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

www.bracpmo.navy.mil
Building 1, Suite 140, Community Conference Center
Alameda Point
Alameda, California

October 7, 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

George Humphreys	Joan Konrad	James Leach
Jean Sweeney	Jim Sweeney	Michael John Torrey

Community Members

Doug Biggs	Alameda Point Collaborative (APC)
Susan Galleymore	Gretchen Lipow

Navy Members

Lora Battaglia	Navy Project Manager (PM)
Frances Fadullon	Navy PM

City of Alameda Representatives

Peter Russell	Alameda Reuse and Redevelopment Authority (ARRA)

Regulatory Agencies

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

Contractors

John McMillan	Shaw Environmental, Inc. (Shaw)
Heather Rectanus	Battelle
Stephen Rosansky	Battelle
Diane Sarmiento	KCH (joint venture between Kleinfelder and CH2M Hill)
Radhika Sreenivasan	ChaduxTt
Tommie Jean Valmassy	ChaduxTt

The meeting agenda is provided as Attachment A.

MEETING SUMMARY

Derek Robinson (Navy co-chair) called the October 2010 former Naval Air Station Alameda (Alameda Point) Restoration Advisory Board (RAB) meeting to order at 6:30 p.m.

I. Approval of September 2010 RAB Meeting Minutes

Dale Smith (RAB co-chair) asked for comments on the August 2010 RAB meeting minutes. RAB members provided comments, which will be incorporated into the final set of minutes for September 2010.

II. Co-Chair Announcements

Ms. Smith distributed the list of documents received in August and September 2010 (Attachment B-1). Ms. Smith provided the RAB comment letter on the draft remedial design (RD)/ remedial action (RA) and sampling and analysis plan (SAP) for Site 35 (Attachment B-2).

Mr. Robinson reviewed the action item list. The list is presented in Section VI of these minutes, and items that were discussed are noted below.

Presentation Requests: Mr. Robinson noted that the Navy has completed presentations on the Bayport sewer system and Site 26 cleanup. Mr. Robinson said the interim remedial action completion report (IRACR) would include responses to the comment letter by George Humphreys (RAB member). Mr. Humphreys said that the Bayport sewer system presentation did not include the change in the plumes over time and so requested an action item to evaluate the change in the plume over time in the IRACR.

Action Item 3: Mr. Robinson said that he will not be able to give a presentation on the Veterans Administration's (VA) new site plan. However, he offered to give a presentation on transfer mechanisms for Alameda parcels, including the VA parcel, at the January RAB meeting. Jean Sweeney (RAB member) said that the VA made a presentation at the city council meeting and the VA's site plan is available at the city meeting's website.

Action Item 7: Complete. Mr. Robinson said that the Navy has asked its contractors to evaluate use of ozone to treat sites when possible. Contractors will be asked to consider the technology in the future.

Ms. Smith said that the RAB has requested more information than is listed in the action items. She said that Mr. Humphreys has assembled a list of information requested during prior meetings the RAB would like from the Navy. Ms. Smith provided the list to Mr. Robinson (Attachment B-3). Mr. Robinson said that he would review the list and provide responses.

III. Site 2 Data Gaps

Ms. Smith said that the RAB could ask questions on the presentation at this meeting but the RAB can provide written comments when the document is submitted for a formal review and comment period. The Navy will provide a response to the written comments in the next version of the document and both the RAB comments and responses will become part of the administrative record.

Mr. Robinson introduced Frances Fadullon (Navy PM) to begin the presentation on the Site 2 data gap sampling. Ms. Fadullon began the presentation on the Site 2 status update and proposed pre-design field investigation (Attachment B-4).

During the review of slide 7, Ms. Fadullon introduced Diane Sarmiento (KCH) to provide technical details on the data gap investigation. Ms. Sarmiento said that she works with KCH and her team is preparing the design for IR Site 2. Mr. Humphreys asked about the depth of the test pit. Ms. Sarmiento said that the objective is to detect waste in the pit and the team intends to excavate to the water table. She added that if waste is visible before the excavation reaches the water table, then excavation will stop because the Navy will cover the waste. She said that the objective is to find the extent of the waste rather than its depth. Jean Sweeney (RAB member) asked if the waste will be tested. Ms. Sarmiento said that the waste will not be tested.

Ms. Smith asked about Navy plans if radiological waste or unexploded ordnance is found. Ms. Sarmiento said that the Navy is routinely conducting radiological screening. Ms. Fadullon said that if radiological waste is found during the screening, the Navy will not trench that area and will move farther from the area, depending on the screening results.

Mr. Humphreys said that the last remedial investigation report extended only 2 to 3 feet below ground surface (bgs) to study waste. He added that the pond is at a lower elevation than the northern area of the site. Mr. Humphreys said he feels that waste could be found at a depth of 15 or 20 feet; not finding waste in the top 3 feet does not indicate the presence or absence of waste below 3 feet. Ms. Sarmiento confirmed that the Navy will proceed deeper than 3 feet bgs and the depth will vary with elevations at the site. Ms. Smith said that the work plan is not clear in explaining the rationale and how the work will be carried out. Ms. Sarmiento said that the sampling and analysis plan will provide more details than the work plan.

Mr. Humphreys said Foster Wheeler Corporation's report on seismic stability at Site 2 concluded that there may be 25 feet of lateral displacement in the case of a seismic event. Mr. Humphreys said he thinks lateral displacement could occur in areas where soil gas locations KCHSG-8 and KCHSG-9 are proposed. He added the steepest slope to the bank is found in this area and expects probable slope failures. He asked why the Navy is not testing at the edge of the slope. Ms. Sarmiento said that the Navy has reviewed the report and KCHSB-5 will be used to assess vertical settlement since the area has the thickest portion of potential waste. She added that the Navy is concerned about borings B-1, B-2, and B-3, which are around the perimeter, for lateral settlements. Mr. Humphreys said that the north pond is connected to the bay by a culvert. If there is a failure, waste will enter the pond and then into the bay without any failure of the perimeter wall.

