**FINAL**
**NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD**
**MEETING SUMMARY**

www.navybracpmo.org
Building 1, Suite 140, Community Conference Center
Alameda Point
Alameda, California

January 5, 2006

The following participants attended the meeting:

| | |
|---|---|
| **Co-Chairs:** | |
| Thomas Macchiarella | Base Realignment and Closure (BRAC) Program Management Office (PMO) West, BRAC Environmental Coordinator (BEC), Navy Co-chair |
| George Humphreys | Restoration Advisory Board (RAB) Community Co-chair |
| **Attendees:** | |
| Jim Barse | Community Member |
| Doug Biggs | Alameda Point Collaborative Representative |
| Neil Coe | RAB |
| Anna-Marie Cook | U.S. Environmental Protection Agency (EPA) |
| Robert De Luca | RAB Alternate for Ardella Dailey |
| Tony Dover | RAB |
| Jamie Hamm | Sullivan International Group (Sullivan) |
| Judy Huang | Regional Water Quality Control Board (Water Board) |
| Craig Hunter | Tetra Tech EM Inc. (Tetra Tech) |
| Michelle Hurst | BRAC PMO-West Remedial Project Manager (RPM) |
| Elizabeth Johnson | City of Alameda |
| John Kaiser | Water Board |
| Joan Konrad | RAB |
| James D. Leach | RAB |
| Greg Lorton | BRAC PMO-West Lead RPM |
| Dot Lofstrom | Department of Toxic Substances Control (DTSC) |
| Patrick Lynch | Community Member |
| Frank Matarrese | Alameda City Council |
| John McMillan | Shaw Environmental and Infrastructure Inc. (Shaw) |

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|---|---|
| Bert Morgan | RAB |
| Samantha Murray | Audubon Society |
| Kevin Reilly | RAB |
| Peter Russell | Russell Resources/City of Alameda |
| Dale Smith | RAB/Sierra Club/Audubon Society |
| Jean Sweeney | RAB |
| Jim Sweeney | RAB |
| Michael John Torrey | RAB/Housing Authority of the City |

The meeting agenda is provided in Attachment A.

**MEETING SUMMARY**

**I. Approval of Minutes**

Mr. Humphreys called the meeting to order at 6:30 p.m.

Mr. Reilly announced that he would no longer be able to serve as a RAB member because of a time conflict with graduate school.

Mr. Humphreys distributed a list of Navy documents that he received during December (Attachment B-1). He noted that a significant document was the Draft Remedial Investigation (RI) for Installation Restoration (IR) Site 2, West Beach Landfill and Wetlands. He also noted that the document is large and takes a long time to read, and that Ms. Smith had asked for a presentation on the document at today's RAB meeting. However, her request was too late to be included on the meeting schedule, so the Navy will discuss the document during the February RAB meeting. The comments for the document are due on February 6, 2006; therefore, RAB members should contact Mr. Humphreys or Ms. Smith to set up a meeting if they want to discuss it.

Mr. Humphreys asked for comments on the minutes from the RAB meeting held on December 1, 2005. Mr. Humphreys, Mr. Macchiarella, and Mr. De Luca provided the following comments:

<u>Mr. Humphreys and Mr. Macchiarella's comments</u>

- Page 3 of 7, Section I, second full paragraph; the fourth and fifth sentences will be combined and revised to read, "Mr. Humphreys gave the example of the City of Alameda; where the annex has in-place ICs for restricted land use on some of the sites."
- Page 3 of 7, Section 1, second full paragraph; second from the last sentence, will be revised to read, "She also said that she thought it was suggested by City councilman Mr. Frank Matarrese during the November RAB meeting to take a vote."

<u>Mr. De Luca's comment</u>

- Page 3 of 7, Section II, second paragraph; first sentence will be revised to read, "Mr. Macchiarella called attention to Mr. De Luca; he will be an alternate for Ardella Dailey, who is the new superintendent of the Alameda School system."

## II. Co-Chair Announcements

Mr. Macchiarella and Mr. Humphreys did not have any co-chair announcements.

## III. Petroleum Hydrocarbon Program Update

Ms. Hurst presented an update on the petroleum program. A handout of the presentation is included as Attachment B-2. The first slide illustrates the areas on Alameda Point where the Navy is investigating free product at Corrective Action Areas (CAA) 3 and 5; conducting post-remediation monitoring and sampling at CAA 6 (Parcel 37), CAA 7 (Site 7), CAA 13 (Building 397 and 530), and CAA 11 (Area 37); and implementing active remediation using dual-vacuum extraction (DVE) for floating phase product and biosparging at CAA 4C (Site 22) and DVE at Building 410 (Site 9). The remediation technologies used at Alameda Point (Slide 2) include DVE at Building 410 and CAAs 4C, 6, 7, and 13 (Buildings 397 and 530); vacuum truck extraction, which extracts floating product from the subsurface at CAA 11; and biosparging, which injects air into the subsurface to facilitate natural attenuation at CAA 4C, 6, 11, and 13 (Building 530).

Slide 3 is a flow chart showing the various components of the original DVE system used at the base. Slide 4 illustrates the current DVE process, which uses a catalytic oxidizer before emissions are discharged into the atmosphere instead of using a vapor-phase activated carbon adsorber. The sites at Alameda Point use both vertical and horizontal wells to collect free product. The free product is pumped into a knockout drum, where the liquid and vapor are separated. The liquid is sent to an oil/water separator where approximately 40 percent of the oil is recovered for recycling. The remaining water is treated by liquid-phase activated carbon adsorbers before it is discharged into the sanitary sewer. The vapor from the knockout drum is passed through the catalytic oxidizer. The catalyst keeps the vapors at lower temperatures, which in turn produces less nitrogen oxides.

