

Peter Russell, Russell Resources, Alameda Reuse and Redevelopment Authority (ARRA)

Contractors

John McGuire Shaw Environmental and Infrastructure
Betty Schmucker, Trevet Environmental, Inc.
Tommie Jean Valmassy, Tetra Tech EMI

The meeting agenda is provided as [Attachment A](#).

MEETING SUMMARY

I. Welcome and Introductions

Derek Robinson (Navy Co-chair) called the December 2011 former Naval Air Station Alameda (Alameda Point [AP]) RAB meeting to order, welcomed all to the meeting, and asked for introductions.

II. Co-Chair Announcements/Community and RAB Comment Period

Mr. Robinson noted the recent passing of RAB member Jean Sweeney and asked for a moment of silence. Dale Smith (RAB Community Co-chair) then asked RAB members to say a few words about Jean and how she impacted their lives. Thoughts were expressed by RAB members Kurt Peterson, George Humphreys, Joan Konrad, Michael John Torrey, and Dale Smith; Peter Russell (ARRA); and Dot Lofstrom (DTSC/community attendee). All noted how much Mrs. Sweeney will be missed and how active she was in the Alameda community. She was remembered as kind, gracious, and conscientious. She was responsible for acquiring the Alameda Belt Line property for the city of Alameda (City) from the railroad for a very reasonable price. She was a RAB member for eight years and RAB community co-chair early on.

Ms. Smith moved on to Community Co-chair Announcements. She announced that she received three documents for review in the last two months. For Site 24, the EPA had concerns about slope stability and lack of drawings showing rip rap relative to the slope. For Site 1, EPA had concerns about the proposed technology, how well it would function, and inadequate technology at the well heads. Her comments on the Operable Unit (OU)-2B Draft Final Feasibility Study (FS) will be discussed during the presentation tonight.

Ms. Smith said she went by Site 24 and noticed no fieldwork underway there, although the contractor needed to be in the field by October 2011. She said that until the Site 24 document is finalized fieldwork won't start, and she is concerned about the Navy's contractor being able to complete fieldwork before the least terns arrive (around April 15, 2012).

Ms. Smith said she did not observe fieldwork underway at Site 17, either, and radioactive soil is stockpiled and not yet cleaned up. There is soil outside the berm area that is not contained and

she is concerned it could go into Seaplane Lagoon. She also noted three vaults open and exposed at OU-2A, one with friable asbestos. Ms. Smith said she received a document from Dr. Russell about the Lawrence Berkeley National Laboratory (LBNL) Second Campus project location involving OU-2A and environmental issues. She said when she joined the RAB the area now proposed for LBNL was under remediation, and now rebound is occurring. She said the area is under the petroleum program and needs further remediation.

Lastly, Ms. Smith said that the RAB sent a letter to Congressman Stark and she received a reply. He will send her comments along to the Navy and asked her for any other information she can provide. Ms. Smith said she will provide him with information from RAB meeting minutes. She asked for any other RAB or community comments.

Doug Biggs (Alameda Point Collaborative [APC]) commented on a presentation given by Dr. Russell at an ARRA meeting, and said Ms. Smith had made comments at the presentation on which he wanted clarification. He said Ms. Smith stated at the meeting that there are no residential cleanup standards for soil at AP, only groundwater, and asked if that is true. He said Ms. Smith also said planting trees or digging in the soil is prohibited at AP, and asked if that is true. Mr. Biggs felt these statements ran counter to what he had learned at the RAB. Ms. Smith clarified that she meant only the non-residential areas and specifically OU-2A, OU-2B, and OU-2C, not the APC area. Mr. Biggs said her statements were taken for AP as a whole and it was not clear at the ARRA meeting that her statements were site-specific.

Mr. Robinson said that part of the Navy-City dialogue involves reuse, and that specific areas designated by the City for commercial reuse are not required to be cleaned up to residential standards. However, the majority of the base has reached residential cleanup standards for soil and groundwater. Ms. Smith disagreed that such standards exist. Mr. McGinnis said residential soil standards exist for all sites, but may or may not be referenced in site documents depending on future land use and whether or not soil contamination exists.

Mr. Robinson clarified the second comment Mr. Biggs relayed, noting that digging is not necessarily prohibited. However, the existing City Marsh Crust Ordinance requires additional steps if one chooses to dig through the Marsh Crust, which exists at depth across AP. The ordinance is an institutional control by which everyone is required to abide. Mr. McGinnis added that land-use controls are and will be applied to specific areas, but not across all of AP. Dr. Russell said the ARRA had asked him to clarify Ms. Smith's comments and he prepared responses. He said restrictions exist on digging and to what depths, as reflected in Records of Decision (RODs) for three areas: one is the Marsh Crust Ordinance; one is Dog Park (Installation Restoration [IR] Site 28), and the third is North Housing. As no RODs are prepared yet for OU-2A, OU-2B, and OU-2C, any restrictions that might be placed there are yet to be determined.