Mr. Humphreys said that the sediment was excavated from the Seaplane Lagoon and deposited in the south pond. He added that no radiological surveys were conducted there, although there may be radiological material present. Mr. Humphreys said he is concerned that the area has not been adequately scanned or sampled. Ms. Sarmiento said that a number of surface soil samples were collected from this area for the ecological risk assessment and were analyzed for radiological material, but she does not know whether radiological material was found.

Mr. Humphreys said that the base for the perimeter road around the landfill was sandblasting grit and contains tributyl tin above the action level. He added that the Navy never evaluated tributyl tin in the risk assessment. Mr. Humphreys said that a small volatile organic compounds (VOC) plume in the northwestern corner of the site has not been tested. Ms. Fadullon said that groundwater monitoring wells in the area have been sampled and the results do not show a VOC concern. She added that there is a concern about low-level VOCs in groundwater in the middle of the landfill. Mr. Humphreys and Ms. Smith thought that there was a VOC plume in the area of location KCHTP-2.

Ms. Smith asked whether the data gap investigation will meet the Water Board requirement for site closure. Mr. West said that it is not customary for the Water Board to concur on a formal

closure for old landfills. Mr. Humphreys indicated that in the past, a solid waste assessment test (SWAT) was completed and a partial cover was put in place. Mr. West said that he would check when the SWAT test began at Site 2 landfill.

During the review of slide 8, Ms. Smith said that the Audubon Society objects to removal of the wetlands. Ms. Fadullon noted that institutional controls will be put in place for the landfill and the wetland.

Ms. Smith asked what is meant by "the test pit locations are judgmental." Ms. Sarmiento said that the intent is to have flexibility in answering the questions to achieve the design goals. Ms. Smith asked if the rationale for relocation of boreholes based on radiological screening will be explained in the report. Ms. Sarmiento said the rationale would be explained. Mr. Humphreys asked if the culvert will be fitted with a cut-off valve to prevent any contamination from entering the north pond in case of an oil spill in the bay. Ms. Sarmiento stated that a cut-off valve will be considered in the design of the culvert and the Navy will be evaluating various alternatives. Ms. Fadullon requested that the RAB provide written comments on the work plan.

IV. Site 26 Update

Mr. Robinson introduced Lora Battaglia (Navy PM) to begin the presentation on the Site 26 Update (Attachment B-5). Ms. Battaglia introduced Heather Rectanus and Stephen Rosansky (Battelle) and said that the presentation will focus on the VOC plume south of Building 20.

During the review of slide 3, Ms. Smith asked when the in situ bioremediation (ISB) was initiated. Ms. Battaglia said it was initiated on September 29, 2010.

Ms. Battaglia noted during the review of slide 5 that 12 percent hydrogen peroxide was used during the pilot test and 8 percent hydrogen peroxide was used during the July and August 2008 in-situ chemical oxidation (ISCO) events.

During the review of slide 6, Ms. Battaglia said that overall results show that ISCO has reached its limit in reducing the VOC concentrations. She added that the transition to ISB is more technically practicable and cost effective than conducting another ISCO event.

Next, during the review of slide 7, Ms. Smith asked how the Navy would keep the injection in the central area without pushing contamination away. Mr. Rosansky said that the Navy will surround the injection points with the extraction points. Water will be drawn from the extraction points, mixed with oil, and injected back through the injection points. He added that this process controls movement of groundwater.

Ms. Smith asked if the "boost" product that will be used at this site has been tested before and said she is concerned about using an additive that has never been tested in the field. Ms. Rectanus said the boost product was developed by EOS Remediation based in North Carolina.

The boost product contains vitamins and oxygen-scavenging enzymes that are well know and have been injected into the sub-surface before, but not in one package. Although it is a new product, its components are not new. For example, vitamin B12 has been used routinely with emulsified vegetable oil as have oxygen-scavenging enzymes. She said that the boost will help cushion the microorganisms and provide them with supplements necessary for proliferation. Mr. Rosansky said that if the boost does not help in expanding bacterial growth, it will not harm the growth. He added that there is no risk in using the boost product.

Ms. Smith asked during the review of slide 9 about Navy plans if the chemicals of concern (COCs) are not reduced to below the remedial goals (RGs) within four quarters. Ms. Battaglia said that the Navy will continue to monitor since the emulsified vegetable oil is expected to persist for about 3 to 5 years.

Mr. Humphreys asked if total petroleum hydrocarbons (TPH) are present beyond the VOC plume. Mr. Rosansky said the TPH plume is contained within the VOC plume and the microorganisms will feed on the TPH to reduce its concentration. Therefore, the ISB will remediate the VOCs and the TPH as well.

John West (Water Board) asked how the Navy will account for any rebound that occurs beyond the four quarters of monitoring. Mr. Robinson said that there will be monitoring apart from the remedial action. He added that the remedial system will be monitored again as part of the 5-year review. If, during the 5-year review, it is found that the COCs are not expected to reach RGs, then the Navy will adjust the system.

Mr. Humphreys asked about the composition of emulsified vegetable oil. Ms. Battaglia said that the emulsified vegetable oil is composed of 50 percent soy bean oil and 4 percent sodium lactate, and the remainder is food additives, preservatives, and water.

