

**FLEET AND INDUSTRIAL SUPPLY CENTER OAKLAND
ALAMEDA FACILITY/ALAMEDA ANNEX (FISCA)
RESTORATION ADVISORY BOARD
MEETING MINUTES
OCTOBER 4, 2006**

These minutes summarize the discussions from the meeting of the Restoration Advisory Board (RAB) for the Fleet and Industrial Supply Center Oakland, Alameda Facility/Alameda Annex (FISCA). The meeting was held in the Alameda Point Main Office Building (Building 1) on October 4, 2006. The agenda and sign-in sheet are included as Attachment 1. The following participants attended the meeting:

Co-chairs:

Ken Hansen	RAB Community Co-chair
Thomas Macchiarella	Base Realignment and Closure (BRAC) Program Management Office (PMO) West, Navy Co-chair

Attendees:

Jamie Hamm	Sullivan International Group, Inc.
Joan Konrad	RAB Member
Dot Lofstrom	Department of Toxic Substances Control (DTSC)
Kevin Mucha	Environmental Resource Management (ERM)/Catellus
Lou Ocampo	BRAC PMO West
Mary Parker	BRAC PMO West
Mike Quillin	ERM/Catellus
Peter Russell	City of Alameda/Russell Resources, Inc.
Erich Simon	Regional Water Quality Control Board (Water Board)
Jean Sweeney	RAB Member
Jim Sweeney	RAB Member
Henry Wong	DTSC

1.0 WELCOME AND INTRODUCTIONS

The meeting began with introductions and a review of the agenda (see Attachment 1). Mr. Hansen welcomed the meeting participants and initiated a round of introductions.

2.0 APPROVAL OF MEETING MINUTES

Mr. Hansen requested comments and proposed changes to the RAB meeting minutes from July 12, 2006. Mr. Ocampo provided the following comment:

- Page 2, Section 4.0, the title of the section will be changed to “UPDATE ON FS, BASEWIDE PAH, AND DRAFT SMP”.
- Page 2, Section 4.0, first sentence will be revised to read; “Mr. Ocampo provided an update on the feasibility study (FS) for basewide polycyclic aromatic hydrocarbons (PAHs) in soil and noted that the Navy has received electronic copies of DTSC’s comments on the reports.”

There were no additional comments, and the minutes were approved as amended.

3.0 UPDATE ON FS FOR BASEWIDE PAH

Mr. Ocampo said that the Navy has received comments from the DTSC and the City of Alameda on the feasibility study (FS) for basewide polycyclic aromatic hydrocarbons (PAHs). The Navy is working on responses to comments to the agencies and the city. After responses are submitted, outstanding comments will be resolved and the draft FS report will be submitted.

4.0 UPDATE ON OU-5/IR02 GROUNDWATER ROD

Ms. Parker announced that the draft record of decision (ROD) for the groundwater plume at Operable Unit 5/IR Site 02 (OU5/IR02) was submitted to the agencies on September 8, 2006. The agencies have a 60-day comment period, with comments due to the Navy on November 10, 2006. The ROD will not be finalized until 2007; however the Navy is preparing a draft pre-design work plan for field work before the remedial design is completed. Ms. Parker noted that the draft pre-design workplan is scheduled to be issued by October 13, 2006. Mr. Hansen asked about the remedial alternative selected for groundwater cleanup. Ms. Parker said that the remedial alternative includes soil vapor extraction with biosparging. Some type of bioremediation will also be used on the site, depending on site conditions. Mr. Hansen asked if this work plan is undergoing a 60-day review. Ms. Parker responded that the 60-day review period begins on October 13, 2006. Ms. Sweeney noted that contaminant concentrations rise with depth in the water table. She asked about the depth of biosparging and whether contamination could recur if the source is not removed. Ms. Parker responded that the shallow groundwater at the site will be remediated to a level acceptable for drinking water. Ms. Konrad asked if the concentration of benzene tends to attenuate