Dr. Gottstein commented on a statement made in a newsletter (Alameda Point Focus, Issue #4, Fall 2005/Winter 2006) in which EPA stated that homegrown produce from AP is safe. She thought it was something of a blanket statement for all of AP. Dr. Russell said the remark was specifically about the safety of homegrown produce relative to PAHs in the APC area, not base-wide. Dr. Gottstein felt the statement in the newsletter could be misinterpreted by the public.

Mr. Humphreys handed out a comment letter on the OU-5/Fleet Industrial Supply Center Oakland Alameda Facility/Alameda Annex (FISCA) IR-02 presentation given at the October RAB meeting ([Attachment B-1](#)). He asked that the written comments be incorporated into the meeting minutes; Mr. Robinson agreed.

Mr. Humphreys commented on the November 2011 Fact Sheet for the AP/FISCA Five-Year Review (5YR). He said he cannot tell from the figure on page 3 if the area between FISCA and Bayport is part of FISCA, or what its status is. Dr. Russell said that area is part of Site 1. Mr. Humphreys asked about the petroleum fuel facility there and Dr. Russell said it was addressed by the City/its developer.

Mr. Humphreys noted that the two figures on page 7 of the 5YR Fact Sheet are unclear and need to be readable, in particular for PAHs. Mr. Robinson agreed the figures are not useful at that size and will make sure they are better presented in the future. Mr. McGinnis said the original figures are in the 5YR document and a link to the website is provided. Ms. Smith said some RAB and community members do not have internet access, and this becomes an environmental justice issue. Dr. Gottstein commented that on page 2 (summary table) radioactive isotopes (“rad”) need to be added for several sites, and the same mistake was made on a previous document regarding historical contaminants. She asked why they are missing as previous contaminants of concern (COCs) at other sites listed on the table. Mr. Robinson said “radioactive isotopes” are listed for Site 1. Dr. Gottstein noted that for Building 5, there is no mention that drains and sewer lines flow to Seaplane Lagoon. Mr. Robinson said there is no ROD yet that addresses Building 5, which is in OU-2C and not to be confused with OU 5 in the 5YR. He explained that the 5YR is conducted for sites that have passed the ROD stage and it reviews remedies for protectiveness. Dr. Gottstein said someone reading this 5YR Fact Sheet may think there is no radioactive issue at OU 5 or Site 17. Mr. McGinnis said “rad” at Site 17 is not a COC; the cleanup is being done for COCs. The signs posted at Site 17 are for health and safety, not for “rad” cleanup. Ms. Smith added that the 5YR Fact Sheet (page 4) says remedial action is underway at IR Site 2, but she has seen no documents substantiating that.

There were no further RAB or community comments.

III. Co-chair Elections

Mr. Robinson announced that since the October RAB meeting, two nominations for community co-chair were received: Ms. Smith and Dr. Gottstein. Mr. Humphreys was the sole candidate for vice co-chair. Write-on ballots were handed out to the seven RAB community members present and a vote was taken. Mr. Humphreys was elected vice co-chair and the two co-chair candidates were tied (3-3, with one abstention). A second ballot was handed out for the co-chair position only, with the same result (3-3, with one abstention). Ms. Smith said the coming year will be a difficult one for the RAB and she is prepared to read and review documents, deliver synopses to the RAB and public, elicit information from the Navy and regulators, and have knowledge of the various technologies discussed in the documents. She said the RAB co-chair must be prepared to spend money on copying and postage, and Dr. Gottstein agreed. Mr. Robinson said the community co-chair position takes time and he talks with the co-chair every month. Mr.

Humphreys offered to withdraw as vice co-chair so that either Ms. Smith or Dr. Gottstein could serve as vice co-chair. Mr. Torrey moved that Dr. Gottstein serve as vice-co-chair and Ms. Smith serve as co-chair. The RAB members voted and it was approved unanimously. Ms. Smith will serve as community co-chair and Dr. Gottstein will serve as vice co-chair for 2012.

