

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

<http://www.efds.w.navy.mil/environmental/AlamedaPoint.htm>  
Building 1, Suite 140, Community Conference Center  
Alameda Point  
Alameda, California

October 7, 2004

The following participants attended the meeting:

**Co-Chairs:**

Thomas Macchiarella      Naval Facilities Engineering Command, Southwest Division (SWDIV),  
Base Realignment and Closure (BRAC) Environmental Coordinator  
(BEC), Navy Co-chair

Jean Sweeney              Restoration Advisory Board (RAB) Community Co-chair

**Attendees:**

Janet Argyres              Bechtel Environmental Inc. (Bechtel)

Doug Biggs                 Alameda Point Collaborative (APC)

Neil Coe                     RAB

Anna-Marie Cook         U.S. Environmental Protection Agency (EPA)

Nancy Cook                 Department of Toxic Substances Control (DTSC)

Doug Davenport         Tetra Tech EM Inc. (Tetra Tech)

Michele Dermer            Bechtel

Tony Dover                 RAB

Steve Edde                 Innovative Technical Solutions, Inc.

Linda Henry                Brown and Caldwell

Judy Huang                 Regional Water Quality Control Board (RWQCB)

Craig Hunter                Tetra Tech

George Humphreys        RAB

James D. Leach            RAB

Elizabeth Johnson        City of Alameda (City)

Marcia Liao                DTSC

Lea Loizos                 RAB/ARC Ecology

Frank Matarrese         Alameda City Council Member

Bert Morgan                RAB

Lona Pearson	Tetra Tech
Kurt Peterson	RAB
Lee H. Saunders	SWDIV
Dale Smith	RAB/Sierra Club
Jennifer Stewart	SWDIV Remedial Project Manager (RPM)
Cathy Stumpenhous	Bechtel
Jim Sweeney	RAB Vice Community Co-chair
Michael John Torrey	RAB/Housing Authority of the City of Alameda

The meeting agenda is provided in Attachment A.

## MEETING SUMMARY

### I. Approval of Minutes

Ms. Sweeney, Community Co-chair, called the meeting to order at 6:35 p.m.

Mr. Sweeney asked for comments on the September 2, 2004, meeting minutes. Mr. Humphreys, Ms. Smith, and Mr. Torrey provided the comments summarized below.

#### Mr. Humphreys' Comments

- On page 5 of 13,
  - Second paragraph third line; revise “principals” to “principles.”
  - Second paragraph seventh line; revise “a carcinogen” to read “carcinogenic.”
  - Third paragraph last line; revise “soil.” to read “soil conditions.”
  - Fifth paragraph first line, revise “problem during the winter” to read “source of BaP [benzo(a)pyrene equivalents].”
  - Fifth paragraph fifth line; revise “referred” to read, “referred to.”
- On Page 6 of 13, first paragraph, first line, revise “opposed to the analysis that reduces the total PAH [polycyclic aromatic hydrocarbons] risk to define the incremental PAH risk at Site 30” to read “opposed to using incremental risk versus total risk.”
- On page 7 of 13, third paragraph, eleventh line, revise “in Bangladesh, India” to read “in Bangladesh and India.”
- On page 8 of 13, third paragraph, seventh line, revise “exiting” to read “existing.”
- On page 9 of 13, fourth paragraph, first line, remove the word “micro.”
- On page 11 of 13,
  - Top of page, second line, insert the word “not” after “does.”
  - Third paragraph, sixth line revise “is better” to read, “are better.”

- On page 12 of 13 in the third paragraph, seventh line, revise the statement “included in OU-2A” to read “(including OU-2A).”

#### Ms. Smith’s Comment

- On page 7 of 13, third paragraph, seventh line, revise “on their school sites” to read “on school sites.”

#### Mr. Torrey’s Comment

- On page 13 of 13, sixth paragraph last line, the date, “September 26, 2004” should read “September 21, 2004.”

The minutes were approved based on incorporation of the comments summarized above.