over time. Ms. Parker responded that benzene biodegrades naturally but only under certain conditions. Typically, biodegradation is a long process and the Navy will take steps to augment the process during the remediation phase. Ms. Konrad asked if the plume is still migrating. Ms. Parker responded that the plume is generally believed to be stable. Ms. Sweeney asked if the plume is in the same area where the 39-unit residential buildings are planned. Ms. Parker responded that the plume does exist in that area, and said that the Navy will work with the city during the remediation and construction phases. Mr. Hansen asked if a 3-dimensional drawing of the groundwater plume is available. Ms. Parker responded that the Navy may be able to create a 3-dimensional model of the groundwater after the additional field activities are completed. Mr. Hansen said he would like to review the map once it is available. Mr. Sweeney asked about the timeline for the remediation process. Ms. Parker responded that the timeline is approximately 8 years until the remedial goal is reached. Mr. Hansen asked if the remediation equipment in the area near the residential units would be enclosed by a fence. Ms. Parker responded that the Navy will work with the city to build enclosures around the remediation equipment near the residential units. Mr. Sweeney asked when they city expected to start construction on the residential units. Mr. Russell responded that construction will start in about a year. He added that ample space will be available for the Navy's remediation equipment. Ms. Sweeney asked why the city cannot wait until after remediation has been completed before the residential units are built. Mr. Russell responded that an Alameda Point housing group has brought a lawsuit against the city demanding that residential buildings be available for residents.

Ms. Konrad asked about the difference between biosparging and bioremediation. Ms. Parker responded that biosparging involves aerating the subsurface, while bioremediation involves enhancing microorganisms in the subsurface to increase the level of contaminant attenuation. Mr. Sweeney asked if there will be a venting system underneath the building. Mr. Russell responded that this venting system would be discussed as the next agenda item.

5.0 UPDATE ON CITY'S SOIL SAMPLING PROJECT

Mr. Russell said that the city has finished its analysis of the data for the second round of sampling. Very little naphthalene was found in the soil, and concentrations of PAHs were similar to the first round of sampling. The city has met with toxicologists at the DTSC to identify the best way to approach the human health risk assessment for the site. The city is now compiling the results of a human health risk assessment; however, additional data for groundwater from the site may be needed. Once all the additional data have been collected and the human health risks have been assessed, reuse in the area may require installment of vapor barriers beneath new buildings. The city is expecting to finish the risk assessment activities in November 2006.

6.0 BRIEF ON DTSC'S REMOVAL ACTION WORK PLAN FOR IR02

Mr. Russell distributed slides of his presentation on the removal action work plan (RAW) for the western one-third of IR Site 2 (IR02), included as Attachment 2. Mr. Wong noted that currently an interim covenant prohibits residential use of the land on IR02. The DTSC is requiring a sub-slab depressurization system (SSDS) because of the groundwater plume and the uncertainty associated with the human health risk assessment for residential units on the property. Mr. Wong added that

the RAW was presented to the public for a 25-day review period and a public meeting was held on September 21, 2006. The DTSC received comments from four community members during the review period. The DTSC has responded to the comments, and the RAW has been approved. Since the RAW has been approved, the DTSC can lift the covenant and allow the city to build residential units on the property. However, the previous covenants have been replaced with another. This new covenant stipulates a vapor barrier system for all newly constructed buildings. Mr. Wong noted that future data might indicate that the covenant is no longer needed and that the land is safe for residential uses. Mr. Sweeney asked if this requirement applies to all buildings or for new buildings only. Mr. Wong responded that this applies to all new buildings. Mr. Sweeney asked if the risk from venting gases is higher than the risk from biosparging. Ms. Parker responded that there should not be vapor releases from the biosparging. She said that the remediation system will manage any off-gases. Mr. Macchiarella noted that the SSDS is not a remedy that reduces the levels of contamination in the groundwater; rather it is remedy that blocks a risk pathway.