IV. Operable Unit (OU) 2B Feasibility Study (FS) New Alternatives and Changes

Mr. Robinson introduced Curtis Moss (Navy) to discuss the new alternatives for the OU-2B FS Addendum ([Attachment B-2](#)). This topic was requested by the RAB. Mr. Moss said the goal of the presentation is to discuss changes made between the draft and the draft-final OU-2B FS report. Changes have been made based on the availability of new 2011 EPA regional screening levels (RSLs); RAB, regulatory agency, and City comments; and consideration of future beneficial uses of shallow OU-2B groundwater. The Navy feels the addition of alternate FS analyses allows flexibility for groundwater cleanup if the groundwater beneath OU-2B is not considered a drinking water source.

During review of Slide 3, Mr. Humphreys asked which metals are being added as groundwater COCs. Mr. Moss said lead, hexavalent chromium (hex chrome), nickel, arsenic, cobalt, and some other select metals. He noted that this is not because there was a release of metals into groundwater, but locally elevated concentrations are due to geochemical groundwater conditions allowing the mobilization of metals. Mr. Moss noted that before June 2011 there was no RSL for hex chrome in soil, but EPA now has an RSL, so hex chrome (in a localized area under Building 360) was added as a COC at Site 4 and cobalt (mainly under Building 398) was added as a COC at Site 21.

Two new alternatives for soil were presented: institutional controls (ICs), and excavation and disposal of hex chrome-impacted soil with ICs at Site 4 beneath Building 360. During review of Slide 6, Mr. Bangert asked at what depth the hex chrome-impacted soil would be excavated. Mr. Moss said the depths vary, and hex chrome and cobalt are under current building slabs. Part of OU-2B is within the proposed LBNL footprint and commercial reuse is designated. Excavation and removal here would be done to meet commercial reuse standards for hex chrome.

During review of Slide 7, Mr. Torrey asked why changes have been made to groundwater remedies and how the Navy can be sure animals will not drink the water. Mr. Moss said the new scenario addresses cleaning up groundwater to vapor intrusion standards associated with commercial reuse, and the biggest change among the alternatives shown is the time to reach cleanup. He said groundwater is unlikely to be drunk by animals. Mr. Humphreys said he thought the LBNL project site only covered OU-2A. Mr. Moss said the proposed LBNL footprint spans OU-2A and 2B. Pankaj Arora (EPA) said the new alternate scenario shown on Slide 7 is not yet in the FS Addendum, but the Navy is presenting it for future consideration. Mr. Robinson said this new scenario is a viable one for the City because reuse proposed for the area is ground-floor commercial, with possible second-floor residential. Mr. Bangert asked about scenario GM-3A, whether groundwater is still susceptible to movement toward Seaplane Lagoon, and whether monitoring will show this movement. Mr. Moss said groundwater

monitoring will be ongoing for several years, and the land will be available for use within three to five years but monitoring wells will stay in place.

Ms. Smith said the FS report states that OU-2B groundwater flows into Seaplane Lagoon and intersects with the floor of Seaplane Lagoon, and that groundwater may vertically percolate to the surface of the lagoon. She asked why the Water Board is not concerned about that. She said no testing wells are present along the Lagoon shoreline. Mr. Robinson explained that COCs in groundwater flowing to the Lagoon are below levels of concern, based on results of sediment testing, pore-water testing, and sentinel wells along the lagoon. This information is provided in the OU-2B Feasibility Study Report.

John West (Water Board) said the Water Board has looked at results from groundwater monitoring wells around the lagoon and pore-water test results. All lines of evidence have been examined at Alameda Point. Mr. Humphreys noted that sediment overburden was removed from the bottom of Seaplane Lagoon and asked if the Water Board has looked at the area since, as it is easier for groundwater to get out since the dredge. Mr. West said yes, the Water Board has looked at the monitoring results. Ms. Smith said there are no monitoring wells in the rip rap along the lagoon. Mr. Moss said there are six monitoring wells across the plume at various depths, and the closest are 20 feet from the lagoon. Mr. Robinson added that the wells will continue to be monitored for a variety of constituents. Susan Galleymore (community member) asked how the remediation options correlate with duration and what is happening during that time. Mr. Moss said COCs are reduced to certain levels and the majority of the remedial action will be completed within the first three years. Then monitored natural attenuation (MNA) is the final segment of the remedy, with ongoing monitoring to see how COCs are being reduced. Mr. Moss said natural attenuation is the final “polishing step,” and the remedial alternatives in the FS describe aggressive treatment of the source zones, followed by MNA as a final “polishing” phase until the remediation goals are met.