## **II. Co-Chair Announcements**

Mr. Macchiarella provided the RAB with a list of upcoming significant Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) document submittals that are anticipated in October and November 2004. The list is included as Attachment B-1 to these minutes.

Ms. Sweeney stated that a rough draft of the RAB rules have been distributed to the focus group for comments. Mr. Macchiarella stated that after comments are received, the draft would be revised and distributed to the RAB for review in November 2004. Ms. Sweeney stated the goal is to have the rules ready for a vote by December 2004. Mr. Torrey requested a meeting to discuss comments.

Mr. Macchiarella announced that the Navy has reconfigured the BRAC Program Management Office (PMO) under a new team structure that reports directly to the Assistant Secretary of the Navy. The team will be known as BRAC PMO West and will focus on a business management perspective to accelerate transfer. Mr. Macchiarella added that the staff, office location, telephone numbers and email addresses would remain the same. Mr. Macchiarella commented that the Secretary of the Navy intends this new organization structure to accelerate property cleanup and transfer. Mr. Humphreys asked if any steps could be eliminated to streamline the site cleanup process. Mr. Macchiarella replied that the Navy is not at liberty to change the CERCLA process, but hopefully the funding, closure and transfer processes can be streamlined.

Mr. Macchiarella stated that the co-chair elections would be conducted during the December 2, 2004, RAB meeting. RAB members interested in becoming a co-chair can be either self nominated or nominated by another RAB member. Nominations will be proposed at the November 4, 2004, RAB meeting.

Mr. Macchiarella announced that also on December 2, 2004, the City of Alameda is having a workshop that might be of interest to the RAB members. RAB members might want to consider moving the RAB meeting to the City’s meeting place or shortening the duration of the RAB meeting to attend both meetings. Ms. Johnson added that as reported during the September RAB meeting, the City has started the community engagement process for the Master Developer’s preliminary development plan concept, and coordination with the RAB is a planned part of the process. The City’s next community engagement workshop was scheduled for November, but has since been moved to December 2, 2004. Since this is the RAB meeting date, the City would like to suggest combining the RAB meeting with the workshop at the Mastick Senior Center, and meet an hour earlier to allow for the annual RAB holiday party, co-chair

elections, and still participate in the community engagement workshop. The RAB members agreed that it would be a great opportunity but expressed concerns that both meetings might not have enough time as scheduled to conduct their agendas. Ms. Johnson stated that the City is committed to the date but that the times for each meeting could probably be worked out, and that the RAB need not decide at this time. Ms. Sweeney commented that it would be a good time to review the historic buildings at Alameda Point if that is on the City's agenda.

Ms. Liao introduced Nancy Cook as DTSC's new Public Participation Specialist. Ms. Sweeney welcomed Ms. Cook to the RAB.

### **III. Presentation on the Site 32 Draft Remedial Investigation Workplan**

Ms. Sweeney introduced Ms. Stewart to begin the presentation of the Site 32 draft remedial investigation (RI) workplan. A handout was provided and is included as Attachment B-2. Ms. Stewart stated that questions can be asked at any time during the presentation and that she would also leave her business cards if anyone would like to email questions or comments regarding Site 32 to her at a later time.

Ms. Stewart provided the site description, history and aerial photograph review of the presentation; see Slides 2 through 11. She stated that Site 32 is located in the northwestern area of Alameda Point and is known as the northwestern ordnance storage area. The site is adjacent to Site 1 and approximately 1,200 feet west of Site 14. The site is 5.8 acres in size and is mostly open space. Two buildings are located on the site; Building 82 previously used as a guard shack, and Building 594 previously used for office space, marine guard living quarters and also may have been used as storage for underwater weapons.

Ms. Stewart discussed the site property boundaries by reviewing the site photos on Slides 5 through 7.