Mr. Russell noted that data for soil gas sampling do not show a health risk at the site; however, the city and the DTSC feel that this SSDS is worthwhile as a precaution. Soil gas is probably not a problem at the site because concentrations from groundwater contamination are higher with depth and only contaminants at the top of the water table would volatilize into the air.

Slide 2 is a location map of the site. The title for the land was transferred from the Navy to the city in 2000. The current owner of the site is the Community Improvement Commission, and the future intended use is for multi-family residential use in the form of 39-units in three two-story buildings. Slide 4 shows an architectural drawing of the proposed residential buildings.

Environmental investigations have occurred at the site from 1987 through 2001. Soil remedial activity included a Navy excavation to remove lead and polychlorinated biphenyls (PCBs) in 1996, PCBs in 1998, and PCBs and cadmium in 2001. DTSC approved the cleanup in a 2004 letter. Groundwater at the site is contaminated with benzene and naphthalene. These petroleum-related carcinogenic chemicals can evaporate from groundwater and migrate into soil gas. A remediation decision document on groundwater contamination is expected in February 2007. Active groundwater remediation is expected to begin in April 2008 and continue through April 2010. Cleanup of groundwater to drinking water standards is expected to be complete in 2016.

The SSDS system will address the existing environmental conditions so interim residential use of the site will be health-protective before groundwater cleanup has been completed. In addition, the technology will prevent potential indoor air exposure to volatile contaminants in groundwater, which might migrate via soil gas into living spaces. The remedial alternatives evaluated include no action, construction of an active SSDS for new buildings, or a passive SSDS for new buildings.

Construction of an active SSDS for new buildings will include an initial gas barrier membrane. A gravel blanket beneath the floor slab will collect soil gas and inlet pipes will allow fresh air to enter the gravel blanket. Outlet pipes will collect fresh air from the inlet pipes and soil gas and direct it to the roof. A high-density polyethylene (HDPE) membrane will be constructed on top of the floor slab, and a concrete non-structural topping slab will cover it to protect the membrane. The system will also include in-line centrifugal fans and wind-driven turbines. Slide 10 shows a sketch of the

slab details. Slide 11 shows an architectural drawing of the locations of the inlet and outlet pipes in the residential buildings. Slide 12 shows a sketch of the inlet at the roof level, and Slide 13 shows a sketch of the outlet at the roof.

Remedial Alternative 3 is the same as Alternative 2, except that there are no in-line centrifugal fans to move the air through the system. A comparison of the two alternatives shows that the in-line fans in Alternative 2 would supplement the wind-driven turbines. Alternative 3 is more reliable because there are no moving parts that must be maintained. Indoor air will be sampled and analyzed before occupancy is allowed to verify effectiveness for both alternatives. Both of the alternatives are easily implemented; however, Alternative 2 is slightly more expensive because of the added expense of the fans. Alternative 3 is the recommended alternative and was selected based on its ability to meet the removal action objectives as well as cost, protectiveness provided by the passive SSDS, and a design that avoids the risk of mechanical and electrical breakdown and the need for continuous monitoring and maintenance. The alternative is protective of human health and the environment, it complies with regulatory cleanup standards, and it allows full use of the site for the intended development.

The DTSC has approved the RAW. The interim covenant will then be modified to allow for residential land use. The work will be performed during construction with little impact on the project schedule, and all work will be conducted under the oversight of the DTSC.