Dr. Gottstein asked how MNA differs for organic and inorganic compounds. Mr. Moss said MNA is used for organic compounds (volatile organic compounds [VOCs]). The metals are believed to be present due to groundwater geochemical conditions as a result of VOCs. Once the VOCs are addressed, pH and oxidation reduction (redox) conditions causing metals to dissolve into groundwater will stabilize and metals are expected to precipitate out of groundwater, returning to natural conditions. Dr. Gottstein asked about the vapor intrusion issue and second-story residential units over commercial units. Mr. Robinson said the issue for vapor intrusion is VOCs and what standard should the Navy treat to. If the groundwater is not a drinking water source, then treatment will be to vapor intrusion standards.

Doug deHaan (Alameda City Council) asked how heavy metals are removed from soil. Mr. Moss said soil will be excavated from the surface down to 5 to 10 feet to remove hex chrome. Ms. Smith asked why all metals are not being removed. Dr. Russell explained that the ARRA suggested addressing metals in soil through different alternatives based on future reuse. Digging out all of the soil everywhere is very expensive, so some areas – such as north of Atlantic Avenue – can be treated to residential standards because proposed reuse there is more likely residential. The area south of Atlantic Avenue, where Building 360 is located, is unlikely to be

residential in the future and can be addressed differently (including ICs), without the expense of removing soil under Building 360 to meet residential standards. Ms. Smith said the new soil alternative (S-3B) is very limited in scope and represents an “either/or” solution. Mr. Moss added it is not a case of “all or nothing,” but the goal for all parties is flexibility in addressing hex chrome. Mr. Humphreys said that the discussion of soil and groundwater alternatives was unclear and he would like a better description, including drawings, of the alternatives.

Ms. Smith said page 35 of the FS executive summary cites cleanup under Building 360 as not appropriate. Mr. Peterson clarified that Building 5 is proposed for commercial reuse. Mr. deHaan said the City’s intent is to take down Building 360. Mr. Bangert asked that if the alternative with building foundations as ICs (S-3B) is chosen and the building is later torn down, will the developer pay for the soil remediation. Dr. Russell said yes, it would become part of the project cost. Ms. Smith asked if once the land is transferred, would DTSC come in with new cleanup standards. Dot Lofstrom (DTSC) said no; that is why DTSC is part of the BRAC Cleanup Team (BCT) and RAB to help set standards and remediation goals, and the Navy takes these into account.

During review of Slide 8, Mr. Moss said the Navy hopes to beat the July 2014 remedial action start date. Mr. Torrey asked why it takes so long. Mr. Moss said there are required document review times that add up, but it may be possible to accelerate the schedule. Ms. Smith reiterated her concern with incomplete groundwater cleanup as represented by dispersion and dilution. Mr. Robinson confirmed that dispersion and dilution are viable parts of MNA.

Mr. Robinson noted that the time was 8:15 and the RAB should vote on whether to extend the meeting. Mr. Torrey moved that the meeting be extended until 9 PM and Ms. Smith seconded the motion. A vote was taken and the motion passed unanimously.

V. RAB Meeting Changes and Path Forward

Mr. Robinson said he has discussed meeting schedule changes and the path forward with Navy management, and he is interested in hearing more from the RAB. He received the RAB’s letter about meeting frequency and will take it to his management. If there are other RAB member comments, they should be sent to him and he will present them to his management. Ms. Smith said she prefers to discuss how the RAB can focus on operating without input from the Navy. She said the RAB tried to hold a meeting in November without the Navy and it was not that successful. She is pleased that RAB members have worked hard to prevent meeting curtailment.

Mr. Peterson asked how Mr. Robinson communicates with his management. Mr. Robinson said he has face-to-face meetings. Ms. Smith said the RAB is unhappy with limiting topics to pre-ROD sites, and that she is concerned the RAB will be silenced after RODs are signed for the three or four remaining pre-ROD sites. She said during the November *ad hoc* meeting that the RAB members present discussed the suggestions for changing the meeting day and changing meetings to coincide with document reviews. Mr. Peterson said he would like a minimum two-week advance notice for RAB meetings.

Mr. Humphreys said he thought the RAB co-chair nomination process was complicated by soliciting nominations outside of the RAB meeting, which he felt led to divisiveness. Mr. Robinson said because there was no November meeting, he solicited co-chair nominations in advance of this meeting, and his intent was not to create dissent. Mr. Bangert said he does not like either changing the meeting day or having “floating” meetings, in which the meeting dates are scheduled only a few weeks in advance. He noted that knowing quarterly meetings the year in advance is helpful, although the scheduled dates may not agree with document release dates. However, he supports the idea of “floating” meetings if this allows document comments in a timely manner. Joan Konrad (RAB member) asked how much notice is needed for meetings, and if one month ahead of each RAB meeting is doable. Mr. Robinson said yes, and then the Navy will know when each document is coming out. The comment periods for documents are 60 days. At the last meeting he had suggested a year-long schedule; the Navy can prepare a yearly RAB meeting schedule and send monthly updates with meeting changes if document release delays are expected. Ms. Smith said the document delivery sheets have not been updated for the RAB, so the RAB does not know in advance what documents are being issued and when.