On Slide 8, Ms. Stewart discussed the site history. She stated that the rail causeway was originally constructed in 1883 and then was reconstructed following a fire in 1902. Fill material was placed at the site between 1919 and 1936. The railroad tracks were removed in the 1960s and the area was open space up until late 1970s when both buildings were established. Ms. Stewart noted that the dates are based on aerial photograph interpretation. Two underground storage tanks (UST) previously located near Building 594 were removed in 1994. Each UST had a 1,000-gallon capacity and one UST contained gasoline and other contained diesel.

Ms. Stewart described aerial photographs for the years 1937, 1963, and 1985 (Slides 9, 10 and 11). She stated that in the 1937 aerial photograph fill activities could be observed, open space is observed in the 1963 aerial photograph and in the 1985 aerial photograph the buildings are observed on the site.

Ms. Stewart introduced Ms. Dermer of Bechtel, to continue the presentation and discuss previous investigations conducted at Site 32 and the proposed sampling plan (Slides 12 through 22).

Ms. Dermer stated that the two previous USTs were removed in 1994 and at that time, no tank integrity problems were noted. A follow-on investigation was conducted after the USTs were removed in 1995 to determine if contamination was present in the soil and petroleum hydrocarbons were detected. In 1999, another follow-on investigation was conducted; petroleum hydrocarbons and volatile organic compounds (VOC) were detected in grab groundwater samples collected at the site (see Slide 12). Ms. Smith asked if methyl tertiary butyl ether (MTBE) was also detected in the groundwater. Ms. Stumpenhaus replied that it was. Mr. Peterson asked where the USTs were located in relation to the buildings. Ms. Dermer stated that the USTs were located adjacent to Building 594 and were used to hold generator fuel.

Ms. Dermer stated that a groundwater investigation was conducted in 2002 to determine the extent of the groundwater contamination. Samples were collected from 12 Hydropunch locations and VOCs (including benzenes) were detected at concentrations above maximum contaminant levels in the groundwater. The basewide PAH investigation, conducted in 2003 and 2004, found PAH concentrations at Site 32 to be below the human health-screening criterion of 620 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) BaP equivalent. The northern portion of the site was not included in the PAH investigation, but will be included in the RI (see Slide 13). Monitoring well MW005-A was installed in 1991, and several rounds of quarterly groundwater sampling were conducted in the 1990s. The results of the supplemental environmental baseline survey investigation conducted in March 2003 provided the basis for creating Site 32 (see Slide 14). Ms. Smith asked about the source of VOCs in the groundwater. Ms. Dermer replied that the source is currently unknown and that is why Site 32 needs to be investigated and characterized.

Ms. Dermer stated that the objectives of the RI are to assess whether the soil or groundwater is contaminated above regulatory levels and if there is a risk to human health and the environment (Slide 15). She stated that the proposed sampling plan involves two stages. In the first stage, soil gas samples from 17 borings will be collected and analyzed for VOCs; soil samples will be collected at 27 soil boring locations from two depths and analyzed for VOCs, semivolatile organic compounds (SVOC), pesticides/polychlorinated biphenyls (PCB) and metals; and 3 soil borings will be sampled at four depths for PAHs at locations excluded from the previous basewide PAH investigation (Slide 17). Ms. Dermer stated the proposed soil sample locations are illustrated on Slide 18. In addition to the soil sampling locations, discrete groundwater samples will be collected at 27 groundwater sample locations at one depth interval of 10 to 15 feet below ground surface and analyzed for VOCs. Based on all the results from the soil and groundwater sampling, up to five permanent groundwater-monitoring wells will be installed, which is stage 2. The monitoring well samples will be analyzed for VOCs, SVOCs, total petroleum hydrocarbons, PAHs, pesticides/PCBs, and metals and radionuclides (Slide 19).

Mr. Humphreys asked why the soil was not being analyzed for radionuclides. Ms. Dermer replied that there did not appear to be a source for radionuclides in soil. Ms. Stewart added that radionuclides in the groundwater could have migrated from Site 1 to Site 32; radionuclides do not usually migrate on soil. Ms. Dermer stated that since radionuclides were found in well MW005-A during the previous groundwater-monitoring program, the groundwater needs to be investigated to determine if radionuclides are still present and if so, to what extent. Ms. Sweeney asked if the radionuclides were found in wells other than MW005-A. Ms. Dermer replied radioactivity was detected in other monitoring wells located on Alameda Point, but that MW005-A is the only well currently located at Site 32; additional groundwater-monitoring wells are proposed based on the results of the soil gas, soil and groundwater investigation.