V. Community and RAB Comment Period

Mr. Robinson distributed the recent and upcoming documents and field work schedule (Attachment B-6). Mr. Robinson asked if the RAB members have any requests for presentation topics for the next meeting to enable them to more easily review any of the upcoming documents. Ms. Smith said she prefers to review a document before a presentation is given to be able to ask more questions. After discussion, the following RAB presentations were suggested as future topics:

- Site 1 Final Radiological RD/RA Work Plan
- Federal Parcel Draft Final Site Investigation presentation Site 32 Draft Final Radiological Characterization Work Plan
- Operable Unit (OU)-2C Revised Draft Feasibility Study presentation

Ms. Smith asked for any RAB comments. Ms. Sweeney asked if Dr. Russell was satisfied with the Navy's responses to the city's comments on OU-2A. Dr. Russell said that a meeting will be held on October 21 to discuss OU-2A and agency comments.

Mr. Humphreys said that he wanted to add a thought to last month's discussion on the 60 Minutes program that involved the coal mine waste. He said that coal-fired power plant waste was covered up with 1½ foot of soil and developed into a golf course. He added that interviewer for the program found black soot on the ground among the grass. It was said that the soot was brought to the surface by insects. Mr. Humphreys said that insects such as ants are another mechanism to disturb the soil cover. Mr. Robinson said that he will ask his contractor to evaluate insects along with burrowing animals when considering the animal intrusion barrier.

Mr. Leach requested that the Navy include advantages and disadvantages for institutional controls (ICs) in the alternative analysis. He feels like ICs are not effective and he wonders why the Navy chooses ICs as a preferred alternative. Ms. Smith agreed and added that ICs do not work, especially as an alternative to protect human health. Mr. Humphreys indicated that a landscaper in Bay Farm Island dug into the natural gas line accidentally, although there is an IC for digging.

Doug Biggs (Alameda Point Collaborative) said that Pat Brooks (former Navy co-chair) was involved in economic development of Alameda and in providing work to local contractors. He wanted to bring to the RAB's notice that the Navy has not responded to his request to obtain a list of local contractors in Alameda. He wants to work on setting up the program to train local residents and use them for remediation at Alameda Point. Ms. Smith said that she has commented on using local disadvantaged businesses as a part of the remediation process at Alameda Point. Mr. Robinson asked Mr. Biggs to copy him on the next correspondence to the Navy's small business department. If the Small Business Department doesn't respond, Mr. Robinson will contact them directly.

Ms. Konrad distributed her comment letter to Mr. Robinson, requesting that he address comments from Mr. Humphreys and Ms. Smith at the next RAB meeting (Attachment B-7).

VI. Meeting Adjournment

The meeting was adjourned at 8:40 p.m. The next RAB meeting will occur at 6:30 p.m. on November 4, 2010, at 950 W. Mall Square, Alameda.

Action Items

Action Items:	**Previous Item #/ Action Item Status/ Action Item Due Date:**	**Initiated by:**	**Responsible Person:**
1. Request for Presentations: a. Site 1 Radiological RD/RA WP b. Site 32 Radiological Characterization WP c. Federal Parcel Site Investigation d. OU-2C FS	a./ New/ November 4, 2010. b./ New/ To Be Determined. c./ New/ To Be Determined. d./ New/ December 2, 2010.	RAB	Mr. Robinson
2. Provide as-built specifications on the Site 5 and 10 storm drain replacement to Mr. Matarrese.	2./ Pending/ November 4, 2010	Mr. Matarrese	Mr. Robinson
3. Provide information on the capacity of the generator to be used for the OU-2B treatability study.	6./ Pending/ November 4, 2010	Mr. Leach	Mr. Moss
4. Review the list of additional action items provided by the RAB. Add applicable items to the action item list or note completed items.	0. New/ November 4, 2010	Ms. Smith	Mr. Robinson
5. Review when the SWAT testing began at the landfill and confirm that the landfill does not have to be closed through the Water Board.	0. New/ November 4, 2010	Mr. Humphreys	Mr. West

ATTACHMENT A

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING AGENDA

October 7, 2010

(1 page)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

OCTOBER 7, 2010, 6:30 – 8:30PM

ALAMEDA POINT – BUILDING 1 – SUITE 140
COMMUNITY CONFERENCE ROOM
(FROM PARKING LOT ON W MIDWAY AVE, ENTER THROUGH MIDDLE WING)

TIME	SUBJECT	PRESENTER
6:30 – 6:45	Approval of Minutes	Dale Smith
6:45 – 7:00	Co-Chair Announcements	Co-Chairs
7:00 – 7:30	Site 2 Data Gaps	Frances Fadullon
7:30 – 8:00	Site 26 Update	Lora Battaglia
8:00– 8:10	Upcoming Documents and Future Agenda Items	Derek Robinson
8:10– 8:30	Community & RAB Comment Period	Community & RAB
8:30	RAB Meeting Adjournment	

ATTACHMENT B

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS

B-1 Documents received in August and September 2010. Distributed by Dale Smith, RAB Co-Chair (1 page).

B-2 RAB Comment Letter on Draft Remedial Design / Remedial Action and Sampling and Analysis plan (SAP) for Site 35. Distributed by Dale Smith, RAB Co-Chair (3 pages).

B-3 RAB Action Item Request List. Distributed by Dale Smith, RAB Co-Chair (1 page).

B-4 Site 2 Status Update and Proposed Pre-Design Field Investigation Presentation Handout. Distributed by Frances Fadullon, Navy PM (5 pages).

B-5 Site 26 Update Presentation Handout. Distributed by Lora Battaglia, Navy PM (5 pages).

B-6 Recent and Upcoming Document and Field Work Schedule. Distributed by Derek Robinson, Navy Co-chair (2 pages).

B-7 Comment Letter. Distributed by Joan Konrad, RAB member (1 page).