Ms. Konrad asked for an explanation of the vadose zone illustrated on the drawing. Ms. Hurst replied that the vadose zone is the area of soil above the groundwater table.

Ms. Sweeney asked why the Navy used the catalytic oxidizer rather than the activated carbon. Ms. Hurst replied that it was more cost-effective to install a catalytic oxidizer rather than to continuously change the carbon adsorbers because the Navy was withdrawing vapors with high concentrations of gasoline from CAA 4C. Changing the adsorbers also requires that the system is shut down from 1 to 3 weeks to service all the adsorbers; the catalytic oxidizer allows for more operation time of the system.

Slides 5 and 6 show the knockout drum at CAA 4C and the treatment system at Building 397. Slide 7 is a site map showing the treatment system location, above- and under-ground piping associated with the treatment system, and the approximate areas of free product contamination around Buildings 410, 530, 397, and at CAA 4C.

Slide 8 illustrates the sparging process where air is pushed from a blower into the wells and infiltrates the contaminated soil and groundwater. The wells are monitored to ensure that there is no buildup of air pressure.

Ms. Hurst reviewed the CAA site histories, starting with CAA 4C (Slide 9), which is also known as Site 22. This site was a former auxiliary base service station at the corner of Main Street and Pacific Avenue and was operated before the Navy Exchange (NEX) service station at CAA 7. Ms. Sweeney commented that the NEX service station at CAA 7 was in operation before this service station. A DVE system has operated at CAA 4C since June 2004 and was combined with biosparging in July 2004. The total mass removed from CAA 4C is 31,983 pounds. Slides 10 and 11 are pictures of CAA 4C showing the treatment system piping and the associated well field.

The biosparge system at CAA 6 (Slide 12) was shut down in August 2005 and the Navy is currently monitoring the site. The CAA is also called Parcel 37 and was historically used as an aircraft fuel storage area that operated until 1997. It has been contaminated by free product and dissolved-phase jet fuel. The DVE system operated from March 2002 through September 2003, and biosparging was conducted from September 2004 through August 2005. The total mass removed is 5,354 pounds. CAA 7 (Slide 13), which is also known as Site 7, is also the location of the NEX service station that operated from 1966 to 1997. Contaminants present include gasoline and methyl tertiary-butyl ether (MTBE) as free product in groundwater. The DVE system at the site operated from May 2002 through September 2003. The site is currently being monitored, and the total product mass removed is 9,917 pounds.

CAA 11, which includes CAA 11A and 11B (Slide 14), is also known as Area 37 and Building 14. It was a historical fuel storage area east of Seaplane Lagoon; contaminants present are dissolved-phase fuels. A vacuum truck is being used at Building 14. Pilot-study and full-scale biosparging was operated from December 2003 through September 2004. Since April 2004, targeted wells have been injected with pure oxygen to facilitate remediation at the site. Exploratory excavations were dug at the site in June 2004, August 2004, October 2004, and in 2005. Monitoring is currently in progress at Area 37.

CAA 13 contains two buildings: Building 397 and Building 530. Building 397 (Slide 15) is the former location of the jet engine test cells. A jet fuel spill occurred in 1991, and several excavations and removal actions followed the spill. However, in 2000, floating free product was discovered near the building. This site operated a DVE system with pilot- and full-scale operation from March 2002 through September 2003. The Navy has been targeting specific wells from November 2003 through the present. The site is being monitored, and the total mass removed is 1,248 pounds. Building 530 (Slide 16) is a former aircraft defueling area. Aircraft were drained of fuel in the lot west of the building for maintenance. Fuel leaked from the collection system into the soil, resulting in contamination by free product and dissolved-phase jet fuel. Pilot- and full-scale DVE was conducted from October 2002 through September 2004 and specific wells were targeted from October 2005 to the present. Biosparging was conducted between February and September 2004. Monitoring is currently in progress. Approximately 55,804 pounds of total mass has been removed. Slide 17 is a photograph of the well field at CAA 13 Building 530.

Building 410 (Slide 18), also called Site 9 Shallow, was a historical paint-stripping facility. Environmental investigations have shown that an apparent aircraft defueling area was also located east of the building. This defueling system included underground drains that collected the fuel, and it is expected that a release occurred from these drains. Solvents from the paint stripping process are also present in groundwater at the site. The Navy is addressing free product from jet fuel that was discovered during remediation of the paint stripping solvents. The DVE system has operated from May 2005 to the present, and the total mass removed since the previous petroleum program update in July is 7,449 pounds. The amount recovered at this site was unexpected; however, there is no more evidence of free product presence at the site. Slide 19 shows a photograph of the well field at Building 410.

Slide 20 depicts a graph of the total petroleum mass removed from CAA 4C and Building 410 since June 2004, and Slide 21 shows the total petroleum mass removed from each of the petroleum sites.

Mr. Leach asked how often the carbon adsorbers for the liquid mass removal are changed. Mr. McMillan replied that most of the petroleum is removed in the vapor phase, so the liquid-phase carbon adsorbers need to be changed only every few months. Mr. Dover asked about rebound of free product once systems have been shut down. Ms. Hurst replied that the Navy monitors for rebound after systems have been shut down and continue monitoring for at least a year. If there is rebound, then the Navy addresses the problem. Mr. Coe asked if there is a projected schedule to complete these projects. Mr. Lorton replied that the Navy is no longer observing free product at the majority of the sites and needs to address only the dissolved phase contaminants in groundwater.