Mr. Peterson said the concern is to get documents in a timely manner so the RAB can review and respond. He suggested that the Navy’s contractors who prepare the documents work around the RAB meeting schedule by providing documents when the RAB meets.

Ms. Smith said a previous suggestion about videotaping presentations and showing them later is not effective if no feedback is allowed, and thinks videoconferencing (live conferencing) is better. Mr. Robinson said videotaping was a suggestion by Mr. Bangert, who then elaborated on his idea about using YouTube to view videos and then post comments. Ms. Smith suggested live teleconferencing with the Navy, or meeting only with regulators and not the Navy, if this would save money. She said EPA is the lead agency, DTSC has very little to say, and the Water Board has involvement on some sites. She thinks more information would be provided by the agencies and they could answer questions.

Mr. Peterson said videoconferencing makes sense as long as the handouts are provided ahead of time. Ms. Smith asked if the City has capability to videoconference; Mr. deHaan said no. Mr. Robinson said he will raise the idea of videoconferencing with management. Suggestions were made for using Skype, videoconferencing at the local library, webinars, holding meetings at EPA, meeting in the evening, and others. Mr. Arora reminded the RAB that the Navy is the lead for AP and the RAB. The agencies work with the Navy and help make sure the community is served. Mr. deHaan suggested the RAB bring individual proposals to the Navy, and wondered if meeting six times a year would accomplish the RAB’s goals. Mr. Robinson asked if the RAB would require formal presentations or meeting minutes for supplemental video or web meetings, as travel alone is not a significant enough cost savings. Ms. Smith said meeting minutes are necessary to have a written record of meetings in the administrative record file. She said she feels there are too many Navy, regulators, and contractor staff attending the RAB meetings. Dr. Russell suggested keeping monthly RAB meeting dates but cancel a meeting if no seminal document is ready for discussion. He said the annually updated Site Management Plan (SMP) provides a schedule for upcoming documents, both primary and secondary. The RAB can pick which documents they wish to review over the next year and meet accordingly. He felt this

should satisfy everyone's minimal requirements and still be able to reduce the number of meetings down to available funds. Mr. Robinson had provided three hard copies of the latest SMP update (September 2011) at a previous meeting.

Mr. Robinson said the Navy has received two presidential Executive Orders in the last few months, both of which address cost-cutting and elimination of non-essential work. Everyone in government is making tough budgetary decisions. Every BRAC base has reduced its meetings.

Dr. Russell and Mr. deHaan agreed to look into videoconferencing capabilities at their organizations. Mr. deHaan supported Dr. Russell's idea to meet as needed and allow the RAB to "throttle down." He said several topics should be able to be addressed in one meeting.

Mr. Robinson agreed to provide additional copies of the latest SMP update for the RAB to use as a starting point for document review and meeting schedule. He asked for a proposal from the RAB for meetings that he can take to his management and is supportable. He suggested developing several proposals among the RAB and voting on one. Irene Dieter (community member) suggested that a RAB member make motion to vote on the three suggestions: 1) keep meetings monthly and cancel as needed; 2) videoconference in the local library with just the regulators; or 3) decide on dates for four meetings for 2012. Dr. Russell reviewed his proposal, stressed that meetings would only be when needed, and adequate notice would be made for document delays. He said Mr. Robinson needs to be able to make a strong case to his management about the number of documents needed to be reviewed. Ms. Smith moved that RAB members meet within the next two weeks to discuss documents for review and Mr. Bangert seconded. The motion failed (3-4).

Dr. Russell suggested the Navy highlight the pre-ROD documents in the SMP before distributing it to the RAB members; Mr. Robinson agreed. Mr. Peterson asked Mr. Robinson to let management know the RAB is trying to prioritize meetings and is considering videoconferencing.

At 9:10 Mr. Robinson asked for another vote to extend the meeting. The RAB unanimously voted to extend the meeting to 9:30 PM.