ATTACHMENT B-1

DOCUMENTS RECEIVED IN AUGUST AND SEPTEMBER 2010

(1 page)

Documents Received
August - September 2010

Navy Communication

1. *Final Sampling and Analysis Plan Sampling and Quality Assurance Project Plan, Basewide Groundwater Monitoring Program,* AMEC Earth & Environmental, August
2. *Final Annual Groundwater Monitoring Report, Basewide Groundwater Monitoring Program,* AMEC Earth & Environmental, August, 2010
3. *Final Work Plan for Basewide Radiological Surveys,* Chaduz Tt, August 11, 2010
4. *Final Indoor Air, Outdoor Air and Soil Gas Sampling Report – Buildings 163 and 163A,* SES-Tech, August 11, 2010
5. *Final Supplemental Data Gap Investigation Report, OU 2A and 2B,* TetraTech, August 16, 2010
6. *Draft Remedial Design/Remedial Action Work Plan for IR Site 25,* Oneida Total Integrated Enterprises, August 20, 2010
6. *Final Zero-Valent Iron Treatability Study Report, IR Site 4, OU 2B,* TetraTech August 24, 2010
7. *Draft Work Plan for the Pre-Design Field Investigation in Support of the Remedial Design, IR Site 2,* CH2MHill-Kleinfelder, September, 16, 2010

Agency Communication

1. *Draft Zero-Valent Iron Treatability Study Report, IR Site 4, OU 2B,* California Environmental Protection Agency, Department of Toxic Substances Control, August 2, 2010
2. *2011 Draft Amendment to the Site Mitigation Plan,* California Environmental Protection Agency, Department of Toxic Substances Control, August 19, 2010

ATTACHMENT B-2

RAB COMMENT LETTER ON DRAFT REMEDIAL DESIGN / REMEDIAL ACTION AND SAMPLING AND ANALYSIS PLAN FOR SITE 35

(3 pages)

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD

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

October 7, 2010

Re: Draft Remedial Design/Remedial Action and Sampling and Analysis Plan, Site 35

Dear Mr. Robinson,

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

The RAB has expressed concerns about PAH, arsenic, lead, mercury, beryllium, cadmium, chromium (hexavalent/total), copper, nickel, selenium, silver and thallium exposure due to previous activities in Alameda and Oakland. In our comments to the Draft Site Inspection Report for transfer parcel EDC-5[1] we acknowledged that the elevated screening levels were negotiated with the regulators due to the urgency of the situation. However, we specifically did not accept these levels as permanent and requested further discussion before community acceptance would occur. This has not occurred.

PG&E has specifically accepted responsibility for contaminate deposition at various manufactured gas sites and is in the process of remediating them. Chevron is a successor to the burdens[2] of Pacific Coast Refinery. It is understandable that the Navy would not wish to be responsible for the clean up costs of other polluters; however, it does not make any financial sense to clean up a site partially, backfill it and then require another entity to remediate the rest, which would involve removing recently placed clean soil in order to access contamination at depth. Neither the Navy nor the regulators have satisfactorily answered the RAB's questions why the clean up is not including all responsible parties. Therefore, the potentially site, highly valuable, will not cleaned up to depth as needed.

In 2008 George Humphreys[3] noted that the proposed alternative would leave undiscovered contamination in place as a result of minimal sampling. There has been a tendency to under sample, leading to remediation problems and leaving contamination in place. The SAP for this RD/RA does not include referenced figures that purport to show where sampling would occur. It is not possible to determine if Mr. Humphreys' concerns have been addressed without these figures (there is also no CD, so the figures cannot be viewed).

The RD/RA is vague about the depth of excavation, stating " [i]f the confirmation sampling results indicate that the cleanup goals have not been attained for site-specific COCs, then further action ***will be considered*** (emphasis added) following the detailed decision rules discussing alternative courses of action presented in Worksheet 11 of the Sampling and Analysis Plan (Appendix A)." Appendix A does not define the decision rules, thus leaving final actions up to negotiation at the time of clean up. In the past this has led to poorer results.

Other parties obligated to clean up past contamination are cleaning up to the full depth of deposition, frequently more than four feet. Remediating to only two feet maximum is not protective of human health and in no way should receive an unrestricted designation. This gives a false sense of protection. It also means that no trees can be planted in the area, as planting holes typically require excavation to more than two feet. Even bamboo would not be permitted as its root system extends to two feet.

In 2008 the Alameda Collaborative Housing[4] expressed concern that lead clean up would be to 184 mg/kg only. This level has not changed, even though at the time the EPA PRG was 150. It is now 80 mg/kg. As we commented in our letter Comments on the Draft Final Feasibility Study for OU2-A[5] concerning unusual screening levels, it is inappropriate and reprehensible to not use current levels, particularly concerning lead. We do not agree that risk estimates would not change significantly given the highly toxic nature of lead.

Retaining contaminated soil at Site 1 or nearby increases the level of toxicity at that site. Given that the DON is unwilling to construct a lined waste repository, this would only increase the possibility of contamination reaching the Bay or receptors being exposed. It also will require monitoring over the life of the site, contrary to what we were told was the goal of the clean up, to reduce long-term responsibility.

There is no explanation given as to what happens if the soil tested at the receiving waste facility has contaminants other than lead and heptachlor that require greater sequestration. Would the contaminant concerns there be applicable to Alameda Point?

We are disappointed that there is no set-aside for using local, low income Minority Business Enterprises for site restoration. There is a company active on the base that has been propagating native plants suitable for restoration. This would be a beneficial use of local enterprises and provide income to disadvantaged populations.