Mr. Humphreys commented that if radionuclides were detected in the groundwater it would be logical to sample the soil above as a source of contamination. Ms. Dermer stated that the Navy would consider the suggestion. Mr. Macchiarella asked if the source of the radionuclides found in MW005-A could have been caused from nearby Site 1, where radionuclides were also detected in groundwater samples. Ms. Dermer replied that it is a possibility. Mr. Humphreys stated that the soil surface radioactivity at Site 1 extends outside the areas of the waste cells, indicating soil-moving activity that could have been spread to Site 32. Mr. Macchiarella commented that a radiological sweep was just conducted over the ground surface of Site 1 and that data needs to be reviewed adjacent to Site 32 to determine if there is an overlap.

Mr. Peterson commented that he is concerned that it has taken so long to address the radionuclides in groundwater at Site 32. Mr. Macchiarella replied that the radionuclide concentrations in groundwater at

Site 1 are relatively low and that well MW005-A is comparable to those concentrations.

Ms. Stumpenhaus commented that the groundwater radiological concentrations stated in the work plan are 4.8 to 6.8 pico curies per liter (pCi/L) and that the maximum contaminant level (MCL) is 5-pCi/L.

Mr. Macchiarella stated that the MCL is a drinking water level and that the groundwater at Site 32 is not a drinking water source.

Ms. Loizos asked why the samples would only be analyzed for VOCs in the 27-groundwater sample locations. Ms. Dermer replied that it is difficult to get results for anything else other than VOCs when collecting discrete grab groundwater samples.

Ms. Smith commented that she has a problem with using the term “not historically associated with the site”, and asked if the term allows the Navy only to be responsible for site characterization.

Mr. Macchiarella replied that it does not necessarily allow the Navy only to be responsible for site characterization, but background chemical concentrations also need to be considered. Ms. Smith added that she is confused why the soil sampling depths and intervals are not consistent with other sites of Alameda Point. Ms. Dermer replied that the groundwater is anticipated to be shallower in Site 32 and the soil samples are planned to be collected above groundwater.

Ms. Smith asked why there are no groundwater elevation contours or plume delineation shapes on the figures. Ms. Dermer replied that since there is currently only one existing groundwater well at Site 32 (MW005-A) contours or plume delineations cannot be created.

Mr. Humphreys referred to Slide 4, and asked if the area below Site 32 is the area known as the California site and if Site 32 is associated with the California site area. Mr. Macchiarella replied that Site 32 occupies a portion of the area known as the “California parcel” due to its shape, but that the “California parcel” itself is not a site. Ms. Stewart stated that Site 32 is located in the northern portion of the “California parcel”. Mr. Humphreys asked if further investigation is planned for the remainder of the parcel south of Site 32. Ms. Stewart replied that more investigations would be conducted on those areas but on different issues. Ms. Stewart stated that the large arms building (Building 497) south of Site 32 has been investigated by the Radiological Affairs Support Office (RASO) and recommended for no further action. She added the focus is on Site 32 and the VOC contamination to be investigated. The radionuclides and other issues will be investigated as they come up, but none of the other areas will be included in the Site 32 investigation. Mr. Macchiarella added that the RASO is a separate Navy outfit that specializes in radiological issues and that they worked with the BRAC team and the Department of Health Services to determine that there are no radiological issues at the building. Ms. Sweeney asked if the radionuclides could have seeped into the groundwater where it is being detected in the wells. Mr. Macchiarella stated that it is possible, but that the historical radiological assessment (HRA) would have considered all facilities, buildings and other potential sources for radiological contamination and that the Navy is waiting on the final letters to close the issue. He added that all the information should be wrapped up into the HRA report soon. Ms. Smith asked if there are any other monitoring wells anywhere else on the California parcel. Ms. Stewart replied that there are more wells on the southern section but that she did not bring the information on their numbers or locations but she will provide the information.

