sign that they have taken comments regarding these factors seriously. In order for a reactant to do its work, it must come into contact with the contaminant. In most geologic environments it is likely that a reactant injected into the contaminant plume will simply displace the water containing the contaminant pushing it away from the injection site. Contaminant degradation can then only take place at the interface of the injectant and the contaminated ground water and the continued contaminant degradation will be limited by the rate of diffusion. The issue of contaminant displacement by the injectant and the issue of reactant and contaminant mixing must be dealt with to design an effective remedy.

- **Performance Monitoring**

The library of case histories is replete with descriptions of deployed remedies with inadequate performance monitoring systems. In many cases they report reduction in contaminants because they are analyzing the injected reactant. In other cases, the issue of ground water and contaminant displacement has not been addressed, the provenance of ground water samples collected cannot be adequately described and the understanding of what has happened in the subsurface following injection remains unknown. The performance monitoring system installed must be given the same careful consideration as the placement of all other ground water monitoring and injection and extraction wells, to ensure that the data taken from them can be accurately interpreted.

I sincerely hope that the Navy will move toward taking a more science-based approach to the investigation and cleanup of the ground water at Alameda Point, and that the regulatory agencies use all the force of the CERCLA process and ARARS, to ensure that this is done. The result can not help but be a more effective and efficient cleanup activity.

Sincerely,

  
Fred Hoffman