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

Yours

Dale Smith, Community Co-chair

George B. Humphreys, P.E.
George Humphreys, Assistant Community Co-chair

James W. Leach
Jim Leach

Jean Sweeney
Jean Sweeney

Jim Sweeney
Jim Sweeney

Michael John Torrey 14701-(5)
Michael John Torrey

Copies: Councilmembers Matarrese and deHaan
Peter Russell, Russell + Associates
Anna-Marie Cook, US EPA
James Fyfe, Cal EPA DTSC
Charles Ridenour, Cal EPA DTSC
Jim Polisini, Cal EPA DTSC
John West, SF RWQCB

End notes

1. *Revised Draft Site Inspection Report Transfer Parcel EDC-5, Alameda Point, Alameda California*, Lea Loizos, Arc Ecology, September 1, 2004
2. Schmole v. Atlantic City R. Co., 110 N.U. Eq. 597, 160 A. 524,526
3. *Comments on Proposed Plan for Installation Restoration Site 35, Former NAS Alameda*, George Humphreys, June 27, 2008
4. *Comment of Alameda Point Collaborative to proposed plan for IR Site 35*, Douglas Biggs, Alameda Point Collaborative, June 12, 2008
5. *Comments on the Draft Final Feasibility Study for OU2-A*, Alameda Restoration Advisory Board, August 4, 2010

ATTACHMENT B-3

RAB ACTION ITEM REQUEST LIST

(1 page)

Minutes Reference	Action Item	Previous Item # Action Item Status Action Item Due Date	Initiated by	Responsible Person
Page 2 of 10 Sept. Minutes	a. Provide copies of signed comment letter for OU-2A/OU 2-B to RAB at next meeting b. Include signed final comments on OU-2A OU-2B in the final minutes for August.	New.	Ms. Smith	Mr. Robinson
Page 3 of 10 Sept Minutes	Investigate possibility of generating chlorine gas due to passing of electrical current thru brackish water.	New	Mr. Humphreys	Mr Moss
Page 4 of 10 Sept Minutes	Investigate possibility of cycling tri-phase heating to off-peak hours.	New	Ms Cook	Mr. Moss
Page 6 of 10 Sept Minutes	Determine Southern limit of Burn Area at Site 1.	New	Ms. Smith	T. B.D.
Page 7 of 10 Sept Minutes	Site Plan for VA clinic and columbarium	New	Ms Konrad	Mr. Robinso
Page 8 of 10 Sept Minutes	Investigate possibility that residue from coal gasification plant(s) along Estuary contributed lead, mercury, arsenic and thallium to soil at Alameda Point (including FISCA)	New.	Mr. Humphreys	Mr. Robinso
Attach B-3 June RAB minutes	Investigate whether radium contamination discharged to Estuary from NASA contributed to Radium found in soil at Alameda Pt., including Fed-Fed transfer parcel (VA).	New	Mr. Humphreys	T.B.D. RASO?

ATTACHMENT B-4

SITE 2 STATUS UPDATE AND PROPOSED PRE-DESIGN FIELD INVESTIGATION PRESENTATION HANDOUT

(5 pages)

Welcome

Site Status Update
and
Proposed Pre-Design Field Investigation

Installation Restoration Site 2

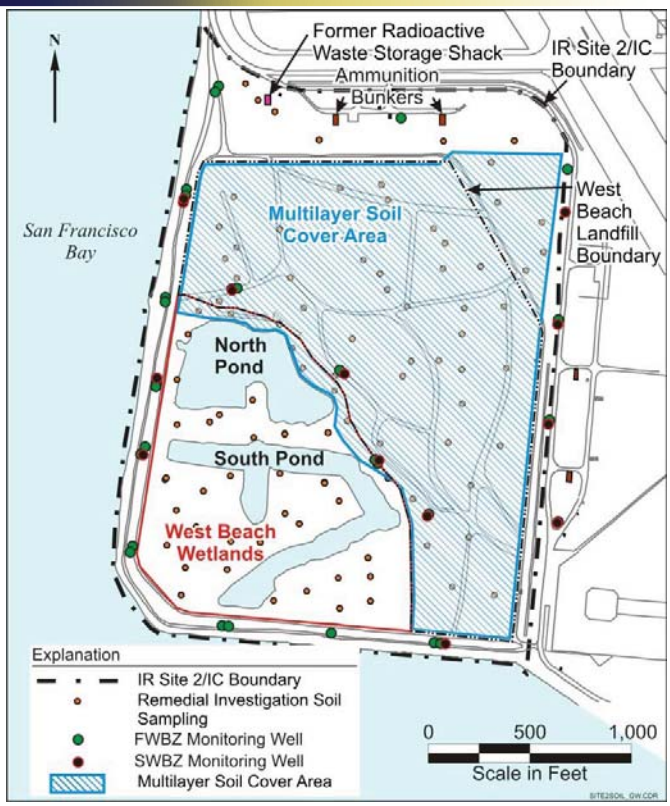
Alameda Point, California

October 7, 2010

Purpose of Presentation

- Summarize current status of IR Site 2
- Communicate elements and objectives of proposed Pre-Design Field Investigation for Remedial Design
- Provide anticipated schedule of activities

General Site Layout



Elements of Remedy

Soil Cover over Landfill

- Purpose: prevent direct contact with landfill waste materials (humans and burrowing animals)

Groundwater Monitoring

- Purpose: ensure that chemical concentrations are stable or decreasing over time in comparison to current conditions