Mr. Lynch claimed that equipment used at the on-site remediation systems violates public health regulations on noise and asked when the equipment will be maintained to conform to those regulations. He would not accept an attempt to solve one public health issue while creating another. He said the system violates the City of Alameda's noise ordinance and that federal law requires that the Navy comply with this ordinance. Ms. Hurst responded that noise readings indicate that the equipment is not operating above 65 decibels during the day. A noise meter is stored at the site, and can be used to take more frequent noise level readings. Mr. Lynch would like the results of noise monitoring shared with the public to show how often the equipment is out of compliance. He also noted that the equipment is especially loud after a rainstorm. Ms. Hurst responded that the Navy would try to collect more measurements after rainstorms. Mr. Humphreys asked if the noise was loudest during or after the rainstorm. Mr. Lynch replied that the system shuts down during rainstorms. Mr. Lorton countered that the system does not shut down during a rainstorm. Mr. Lynch replied that water droplets are drawn into the system and into the incinerator (catalytic oxidizer), which causes the temperature to drop and the system to shut down. Mr. Lorton responded that it is not water droplets that are entering the system but air saturated with water; therefore, the system should not shut down. Mr. McMillan said that the system does not violate the city noise ordinance, and that the Navy has monitoring reports to demonstrate compliance. Secondly, the water table rises during heavy rains and less bleed air will go into the system, which will affect the vacuum levels (possibly increasing noise); however, this problem is usually addressed before rainstorms by increasing the bleed air.

## IV. Presentation of New Projects for 2006

Mr. Lorton provided a handout (Attachment B-3) on his presentation of new projects for 2006. The new projects are to be awarded in fiscal year 2006. He said the Navy received a considerable budget for Alameda Point and so tried to address other non-Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) issues with funds in addition to the mandatory CERCLA projects. Some of these other programs that received funding include Resource Conservation and Recovery Act (RCRA) and petroleum projects. Most of the projects to be awarded in 2006 will not be finished in this fiscal year but will be continued into subsequent years. The Navy typically designs its contracts to last up to 18 months.

The first set of projects are general programs for Alameda Point, such as basewide program management support, basewide radiological surveys, basewide groundwater monitoring, findings of suitability to (or for early) transfer (FOSTs/FOSETs), site inspections for economic development community (EDC)-12, EDC-17, federal (FED) transfer parcels, and lead and asbestos surveys. The lead and asbestos surveys depend on the timeline for early transfer to the city. Reports on lead must be completed within a certain time from the transfer. Ms. Johnson asked if the Navy had prepared a list of buildings for which asbestos and lead based paint documents would need to be updated. Mr. Macchiarella responded that the Navy did not yet have a list but he did not think that the asbestos reports would need to be updated.

Projects for the landfill sites at Operable Unit (OU)-3 (Site 1) and OU-4A (Site 2) include a Site 1 feasibility study (FS), radiological surveys and removals at Sites 1 and 2, a FS, proposed plan (PP), and record of decision (ROD) at Site 2. The Site 1 radiological and lead removal action will be for the lead

berm area of the former firing range. Mr. Humphreys asked why Site 2 is funded through to the ROD when he thought that Site 1 was ahead of Site 2 in the schedule. Mr. Lorton stated that he believed that the PP and ROD for Site 1 were previously awarded and are therefore not depicted on the slide.

Projects for OU-2 (2A, 2B, and 2C) include removal actions for dense nonaqueous phase liquid (DNAPL) at Sites 4 and 5, subsurface slab soil vapor sampling at OU-2B, delineation of the tarry refinery waste at Site 13, data gap sampling and design data collection at OU-2A and OU-2B, a revised remedial investigation (RI) for OU-2C, and radiological removal in the storm sewers at Site 5.

Projects in the offshore areas include an RI for Sites 20 and 24, which will be followed by a FS, PP, ROD, and remedial design (RD) for Site 17.

A ROD and soil RD for Site 25 have been scheduled for OU-5 and nearby sites. In addition, a groundwater RD is scheduled for OU-5/Annex Installation Restoration (IR) 02, a FS, PP, and ROD is scheduled for Site 30; and a FS is scheduled for Site 31.

Projects at OU-6 include design data collection and an RD at Site 26 (the western hangar zone), a PP and ROD at Site 27 and 28, and design data collection and RD at Site 28.

Funded projects at other CERCLA sites on the base include a RD and design data collection at OU-1 (Sites 6, 7, 8, and 16); a RD and design data collection at Site 14; a RI, FS, PP, and ROD at Site 35; additional sampling for the RI at Site 34; a FS, PP, and ROD at Site 32; and a RI at Site 33, which is contingent on the determination made in the FED site inspection report.

Non-CERCLA programs that will be funded include petroleum and RCRA program projects. These projects will include documentation of closure and no further action sites for numerous underground storage tanks and CAA sites. Ms. Huang noted that four closure letters for some underground storage tanks were submitted on the date of the meeting. Active remediation or monitoring at the CAAs and the planning and design of new corrective action activities will continue at the CAAs previously discussed. CAA 3 and CAA 5 will be investigated for the presence of free product. Additionally, permitted and non-permitted RCRA unit closures will receive additional funding. Some of the non-permitted RCRA units are also called solid waste management units (SWMU) and include areas where hazardous materials were stored.

Mr. Humphreys asked why the tarry refinery waste is cleaned up under the CERCLA program but the petroleum sites are not. Mr. Lorton responded that petroleum used for fuel does not fall under CERCLA, although CERCLA covers petroleum-based wastes of a refining operation. The CERCLA exclusion would apply to gasoline stations but not to refineries.

## V. BCT Activities

Ms. Cook provided an update on BRAC Cleanup Team (BCT) activities for the month of December. She said that the BCT had a conference call in lieu of an in-person meeting. The BCT discussed schedule items, such as the RI reports for Site 20 and 24, which will be delayed for about a month, and the OU-2A and OU-2B FS reports have been delayed to April and May for public comment. The schedule was changed mostly because of the large number of PPs and RODs that are must be reviewed by the agencies within the next 3 months.