7.0 COMMUNITY AND RAB COMMENT PERIOD

Mr. Macchiarella asked about the meeting schedule for the RAB in the coming year. Mr. Hansen said that the RAB currently meets four times per year and asked if this frequency is needed since so few environmental issues are outstanding. He asked if the RAB would like to reduce the schedule to two or three meetings per year. He feels that since so many RAB members are also on the Alameda Point RAB that twice a year would be acceptable unless an issue needs the RAB's attention. An extra meeting can be scheduled in that case. Ms. Sweeney asked if the IR02 presentation would be given at the Alameda Point RAB. Mr. Macchiarella responded that it is not on the agenda for the next RAB meeting. She said that as long as the Alameda Point RAB is informed of activities at the Annex then she is satisfied with reducing the schedule. Ms. Konrad stated that she is concerned with how the Navy is involved with land use at the Annex. Mr. Macchiarella responded that the interim covenant and the deed that transferred the property both involve restrictions on the Annex. They include provisions to restrict residential use until certain conditions are met. The city must demonstrate to the DTSC that an area is suitable for residential use for PAHs in soil. The Navy already has restrictions on the property. She asked how the RAB will stay involved in city and DTSC actions at the Annex. Mr. Macchiarella responded that the Navy is not involved other than clearing a deed restriction after the DTSC approves the land use. The RAB exists because of Navy policies, but the city and the developer are not required to form a RAB. Mr. Hansen added that the RAB exists to provide transparency to the community on the actions of the Navy during cleanup at the Annex. He thinks the RAB needs to decide whether meeting twice a year will fulfill the mandate of the RAB. Mr. Sweeney thinks that twice a year meetings is acceptable. The RAB will decide during the January meeting when to schedule the second meeting of the year. Mr. Hansen asked if the RAB prefers two or three meetings a year.

Mr. Sweeney said that he prefers to meet twice a year. Mr. Macchiarella added that he believes two meetings would be adequate. Ms. Sweeney said that the second meeting should be scheduled for September rather than in mid-summer.

8.0 ADMINISTRATIVE ITEMS

Mr. Hansen asked if January would be appropriate for a RAB field trip. Mr. Macchiarella responded that the RAB might be able to observe the field work involved in installing the groundwater remediation system if the trip is delayed to the second meeting of the year.

Mr. Hansen asked for items on the next agenda. Ms. Sweeney asked for a presentation from Catellus on the development of the Annex. Mr. Quillin responded that he will request an update from Catellus.

The next RAB meeting is scheduled for 10:00 a.m. on Wednesday, January 10, 2007, in the first-floor conference room at Alameda Point, Building 1 (Main Office Building), 950 West Mall Square.

ATTACHMENT 1
AGENDA AND SIGN-IN SHEET

RESTORATION ADVISORY BOARD (RAB) AGENDA
For
INSTALLATION RESTORATION PROGRAM
At
FLEET INDUSTRIAL SUPPLY CENTER OAKLAND
ALAMEDA FACILITY/ALAMEDA ANNEX (FISCA)

October 4, 2006 (10:00 am – 11:30 am)
Alameda Point, Main Office Building (Building 1), Room 140
950 West Mall Square
Alameda, California

- I. WELCOME AND INTRODUCTION – Ken Hansen, Community RAB Co-Chair,
10:00 am to 10:05 am
- II. APPROVAL/REVIEW OF RAB MEETING MINUTES of July 12, 2006 -
Ken Hansen/Thomas Macchiarella, 10:05 am to 10:15 am
- III. UPDATE ON BASEWIDE FEASIBILITY STUDY for PAHs
Lou Ocampo, Navy, 10:15 am to 10:30 am
- IV. UPDATE ON OU-5/IR-02 GROUNDWATER ROD and Remedial Design
Mary Parker, Navy, 10:30 am to 10:40 am
- V. UPDATE ON CITY'S SOIL SAMPLING PROJECT
Peter Russell and Mike Quillin, 10:40 to 10:50
- VI. BRIEF OF DTSC'S RECENT REMEDIAL ACTION WORKPLAN FOR THE
WESTERN ONE-THIRD OF IR-02
Henry Wong and Peter Russell, 10:50 to 11:00
- VII. COMMUNITY AND RAB COMMENT PERIOD – Community and RAB
11:00 am to 11:20 am
- VIII. ADMINISTRATIVE ITEMS – Thomas Macchiarella, Navy
11:20 am to 11:30 am
 - a. Proposed agenda items for the next RAB Meeting
 - b. Date for the next RAB Meeting