Institutional Controls

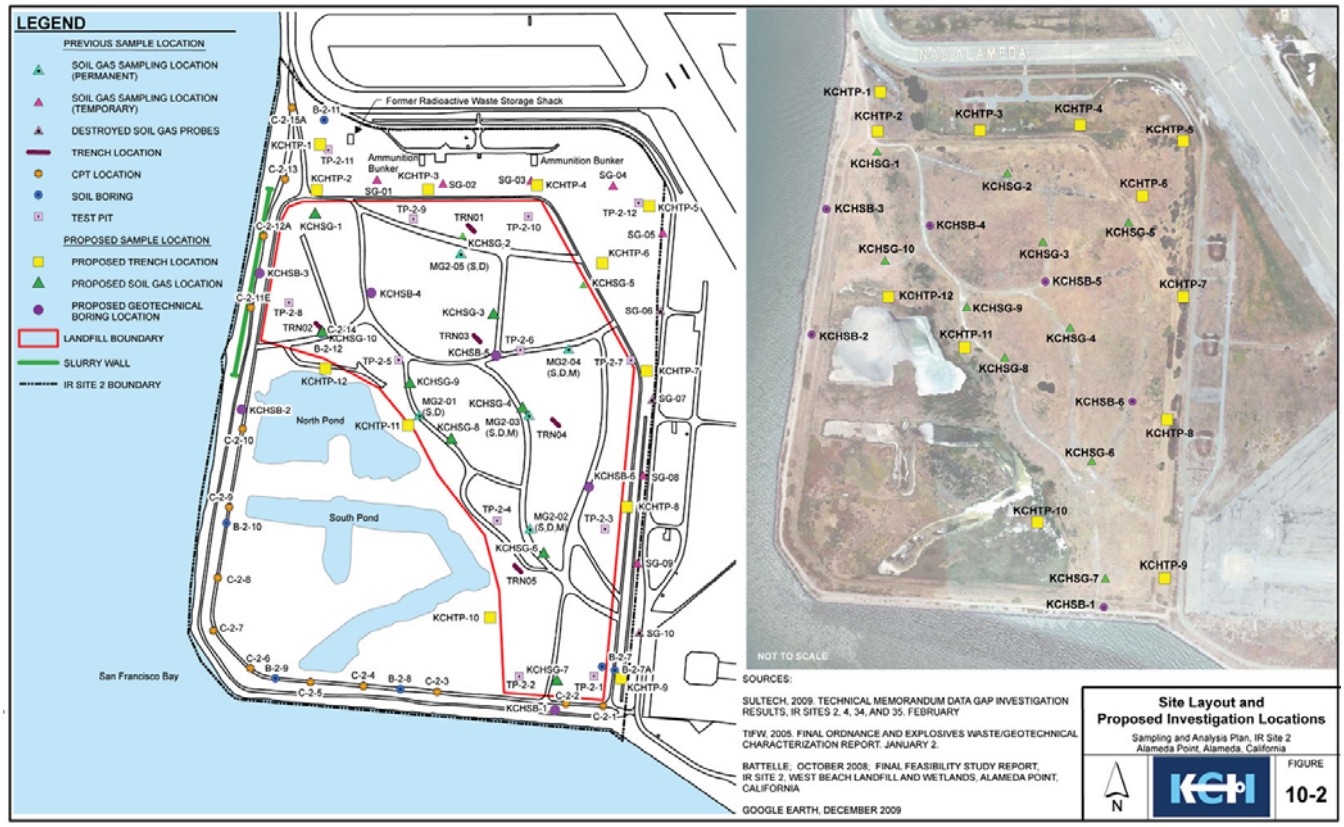
- Purpose: protect human health and environment in perpetuity

Objectives of Pre-Design Investigation

This data gaps field investigation is needed to aid in design the final remedy:

- Landfill Soil Cover
- Landfill Gas Requirements
- Geotechnical Conditions
- Biological Considerations
- Radiological Conditions
- Wetlands

Proposed Investigation Locations



Landfill and Soil Cover

Landfill

- Identify the extent of the soil cover – 12 test pits
- Determine geotechnical conditions – 6 geotechnical borings
- Soil gas sampling to determine if methane is being produced – 10 sampling locations
- Determine radiological conditions – radiological scanning of surface and excavated soil

Biological and Wetlands

Biological – biological reconnaissance

- What effects will the remedy have?
- How can effects be minimized?
- Incorporate findings in to Remedial Design

Wetlands – field delineation

- Will soil cover impact wetlands?
- How can effects be minimized?
- Incorporate findings in to Remedial Design

Schedule for Field Investigation

Date	Activity
December 2010	Work Plan Approval
December/January 2011	Field Investigation
January – February 2011	Laboratory Analysis/Testing
March 2011	Draft Remedial Design
July 2011	Final Remedial Design

QUESTIONS??

ATTACHMENT B-5

SITE 26 UPDATE PRESENTATION HANDOUT

(5 pages)