The BCT also discussed the Site 1 radiological material removal action and found that the agencies and the Navy have different opinions on how to approach the site and spend the available funding. Some BCT members would favor a time-critical removal action (TCRA) at the site, which would require less

than 6 months of planning but limit the public and agency involvement because it happens quickly. Other BCT members would prefer a non-TCRA because it includes community involvement; yet, the schedule for the non-TCRA removal would likely continue into the Record of Decision and/or Remedial Design process since this action will take a long time to review and plan. If that were to be the case, then the benefit of the removal action is essentially lost. The agencies and the Navy are still discussing the best course and would encourage the RAB members to voice their opinions. Ms. Sweeney made a motion to discuss this removal action at this time. Ms. Cook clarified that a TCRA would start within 6 months and would require several months to complete, while a non-TCRA will require about 2 years of planning before field work can begin. The actual cleanup time in the field will be about the same for both routes. Mr. Macchiarella summarized that one option allows the site to be cleaned up faster without as much community involvement, while the other allows for enough community feedback but will take longer to plan and will involve more documentation.

Mr. Dover asked if removing all of the radiological waste would be compromised by acting quickly. Ms. Cook said that the regulators would like to address the major radiological waste first (during the removal action), which would allow for a final remedial action that would focus on the remainder of the issues at the site. Ms. Huang noted that a TCRA would not be the only action at the site if radiological waste remains after the removal action. Mr. Humphreys added that the Navy feels that the 2 feet of soil removed during the TCRA at Site 25 is adequate for the use of the property. He asked if the radiological waste would also be excavated to 2 feet or if all would be removed. Ms. Cook responded that the regulators want to pursue the hotspots that Mr. Humphreys identified and would like to hear his concerns. Ms. Lofstrom added that DTSC also has the same concerns as Mr. Humphreys. Ms. Smith said that the sampling at Site 1 was not as dense as would be preferable and she asked if sampling is also part of the discussion on the TCRA. Ms. Cook responded that all aspects are open for discussion and that she would like as much public input as possible. The Navy will make its decision within the next month. However, the Navy needs to make sure that the action is not occurring during the least tern nesting season. Mr. Macchiarella also added that the removal action could be expanded into Site 2 and the Site 1 lead berm area.

## VI. Community and RAB Comment Period

Mr. Lynch commented that when he previously raised the issue of the noise ordinance violation, he wanted the Navy and its contractors to understand that public perception is reality. Last week he received an e-mail from a community member concerned about the situation that involved an issue near George Miller School and the housing on Annapolis Circle. This community member made a report while living in this housing area, and her husband was later told to keep his wife under control or he could kiss his Navy career goodbye. She asked for help from the Alameda Fire Department who came to her house with some type of instruments that sounded an alarm. She told housing officials that she would call the news if they could not correct the problem. Later that same day, she was handcuffed and removed from the house with her children and without any of their belongings. The email goes on to list a number of her illnesses, which she believes resulted from living on the base. Mr. Lynch would like to know what the Navy is going to do to change this type of public perception. He said the Navy needs to understand that the issues discussed in these RAB meetings can have public health consequences. He also said that the 5-year review report of the Marsh Crust area was not on the list of projects presented at this RAB, but it was presented at the Alameda Annex RAB meeting in October 2005. He said that the report concluded that there is no need to change the assumptions during the completion of the marsh crust reports, which he does not think is the case. He states that the marsh crust is a layer of contamination that is covered with clean fill, however; the clean fill is also contaminated with the same contaminants as the marsh crust layer. He believes that this assumption is false and that only an incompetent person could prepare a report that says something to this effect. The last five years and $20 million spent in polynuclear aromatic hydrocarbons (PAH) removal actions show that the marsh crust ROD is completely

unprotective. He believes that the ROD needs to be reconsidered and that a remedy that is effective be applied to the marsh crust. Mr. Humphreys asked for clarification concerning who lived in the house. Mr. Lynch replied that it was Navy family living in Navy housing. He stated that there is no longer anyone living in these houses.

Mr. Matarrese commented that the word "coerced" in the previous month's draft minutes is strong and was inappropriately used. He wants to set the record straight that he was only making a request during the public comment period; he is not a member of the RAB, and the RAB does not report to the City of Alameda, but only to the Navy. He simply wanted the members of the RAB to take action. There were no threats, sway, or compelling other than the discussion that this board had. He takes use of this word seriously and he will not tolerate its use. Mr. Humphreys noted that at the beginning of the meeting, the word was changed in the meeting minutes to "suggested." Ms. Smith noted that she was not present during the review of the minutes earlier in the meeting but that at the last meeting she was searching for a way to express how the RAB felt motivated to make a decision in a short time with little discussion. Furthermore, this discussion was during review of the meeting minutes and not during the comment period, so the RAB was not focusing properly. She supports the change because she does not think that she said it. Mr. Matarrese responded that he has a problem with the word appearing in print. Ms. Smith responded that this is why the minutes are draft and subject to change.

Mr. Humphreys asked Ms. Smith if she had any comments on Site 2. He added that the Navy would make a presentation on Site 2 during the next meeting. Ms. Smith responded that she would like time to discuss the report during the next meeting and to include the radiological issues.

Mr. McMillan commented in response to Mr. Lynch's comments on the noise at the petroleum remediation system; he said that he wanted to convey that he would consider Mr. Lynch's complaints regarding the operating noise, especially after storm events, and try to adjust the system. He did not want Mr. Lynch to think that these problems would not be addressed in depth.