Mr. Peterson asked if indoor testing of Building 594 has been conducted. Ms. Stewart replied that there has not been any indoor sampling because there is no documentation of spills and that the building was used for barracks and storage. She stated that a discussion with an ordnance expert revealed that any repairs on torpedoes would have been conducted outside of the buildings, including propulsion systems and painting. Ms. Dermer stated that the building is currently vacant. Mr. Peterson stated that it would be easy to collect a few samples inside to ensure that the building is not a source. Ms. Stewart replied that a visual inspection has been completed and nothing was found; the building is relatively small, about

3,100 square feet, and the Navy is focusing on exterior sampling. If anything is found on the outside of the building, then additional investigation would be considered on the inside of the building.

Ms. Dermer stated that the purpose of the meeting is to discuss the site and that the RAB is providing good feedback and suggestions. Mr. Macchiarella added that the environmental baseline survey should be reviewed for the site as well as the adjacent Building 497. Mr. Morgan asked when the building was constructed; Ms. Dermer replied 1979.

Ms. Sweeney asked if the building was used as barracks for the men working at the site. Mr. Macchiarella replied that the building was used as barracks for the guards assigned to the fenced-off area. Ms. Sweeney asked what Building 497 was used for. Ms. Stewart replied that Building 497 was a bunker for weapons.

Ms. Loizos asked if part of the RI would include some source identification and discuss fate and transport. Ms. Dermer replied that it would. Ms. Loizos also asked if the soil would be analyzed for TPH. Ms. Dermer replied that it would not.

Ms. Dermer continued with the presentation and stated that the work plan is out to the regulatory agencies and available in the Information Repository for review by the RAB. Comments on the draft work plan are due on October 29, 2004; the draft final work plan and response to comments is planned for submittal in December 2004 with the sampling event starting in February 2005.

#### **IV. Presentation and Discussion of Regulatory Comments and Direction of Remedial Investigation/Feasibility Study Process for Operable Units 1, 2A, and 2B.**

Ms. Sweeney introduced Ms. Cook to present her discussion of the CERCLA clean up process and an overview of the regulatory comments on Operable Units (OU)-1, 2A and 2B; a handout was provided and is included in Attachment B-3.

Ms. Cook discussed that the first two pages of the handout, which contain a flow diagram that describes the major milestone documents of the CERCLA process from the RI work plan to a record of decision (ROD) amendment. Ms. Cook stated that the purpose of the RI work plan is to devise a sampling plan to delineate areas and sources of contamination and determine the contaminants present and at what concentrations. Based on the sampling results, the RI report must present a conceptual site model that describes the source of contamination, where the contamination is located, where it is going, how extensive it is, and human and ecological risk assessments. The risk assessment results normally are used to determine whether to conduct a feasibility study (FS), but site characterization results can also be used to determine the need for certain types of actions.

The FS sets preliminary clean up levels, evaluates remedial technologies and screens remedial alternatives. The most suitable remedies are subjected to an in-depth analysis using nine CERCLA evaluation criteria. Any remedial alternative selected must be both protective of human health and the environment and meet all applicable, relevant and appropriate requirements (ARAR), such as the Clean Water Act and the Resource Conservation and Recovery Act (RCRA). The FS is an in-depth evaluation that includes cost and implementability of a remedial technology to cleanup the soil or groundwater. When the FS is complete usually one or two remedy alternatives will stand out as the most viable to clean up the soil or groundwater.

In the proposed plan the lead agency (Department of Defense [DoD]) will select the preferred remedy from the FS that best meets the clean up goals. The proposed plan is then made available to the public in

a 30-day comment period, which can be extended another 30 days. In the comment period a formal public meeting is held and public comments both written and verbal are transcribed to the record. The record is added verbatim to the ROD, as well as the responses to the public comments by the lead agency. The public acceptance of the proposed remedy is one of the nine evaluation criteria that must be considered during the remedy selection process.