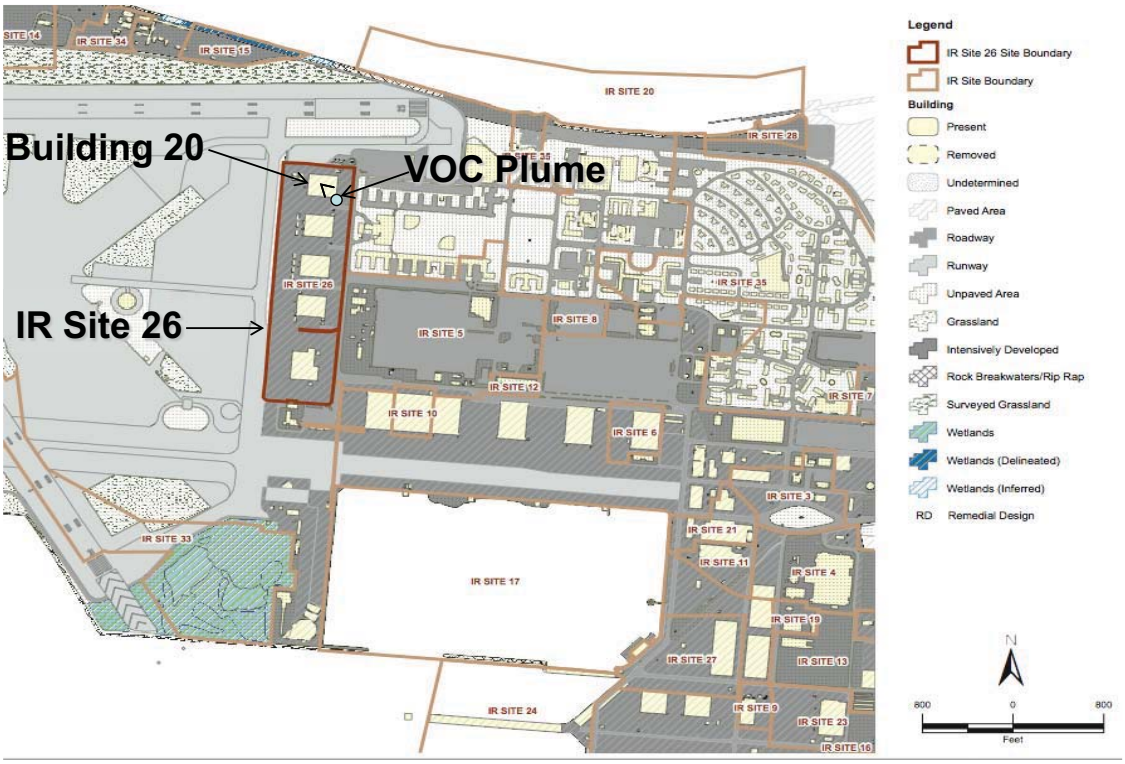
IR SITE 26 - ISCO to ISB

Presentation for Alameda Point RAB
October 7, 2010

Lora Battaglia
Remedial Project Manager
NAVY BRAC PMO West

Stephen Rosansky P.E.
Senior Engineer
Battelle

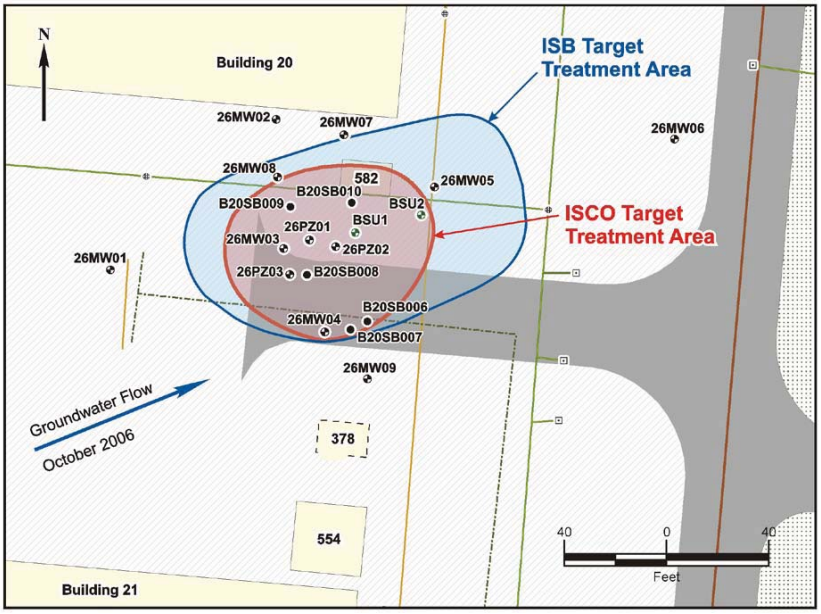
Location of IR26 and Building 20



Background

– Low levels of chlorinated solvents (TCE, DCE, and VC) in groundwater

– Approximately 15 feet beneath ground surface (bgs) southeast of Building 20



Groundwater Treatment

Final Record of Decision (ROD) specified the following remedial actions for groundwater:

– In-situ chemical oxidation (ISCO) followed by
– Enhanced In-situ bioremediation (ISB)

ISCO Applications

Pilot Test – (November 2007/January 2008)

Two Full Scale ISCO Applications

- Hydrogen Peroxide (July/August 2008)
  Groundwater sampled in September 2008
- Sodium Persulfate (February 2009)
  Groundwater sampled in April 2009, September 2009, and July 2010

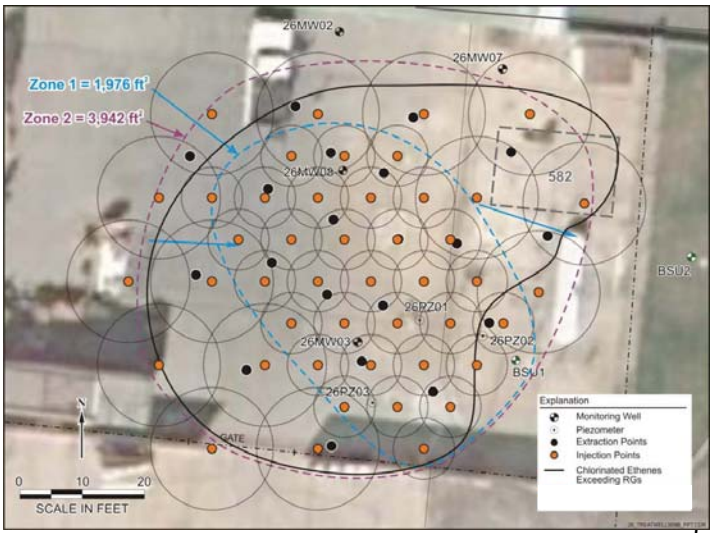
ISCO Results

- 60% reduction of TCE (88 ug/L to 35 ug/L)
- 79% reduction of DCE (323 ug/L to 68 ug/L)
- 65% reduction of VC (67 ug/L to 23 ug/L)

- COC concentrations were significantly reduced in the majority of wells, but rebounded during the most recent sampling events
- ISCO has reached the extent of effectiveness
- Transitioning to ISB is more technically practicable and cost effective

In-Situ Bioremediation (ISB)

- Injecting Emulsified Vegetable Oil followed by bacteria
- Injection area is approximately 6,000 ft^2
- Targeting elevated COC Concentrations
- Two treatment zones
  - Zone 1 =31 injection points
  - Zone 2 =14 injection points
- Recirculation system



ISB Implementation

- Trailer mounted-system
- Water extracted simultaneously from up to 10 points
- Simultaneously inject EVO/groundwater into 6 points

IR26 Schedule

- Sept/Oct 2010: ISB Amendment Injection
- December 2010: Post ISB Monitoring Event 1
- March 2011: Post ISB Monitoring Event 2
- March 2011: CERCLA 5-year remedy review
- Monitoring until 4 quarters of COCs below RGs
- Approx. 2012 – RACR/Site Closure

Thank You!