VII. Approval of October 6, 2011 RAB Meeting Minutes

Mr. Humphreys made the following comments:

- Attachment B-1; the letter was missing two signatures, Mr. Torrey's and Mr. Bangert's. The attachment should be replaced with fully signed letter, which will be provided.
- Page 4 of 11, third paragraph, third line: Change the sentence to "...the drain lines for Operable Unit (OU)-2C run through *to* the estuary, and discuss the possibility of radiological impacts from radiologically contaminated fill material *dredged from the estuary and deposited throughout much of the runway area.*"
- Page 6 of 11, third full paragraph: Mr. Humphreys said he did not ask the question about triggering a system alarm; change to "*Dr. Gottstein asked...*"

- Page 6 of 11, fourth paragraph: Change the second sentence to “*He also asked whether it is because the plume is near Tinker and Fifth streets, so the Navy is not treating that area.*” Rewrite the last sentence as follows: “*Further, he said, they could treat under the roads by slant drilling.*”

Mr. West provided the following comment:

- Page 8 of 11, first paragraph after bulleted items, first sentence: remove the word “*located*” and replace with “*created for mitigation.*”

Mr. Torrey moved that the October 6, 2011, meeting minutes be approved with the noted changes and Mr. Bangert seconded. The motion carried.

VI. BCT Update

Ms. Smith asked James Fyfe (DTSC) if the BCT discussed the RAB meeting reduction issue in its meetings. Mr. Fyfe said it was mentioned that the RAB meeting schedule would change. Mr. Fyfe reported that the Water Board has recommended 35 petroleum sites for no further action. Other BCT meeting topics included those also presented at the October RAB meeting and tonight’s meeting.

The meeting was adjourned at 9:30 PM and was followed by the Year-End Social.

VIII. Review of Action Items

The status of previous action items was not reviewed. The table below has been updated based on actions since the October RAB meeting. New action items from this meeting are included.

Action Items:	Previous Item #/ Action Item Status/ Action Item Due Date:	Initiated by:	Responsible Person:
<p>Article I.</p> <p>1. Request for Presentations: a. Site 25 Plume Status Tracking</p> <p>Postponed Presentations (pending further action or information prior to scheduling the presentation):</p> <p>1. Site 1 Radiological RD/RA work plan</p>	<p>a./Pending/2011 Article II.</p>	<p>Article III.</p> <p>RAB</p>	<p>Article IV.</p> <p>Mr. Robinson</p>
<p>2. Finalize August RAB Meeting minutes at next RAB meeting, pending receipt of comments from Ms. Smith.</p>	<p>Complete</p>	<p>RAB</p>	<p>Navy contractor</p>
<p>3. Find out if current RAB meeting space, Room 140, would be available to the RAB for unofficial RAB meetings.</p>	<p>New/November 3, 2011</p>	<p>Mr. Leach</p>	<p>Mr. Robinson</p>
<p>4. Add email addresses for Susan Galleymore and William Smith to the RAB email distribution list.</p>	<p>Complete</p>	<p>Ms. Galleymore</p>	<p>Navy contractor</p>
<p>5. See if Navy management will allow more than four RAB meetings a year if they are held the same day as BCT meetings.</p>	<p>Pending</p>	<p>Mr. Humphreys</p>	<p>Mr. Robinson</p>
<p>6. Ask BCT if they are willing to change their meeting days from the third Tuesday to the third Thursday.</p>	<p>Complete</p>	<p>Mr. Humphreys</p>	<p>Mr. Robinson</p>
<p>7. Notify the RAB via email (and phone for those without email) of the schedule for the next RAB meeting.</p>	<p>Complete for December RAB meeting; ongoing pending schedule plan for moving forward</p>	<p>Navy</p>	<p>Mr. Robinson</p>

Action Items:	Previous Item #/ Action Item Status/ Action Item Due Date:	Initiated by:	Responsible Person:
8. Check for availability of videoconferencing equipment at City and ARRA.	New/Completed/as per e-mail from R. Bangert dated 12/5/2011	RAB	Mr. deHaan and Mr. Russell
9. Send RAB members the 2011 SMP Update with relevant primary and secondary documents highlighted.	New/Completed/distributed via US mail on 12/8/2011	RAB	Mr. Robinson
10. RAB members to review SMP document schedule and make proposal for Mr. Robinson to take to management re: number of meetings for 2012.	New/TBD	RAB	RAB

ATTACHMENTS

NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING ATTACHMENTS

- A. Naval Air Station Alameda Restoration Advisory Board Meeting Agenda, December 1, 2011 (1 page)
- B-1. George Humphreys: Comment Letter on OU-5/FISCA IR-02 Presentation at October RAB meeting, dated December 1, 2011 (2 pages)
- B-2. Alameda OU-2B Feasibility Study Update (8 slides)