Mr. Coe added that Mr. Matarrese's comments during previous meetings prompted him to think about remediation timeframes and he thinks that this issue was what Mr. Matarrese was trying to convey to the RAB. He added that even during tonight's discussion, timeframes for site remediation has been an issue and each site should be addressed as it arises.

The meeting was adjourned at 8:00 p.m.

**ATTACHMENT A**

**NAVAL AIR STATION ALAMEDA**
**RESTORATION ADVISORY BOARD MEETING AGENDA**
**January 5, 2006**

**(One Page)**

# *RESTORATION ADVISORY BOARD*

## *NAVAL AIR STATION, ALAMEDA*

## *AGENDA*

**JANUARY 5, 2006, 6:30 PM**

**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 | Mr. George Humphreys |
| 6:45 - 7:00 | Co-Chair Announcements | Co-Chairs |
| 7:00 – 7:25 | Petroleum Hydrocarbon Program Update | Ms. Michelle Hurst |
| 7:25 – 7:45 | Presentation of new projects for 2006 | Mr. Greg Lorton |
| 7:45 – 7:55 | BCT Activities | Ms. Anna-Marie Cook |
| 7:55 – 8:15 | Community & RAB Comment Period | Community & RAB |
| 8:15 | RAB Meeting Adjournment | |

**ATTACHMENT B**

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

B-1 List of Reports Received during December 2005, George Humphreys, RAB Community Co-Chair, January 5, 2006 (1 page)

B-2 Alameda Point Petroleum Program Update, presented by Greg Lorton and Michelle Hurst, Navy. January 5, 2006. (11 pages)

B-3 Alameda Point Planned Projects for 2006, presented by Greg Lorton, Navy. January 5, 2006. (5 pages)

**ATTACHMENT B-1**

**RESTORATION ADVISORY BOARD REPORTS RECEIVED DURING DECEMBER 2005**

**(One Page)**

# Restoration Advisory Board
# Reports Received During December 2005

1. Dec. 21, 2005, Quarterly Technical Memoranda for Corrective Action Areas 4C, 6,7,11 and 13 (Buildings 397 and 530) Alameda Point, Alameda, California, Shaw Environmental, Inc.

2. Dec. 15, 2005, Draft Final, Remedial Investigation Work Plan, Installation Restoration Site 34, Alameda Point, Alameda, California, SuiTech, A Joint Venture of Sullivan Consulting Group and Tetra Tech EM Inc.

3. Rev. 0-Dec. 15, 2005 Field Sampling Plan/Quality Assurance Project Plan, Verification Soil and Soil Vapor Sampling at Corrective Action Area 11, Alameda Point, Alameda, CA, Final Sampling and Analysis Plan Addendum 1.

4. Draft Remedial Investigation Installation Restoration Site 2, West Beach Landfill and Wetlands, Alameda Point, California, Battelle, Environmental Restoration Department, and Blasland, Bouch & Lee, Inc.

**ATTACHMENT B-2**

**ALAMEDA POINT PETROLEUM PROGRAM UPDATE**

**(Eleven Pages)**

BRAC
PMO WEST

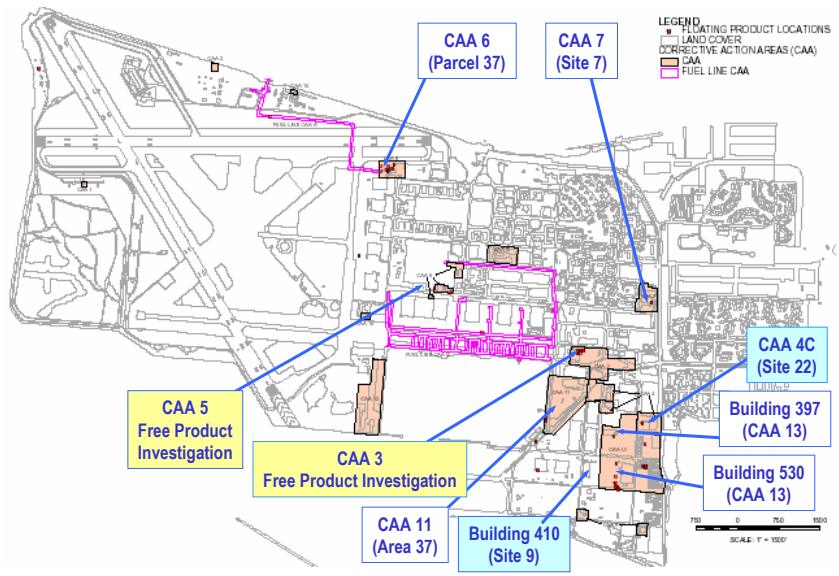
# Alameda Point
# Petroleum Program Update