**FLEET AND INDUSTRIAL SUPPLY CENTER, OAKLAND
ALAMEDA FACILITY/ ALAMEDA ANNEX**

Restoration Advisory Board Meeting / Base Realignment and Closure Team Meeting

October 4, 2006

NAME				
Thomas Macchiarella	Navy	thomas.macchiarella@navy.mil	619-532-0907	-0983
Mary Parker	Navy	mary.parkoz@navy.mil	619-532-0945	-0995
Lou Ocampo	Navy	wu2noocampo@navy.mil	619-532-0969	-0995
Kevin Mucha	ERM/CATELUS	KEVIN.mucha@ERM.COM	925-946-0455	-9968
Dot Hofstrom	DTSC	dlofstro@dtsc.ca.gov	916-255-6449	
Erich Simon	Water Board	ersimon@waterboards.gov	510-622-2355	510-622-2458
Jim Sheehy	RAB	Jim.Sheehy@jms.ca	510-522-579	
Jean Sheehy	RAB	Jean.Sheehy@jms.ca	522-579	
John Kowal	"			
MIKE QUILLIN	ERM/CATELUS	MIKE.QUILLIN@ERM.COM	925-933-6753	-9468
PETER RUSSELL	CITY of Alameda (RRI)	peter@russellresources.com	415-492-0540	815-572-8600 815
Henry Wong	DTSC	hwong@dtsc.ca.gov	510-540-3770	510-849-5285

ATTACHMENT 2
PRESENTATION ON WESTERN ONE-THIRD OF IR SITE 2

Future Building Layout



conceptual layout

Other Clean-up Efforts

- Environmental investigations: 1987-2001
- Soil
 - Navy excavated soil from IR Site 02 (which includes this site) to remove
 - lead and polychlorinated biphenyls (PCBs) in 1996
 - PCBs in 1998
 - PCBs and cadmium in 2001
 - DTSC approved soil cleanup in 2004

Other Clean-up Efforts, cont.

- Groundwater
 - Contaminated with benzene and naphthalene
 - petroleum-related carcinogenic chemicals, which can evaporate from groundwater and migrate in soil gas
 - Remediation decision document expected in February 2007 (Record of Decision and Remedial Action Plan)
 - Active groundwater remediation expected between April 2008 and April 2010
 - Groundwater cleanup expected to be complete in 2016
- Groundwater cleanup to drinking water standards

Purpose of Remediation

- Address existing environmental conditions so interim residential use of the site will be health-protective before groundwater cleanup has been completed
- Prevent potential indoor air exposure to volatile groundwater contaminants (benzene and naphthalene), which might migrate via soil gas, from entering living spaces

Description of Remedial Alternatives

- Alternative 1: No Action
- Alternative 2: Construction of an *Active* Sub-Slab Depressurization System for New Buildings
- Alternative 3: Construction of a *Passive* Sub-Slab Depressurization System for New Buildings

Remedial Alternative 2

- Construction of an Active Sub-Slab Depressurization System for New Buildings
 - initial gas barrier membrane
 - gravel blanket beneath the floor slab to collect soil gas
 - inlet pipes to allow fresh air to enter the gravel blanket
 - outlet pipes to collect fresh air from inlet pipes and soil gas and direct it to the roof
 - a HDPE membrane constructed on top of the floor slab
 - a concrete non-structural topping slab to protect the membrane
 - inline centrifugal fans
 - wind driven turbines

Recommended Alternative

• **Alternative 3**

- selected based on its ability to meet the removal action objectives, cost, protectiveness provided by the passive SSDS, and a design that avoids risk of mechanical and electrical breakdown and need for continuous monitoring and maintenance
- protective of human health and the environment
- complies with regulatory clean-up criteria
- allows full use of the Site for the intended development

REVISION 11 1518

DATE 11/15/18

Next Steps

- DTSC is expected to approve the RAW, with modifications if necessary
- The Interim Covenant will be modified to allow residential land use
- The work will be performed at the time of construction with little impact on the project schedule
- All work will be conducted under the oversight of DTSC

REVISION 11 1518

DATE 11/15/18