RESTORATION ADVISORY BOARD***NAVAL AIR STATION, ALAMEDA******AGENDA*****DECEMBER 1, 2011, 6:30 PM****ALAMEDA POINT – 950 WEST MALL SQUARE, ALAMEDA CITY HALL WEST****SUITE 140/COMMUNITY CONFERENCE ROOM****(FROM PARKING LOT ON W. MIDWAY AVENUE, ENTER THROUGH MIDDLE WING)**

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 – 6:35	Welcome and Introductions	Community and RAB
6:35 – 6:50	Community and RAB Comment Period*	Community and RAB
6:50 – 7:05	Co-Chair Elections	RAB
7:05 – 7:45	OU-2B FS New Alternatives/Changes	Curtis Moss
7:45 – 8:05	RAB Meeting Changes and Path Forward	RAB
8:05 – 8:15	BCT Update	James Fyfe
8:15 – 8:30	Approval of Minutes Review Action Items	Dale Smith
8:30	RAB Meeting Adjournment and Year End Social	

* If there is time at the end of the agenda, additional comments will be taken.

Comments on OU-5/FISCA IR-02
Presentation at October RAB Meeting
George Humphreys

Dec. 1, 2011

This site consists of a benzene/naphthalene groundwater plume that extends under Alameda Naval Air Station IR Sites 25, 30 and 31; and under FISCA IR Site 2. In May 2010, George Humphreys prepared a write-up concerning this site. The Navy currently is treating two “hot spots” one near Kollman Circle and one in the Marina Village Family Housing Area (IR Site 31). The May 2010 paper recommended treating the hot spot between Shinsei Gardens and the northwest corner of the College of Alameda and the hot spot that was shown under IR Site 30, Woodstock/Island H. S. the paper also suggested treating those areas of the overall plume between those hot spots. At the October 2011 RAB meeting the Navy’s Project Manager, Mary Parker, and consultant Larry Dudus, PG of Tetra Tech EC, Inc. made a presentation on groundwater remediation of the two “hot spots” using biosparging. The results showed significant reductions in both benzene and naphthalene concentrations at most locations being treated, although the areas have not yet been tested for “rebound” effects. The consultant identified the producer gas plants in Oakland as the source. Apparently the Navy intends to rely on natural attenuation to take care of the other “hot spots” and areas of the overall plume that remain above the 1 µg/L cleanup goal for benzene. The following questions remain unanswered:

1. Because the producer gas plants last operated circa 1900, natural attenuation has not destroyed the benzene/naphthalene over approximately 110 years. How does the Navy justify relying on natural attenuation to complete the cleanup process after biosparging stops?
2. One of the “hot spots” under the Woodstock Childcare Center and Island High School has not been treated. In fact, benzene concentrations in well BZMW 2 (nearest Island H.S.) actually have increased since the start of biosparging, possibly due to “pushing” of contaminants in that direction. Is it acceptable to the Navy and the City to leave untreated contaminants in place for many years (perhaps a century or more)? This could expose young children and students to contaminant concentrations above cleanup goals.
3. Certain homes near the corner of Willie Stargell and Fifth St. in the Bayport development are shown as being over parts of the benzene/naphthalene plume that exceed the 1 µg/L cleanup goal. Have these homeowners been notified that they may be at increased cancer risk? At the Oct. RAB meeting the consultant was asked whether the “hot spot” near the northwest corner of the College of Alameda was not treated because it had been paved over. He replied that it would be possible to treat the area using slant drilling.
4. In our May 2010 paper, we included vertical sections through the plume that apparently extended into the bay mud. At the Oct. 2011 RAB meeting consultant Larry Dudus said that air was being injected into the bay mud to

treat deep contaminants. How is it possible to control this injection into the bay mud? Because bay mud is more viscous it seems reasonable to expect the air injection to require higher pressures and for the air to blow channels through the mud, rather than to permeate through the medium.

5. The Navy has now stated unequivocally that the source of the benzene/naphthalene plume is the old producer gas plants on the Oakland side of the estuary. This source is antithetical to the Navy's reliance on natural attenuation because the contamination persists after some 110 years. Other possible sources are the San Francisco Airdrome, the Pacific Coast Refining and the FISCA scrap recovery operation. Note that channels through the mud flats could have conveyed tarry wastes from the refinery into this site area. Is the Navy firm in its position that the benzene and naphthalene originated from the producer gas plant? Will the Navy seek cost recovery from prior owners of the producer gas plants, refinery or airport?



Alameda OU2B Feasibility Study Update



No. 113



**Alameda
Point
May 1940**

RAB MEETING
DECEMBER 1st 2011
Navy Project Manager Curtis Moss, P.G.