Greg Lorton, P.E., and Michelle Hurst
Alameda Point BRAC Team

January 05, 2006

## Corrective Action Areas

BRAC
PMO WEST



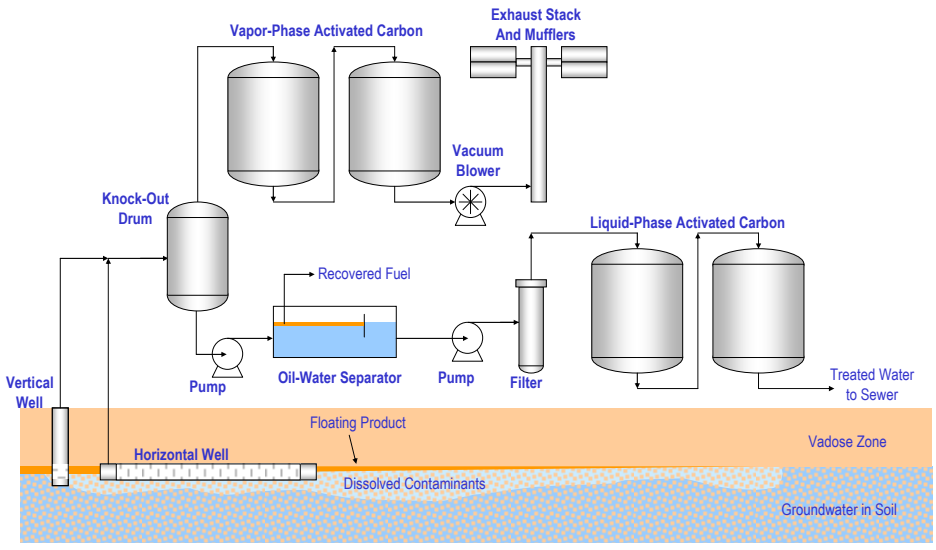
# Remediation Technologies

BRAC PMO WEST

- Dual Vacuum Extraction (DVE)
  - CAAs 4C, 6, 7, 13 (Bldgs 397 and 530), Bldg 410
- Vacuum Truck
  - CAA 11
- Biosparge
  - CAAs 4C, 6, 11, 13 (Bldg 530)