Comments?

Questions?

For more information on remediation technologies go to:

http://clu-in.org/remediation/

http://www.itrcweb.org

ATTACHMENT B-6

RECENT AND UPCOMING DOCUMENT AND FIELD WORK SCHEDULE

(2 pages)

Recent and Upcoming Deliverables, September 21, 2010
Alameda Point, Alameda, CA

Recent		
Site	**Document**	**Transmittal Date**
Site 4	Final Bldg 163 Nano-ZVI Treatability Study Report	8/27/2010
OU2A/2B	Final Supplemental Data Gap Investigation Report	8/30/2010
BGMP	Final SAP	9/8/2010
OU-2A	Draft Final Feasibility Study OU-2A	7/7/2010
OU-2B	Revised Draft FS	6/4/2010
Site 17	Draft TCRA Completion Report	7/21/2010
Site 35	Draft RD/RA WP and SAP	8/20/2010
Site 11	Draft Work Plan OU-2B Thermal Treatability Study Bldg. 162 Hot Spot	9/10/2010

Upcoming		
Site	**Document**	**Transmittal Date**
Site 1	Final Radiological Work Plan for RD/RA	9/24/2010
Site 2	Draft Work Plan and SAP for Data Gaps in support of RD	9/17/2010
Site 32	Draft Final Radiological Characterization Work Plan	10/6/2010
Site 1	Draft Remedial Design/Remedial Action Work Plan	10/4/2010
FED Parcel	Draft Final SI	10/14/2010
EDC-17	Draft Addendum to Final Site Inspection Report	10/14/2010
EDC-12	Draft Addendum to Final Site Inspection Report	10/14/2010
OU2C	Revised Draft FS	11/8/2010

Active and Upcoming Fieldwork, September 21, 2010
Alameda Point, Alameda, CA

Sites	Start	End*	Description of Fieldwork
Basewide	8/11/2010	8/30/2010	Demolition of Building 346 prior to rad screening
Site 4	3/8/2010	9/1/2010	Plume 4-1 TS DNAPL/Hydrogeological assessment: Passive Flux Meters results in. Next up are discrete 'push-pull' tracer tests in source zone with baseline GW sampling round
Site 27	6/15/2009	9/3/2010	Remedial Action - Phase 3 ISCO injections 17 May-11 June followed by confirmation sampling
Site 5/10 TCRA	1/11/2008	9/30/2010	Trenching & line replacement completed in June 2010. Coordination with Alameda Power for substation work, utility clearance, & procurement completed; subsurface work in progress. Other demobilization proceeding; water treatment system demobilization completed.
Basewide	9/13/2010	10/6/2010	Groundwater Monitoring to absorb IR Site 27 quarterly monitoring in the fall
Site 26	9/27/2010	10/11/2010	In situ bioremediation Injections
Site 28 RA	8/4/2010	10/30/2010	Ongoing groundwater monitoring scheduled for August and September, and re-establishment of vegetation, which will be implemented in the fall.
Site 1	9/30/2010	11/12/2010	Groundwater Pilot Test
Basewide	10/3/2010	12/16/2010	Radiological Surveys of Designated Buildings
OU-1 RA	10/5/2009	12/29/2010	Performance groundwater monitoring (post-ISCO) to occur December 2010. Building demolition and addt'l excavation to be completed at Site 7 in Oct/Nov. Pesticides remain at Site 16. Navy to discuss with BCT in Sept.
OU-5/FISCA IR02 Remediation	10/6/2008	10/6/2011	Biosparge / vapor extraction system Eastern Biosparge Area construction completed May 2009; Marina Village Western Biosparge Area biosparge area construction completed 10/6/2009. Treatment system running well. Calculated mass reduction of 2,822 pounds of benzene and 69,961 pounds of naphthalene after ~1 year of operation for the Eastern Biosparge Area. Variable frequency drives contributing to efficiency. Groundwater sampling will be conducted August 17 - 19, 2010. End date based on running the system for two years.
Site 17 Remediation	9/13/2010	12/31/2011	Began fencing and radiological background surveys for land support facilities area. Upon completion of surveys, land support facilities construction will begin. Planning start of dredging early January 2011.

* Ordered by End Date

ATTACHMENT B-7

COMMENT LETTER

(1 page)

Joan Konrad
42 Invincible Court
Alameda, California 94501
510-522-3789

October 7, 2010

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

Dear Derek:

Would you please respond to the issues investigated by Dale Smith and George Humphreys and presented to you in the letter of October 7, 2010 by addressing them as an agenda item at the next Naval Air Station Alameda Restoration Advisory Board meeting, November 4?

Sincerely,

Joan Konrad

Joan Konrad
Member, Naval Air Station Alameda, Restoration Advisory Board

Copies: Councilmembers Matarrese
Peter Russell, Russell + Associates
Anna-Marie Cook, US EPA
James Fyfe, Cal EPA DTSC
Charles Ridenour, Cal EPA DTSC
Jim Polisini, Cal EPA DTSC
John West, SF RWQCB