Outline



- **Summary of updates made in the draft final OU2B FS Report**
- **OU2B Schedule**



Updates to OU2B Draft Final FS



Updates were made due to:

1) New 2011 U.S. EPA regional screening levels (RSLs)

- Added hexavalent chromium as soil COC at Site 4

2) Regulatory Agency, RAB, and City of Alameda comments

- Added cobalt as soil COC at Site 21
- Revised soil remediation alternatives incorporating latest reuse plans
- Added metals as groundwater COCs (OU2B-wide)

3) Consideration of future beneficial uses of shallow groundwater at OU2B

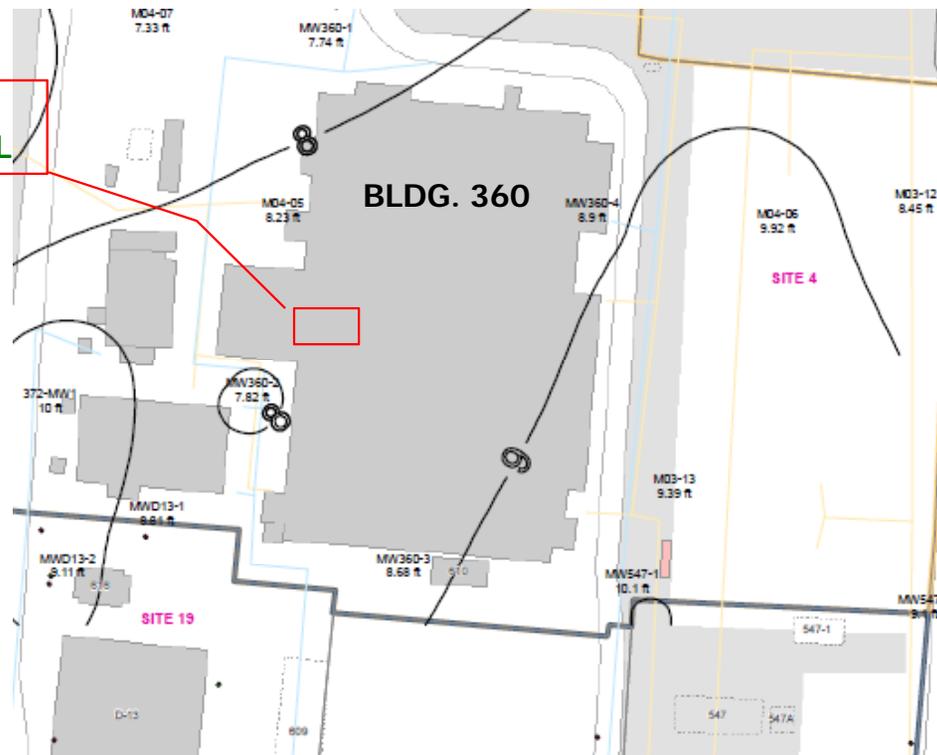
- Added alternate FS analysis for groundwater cleanup if groundwater beneath OU2B is not considered a source of drinking water



Site 4 Hexavalent Chromium in Soil



Extent soil impacted > RSL





Site 21 Cobalt in Soil > RSL





Soil Remediation Alternatives



S-1: No Action

S-2 (New Alternative): Institutional Controls

- \$398k

S-3A: Excavation and Disposal of Impacted Soil (Residential Reuse)

- ~ 18,000 bcy
- \$ 7.3 million

S-3B (New Alternative): Excavation and Disposal of Hexavalent Chromium-Impacted Soil with ICs at IR Site 4 beneath Bldg. 360

- ~ 800 bcy
- \$ 1.1 million



Groundwater Remediation Options



Cleanup to drinking water standards with residential reuse:

Remedial Alternative	G-1 No Action	G-2 ISTT, PRB, MNA, ICs	G-3a ISTT & ISCO, MNA, ICs	G-3b ISTT & ISB, MNA, ICs	G-4 Recirculation & PRBs, ICs
Duration (yrs)	60	30	20	20	30
Cost (\$ millions)	NA	17.3	19.5	14.1	22.2

New Alternate Scenario: Cleanup to vapor intrusion standards with commercial reuse:

Alternative	GM-1	GM-2	GM-3a	GM-3b	GM-4
Duration (yrs)	60	20	3	5	20
Cost (\$ millions)	NA	14.4	14.7	12.4	16.7



OU2B Schedule



- FS Addendum - January 2012
- Proposed Plan & Public Meeting - June 2012
- Draft ROD - October 2012
- Remedial Action - July 2014