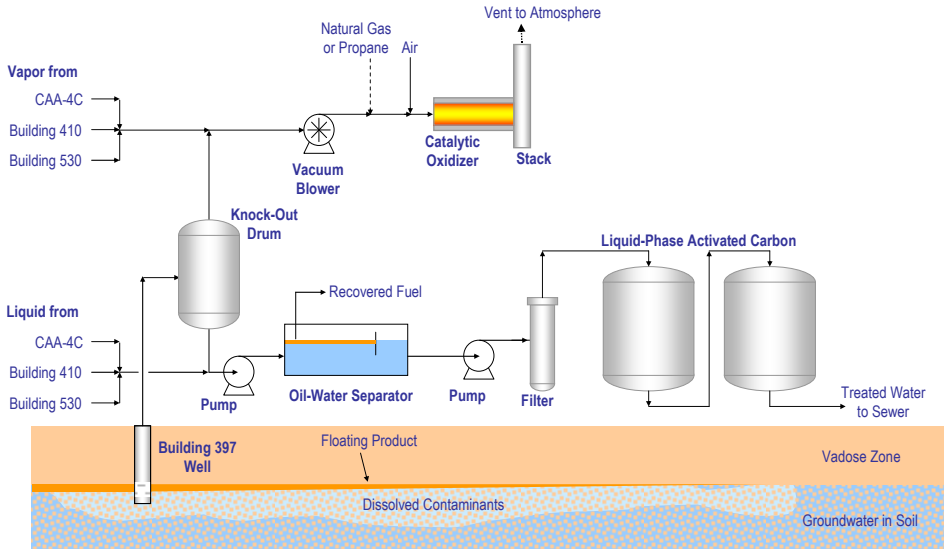
# Original DVE Process

BRAC PMO WEST



# Current DVE Process
## (Catalytic Oxidizer [CATOX])

BRAC PMO WEST

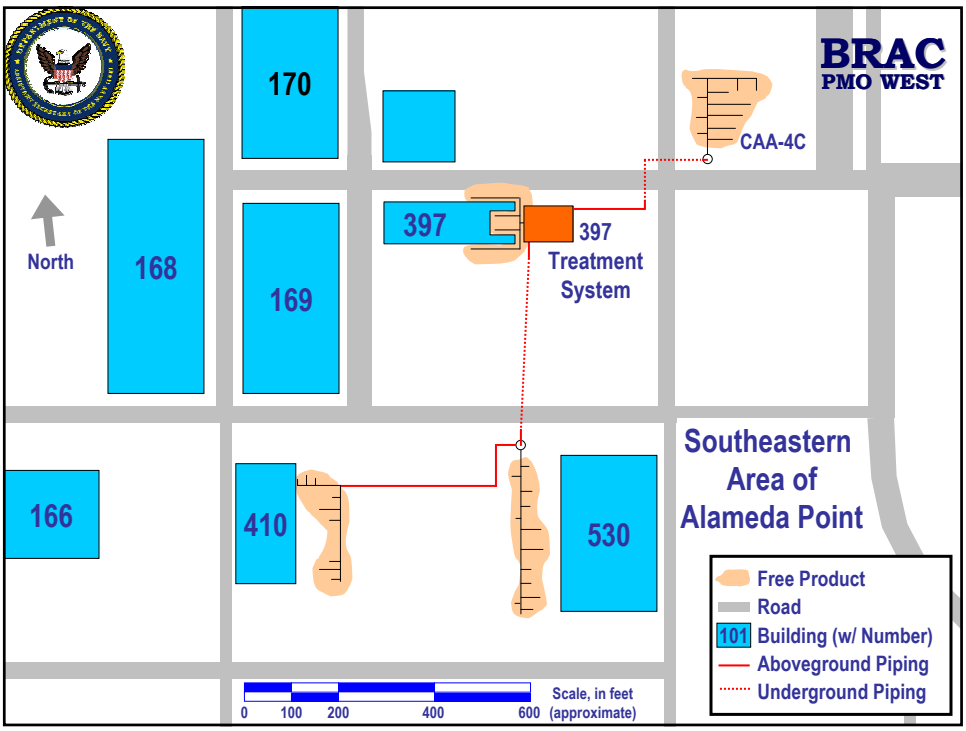



# Knock-Out Drum (CAA 4C)

BRAC PMO WEST

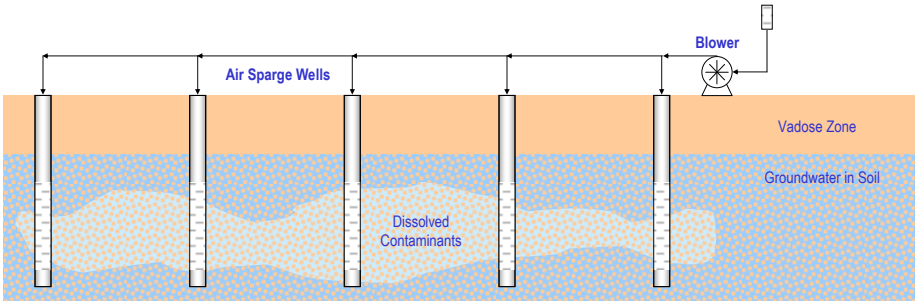
# Bldg 397 Treatment Plant

BRAC
PMO WEST



# Sparge Process

BRAC PMO WEST




# CAA 4C

BRAC PMO WEST

- Alternative Name: Site 22
- History: This former auxiliary base service station at Main St. / Pacific Ave. was operated before the NEX service station at CAA 7.
- Contamination: Free product and dissolved phase gasoline
- Status
  - DVE (Jun 2004 - present)
  - Biosparge (Jul 2004 - present)
  - Mass removed: 31,983 pounds

## CAA 4C Piping

BRAC
PMO WEST

## CAA 4C (looking southwest)

BRAC
PMO WEST

## CAA 6

BRAC PMO WEST

- Other names: Parcel 37
- History: Aircraft fuel storage area, operated until 1997.
- Contamination: Free product and dissolved phase jet fuel
- Status
  - DVE (Mar 2002 – Sep 2003)
  - Biosparging (Sep 2004 – Aug 2005)
  - Mass Removed: 5,354 pounds

## CAA 7

BRAC PMO WEST

- Other name: Site 7
- History: Navy Exchange (NEX) Service Station at Main Street / West Tower Avenue operated from 1966-1997.
- Contamination: Free product gasoline. MTBE in groundwater.
- Status
  - DVE (May 2002 to Sep 2003)
  - Monitoring in-progress
  - Mass removed: 9,917 pounds

# CAA 11
# (CAA 11A and CAA 11B)

BRAC
PMO WEST

- Other names: Area 37, Building 14
- History: Fuel storage area east of Seaplane Lagoon.
- Contamination: Dissolved phase fuels
- Status
  - Vacuum truck (Bldg 14)
  - Biosparge (Area 37)
    - Pilot- and full-scale (Dec 2003 – Sep 2004)
    - Targeted wells, with pure oxygen (Apr 2004 – present)
  - Exploratory excavations (Jun 2004, Aug 2004, Oct 2004, 2005)
  - Monitoring in-progress (Area 37)

# CAA 13 (Building 397)

BRAC
PMO WEST

- Alternative Name: Building 397
- History: Jet Engine Test Cells. Jet fuel spill in 1991. Several excavations and removal actions followed. Floating product discovered near the building in 2000.
- Contamination: Free product and dissolved phase jet fuel
- Status
  - DVE
    - Pilot- and Full-Scale (Mar 2002 - Sep 2003)
    - Targeted wells (Nov 2003 – present)
  - Monitoring in-progress
  - Mass removed: 1,248 pounds

# CAA 13 (Building 530)

BRAC PMO WEST

- Alternative name: Building 530
- History: Aircraft defueling area. The lot west of Building 530 was used to drain fuel from aircraft prior to maintenance. Fuel apparently leaked out of the collection system into the underlying soil.
- Contamination: Free product and dissolved phase jet fuel
- Status
  - DVE
    - Pilot- and full-scale (Oct 2002 - Sep 2004)
    - Targeted wells (Oct 2005 – present)
  - Biosparging (Feb 2004 – Sep 2004)
  - Monitoring in-progress
  - Mass Removed: 55,804 pounds

# CAA 13 (Bldg 530)

BRAC PMO WEST

# Building 410

## Possible Aircraft Defueling Activity

BRAC PMO WEST

- Alternative name: Site 9 Shallow
- History: Paint stripping facility. Paint stripping solvent contaminants are present in the groundwater beneath the site. Aircraft were apparently de-fueled immediately east of the building.
- Contamination: Free product jet fuel
- Status
  - Wells constructed to inject solvent oxidizers revealed unexpected jet fuel free product
  - DVE (May 2005 - present)
  - Mass removed since July TPH update: 7,449 pounds

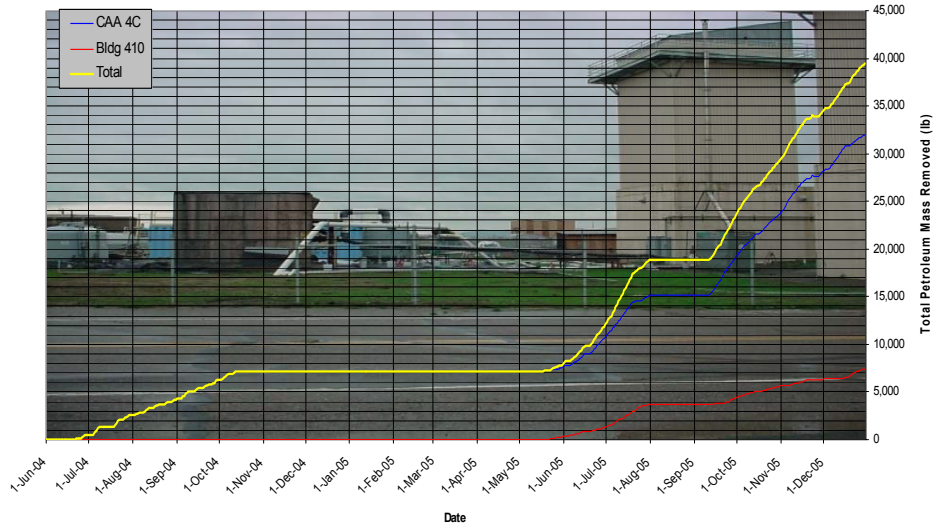
# Bldg 410 Wellfield

BRAC PMO WEST

# Petroleum Mass Removed (CAA 4C and Bldg 410)

BRAC PMO WEST

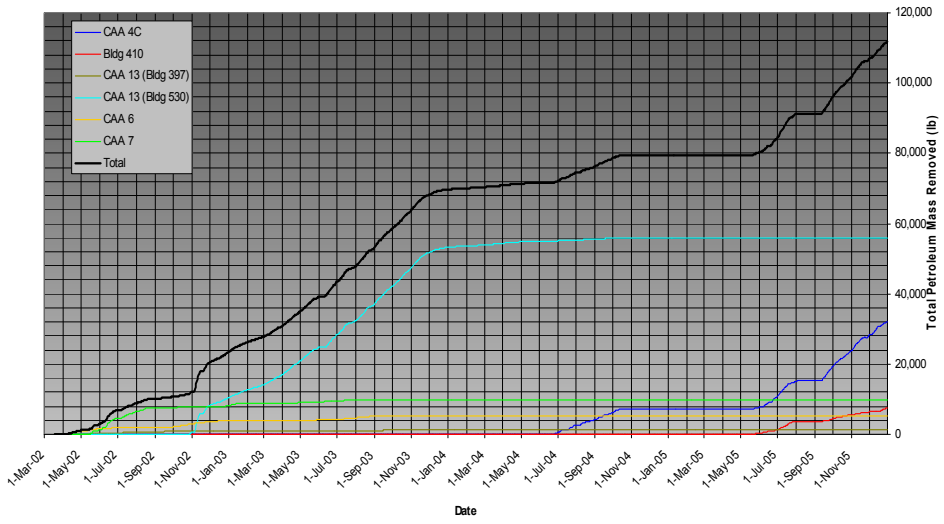
DVE Mass Removal (CAA 4C and Bldg. 410)




# Petroleum Mass Removed (Total)

BRAC PMO WEST

DVE Mass Removal



**ATTACHMENT B-3**

**ALAMEDA POINT PLANNED PROJECTS FOR 2006**

**(Five Pages)**

BRAC
PMO WEST

# Alameda Point
# Planned Projects for 2006

Greg Lorton, P.E.
Alameda Point BRAC Team

January 5, 2006

## General Programs

BRAC
PMO WEST

- Basewide Program Management Support
- Basewide Radiological Surveys (based on Historical Radiological Assessments)
- Basewide Groundwater Monitoring
- FOSTs/FOSETs (Findings of Suitability to [Early] Transfer)
- Site Inspections for EDC-12, EDC-17, and FED transfer parcels
- Lead and Asbestos Surveys*

* - Funding in 2006 depends on pace of early transfer with City.

## OU-3 (Site 1) and OU-4A (Site 2)

BRAC PMO WEST

- Site 1 Feasibility Study Completion
- Radiological Survey and Removal (Sites 1 and 2)
- Site 2 Feasibility Study, Proposed Plan, and Record of Decision
- Site 1 Radiological and Lead Removal

## Operable Unit 2 (2A, 2B, & 2C)

BRAC PMO WEST

- DNAPL Removal Action (Sites 4 and 5)
- OU-2B Sub-Slab Soil Vapor Sampling
- Site 13 Tarry Refinery Waste Delineation
- Data Gap Sampling and Design Data Collection (OU-2A and OU-2B)
- Revised Remedial Investigation (OU-2C)
- Storm Sewer Radiological Removal (Site 5)

## Offshore Sites

BRAC PMO WEST

- Remedial Investigations (Sites 20 and 24)
- Feasibility Study, Proposed Plan, and Record of Decision (Sites 20 and 24)
- Site 17 Remedial Design

## Operable Unit 5 (and nearby sites)

BRAC PMO WEST

- Site 25 Record of Decision and Soil Remedial Design
- OU-5/IR02 Groundwater Remedial Design
- Site 30 Feasibility Study, Proposed Plan, and Record of Decision
- Site 31 Feasibility Study

## Operable Unit 6

BRAC PMO WEST

- Site 26 Remedial Design and Design Data Collection
- Site 27 Proposed Plan and Record of Decision
- Site 28 Proposed Plan and Record of Decision
- Site 28 Remedial Design and Design Data Collection

## Other CERCLA Sites

BRAC PMO WEST

- OU-1 Remedial Design and Design Data Collection (Sites 6, 7, 8, and 16)
- Site 14 Remedial Design and Design Data Collection
- Site 35 Remedial Investigation, Feasibility Study, Proposed Plan, and Record of Decision
- Site 34 additional Remedial Investigation sampling
- Site 32 Feasibility Study, Proposed Plan, and Record of Decision
- Site 33 Remedial Investigation*

** - contingent on determination in FED Site Inspection*

# Petroleum and RCRA Programs

BRAC
PMO WEST

- Documentation of Closures and No Further Action Sites
  (numerous USTs and CAAs)
- Continuation of Current Correction Actions
  (CAA 4C, CAA 6, CAA 7, CAA 11, CAA 13, Building 410)
- Planning and Design of New Corrective Action activities
- Free-Product Investigation at CAA 3 and CAA 5
- Permitted RCRA Unit Closures
- Non-permitted RCRA (SWMU) Closures