After receipt of the public comments on the proposed plan and only with EPA concurrence, the ROD then memorializes the selected remedy. The ROD is specific about the details of the clean up levels, the implementation of the remedy process, and the details of institutional control implementation.

In the remedial design, the remedy concept must be designed and approved prior to field implementation. This is usually completed in two stages, a 30 percent conceptual design and then a 90 percent design. This stepwise process allows all pertinent specifications to be fully identified and evaluated, although simpler designs may go directly into the 90 percent design stage.

The remedial action work plan contains all the remedial design specifications for the remedial equipment and presents a plan to further delineate soil and groundwater contamination to optimize the remedial system. Data gaps are addressed using sampling efforts to verify the consideration of all contamination in the cleanup activities.

The remedial action report verifies that all remedial action has been completed and that the goals of clean up have been met for soil or groundwater. The EPA makes the determination whether or not the remedy is operating properly and successfully. The EPA conducts a 5-year review on all ongoing and completed remedies to determine whether the remedies are still effective. If the remedies are no longer effective or protective, they can be altered or changed through a ROD amendment or explanation of significant differences (ESD) depending on the scope of change.

Ms. Cook stated that OUs 1, 2A and 2B are still in the process of clean up and have been for a long time. The OU-1 RI was initially submitted in 1998 with many data gaps, the report was resubmitted in 1999 after some of the data gaps were filled. OU-2A was also submitted in 1999, but it also had too many data gaps. Three years later after the third reiteration of the OU-1 RI report and second reiteration of the OU-2 RI report there are still data gaps. The reports are not what the regulators would like in a RI report, but the regulators have decided to take a different approach at moving the OUs forward. Ms. Cook discussed the approach as presented on page 3 of Attachment B-3.

Ms. Cook stated that the goal is to clean up OUs 1, 2A and 2B in as short a time as possible and to do a good job of the clean up. The problems in the RI reports include incomplete nature and extent discussions and incomplete fate and transport discussions because of data gaps. In addition, regulators feel that the risks are underestimated, because many of the contaminants of potential concern were excluded from the risk assessment without sufficient justification. Ms. Cook stated that regardless of the problems, the need for further action is indicated by the risk assessment; therefore, it does not require further refinement at this time. The regulators have decided to be very conservative and take all the sites into the FS, ROD, and remedial design and action phase. The existing data gaps will be documented in the remedial action work plan and addressed while implementing the remedies for the soil and groundwater. The costs can be conservatively assumed and adjusted in the FS for the additional data gap sampling and remediation for both soil and groundwater. Funding for remedial actions is more secure than funding for RI work. Ms. Cook reiterated that the regulators have not approved the RI reports and have documented the problems with comments. Once the ROD is signed, the Navy will have a statutory deadline of 15 months to begin the remediation process. The sooner the ROD is in place the sooner the

cleanup can begin. If additional problems are discovered during remediation they can be addressed at that time, instead of investigating for another 3 or 4 years.

Mr. Dover asked if there are significant risks to moving forward without the sites being fully characterized and if this solution will set a new precedent for other sites at Alameda Point. Ms. Cook replied that there is not a guarantee against risks, however even in cases where the RI work is adequate sometimes a ROD amendment still needs to be completed. She added that these sites have had many removal actions completed and in general the removal actions turn out bigger than expected and the contamination more widespread than anticipated, but in general the removal action alternatives have worked. Ms. Cook referred to Site 9, and added that there is always a potential for the extent of contamination to be greater than what is known and for other contaminants to show up unexpectedly even when everything is done correctly. Ms. Cook stated that this approach would not set a precedent for any other sites and that this method is not a trend. There are many contributing factors, one being that OUs 2A and 2B are very large and have complex issues. In addition, the RIs were started in the early 1990s, when the technology for the detection limits was much higher than today's standards. However there should be enough information available to move the sites forward into the FS.

Mr. Peterson asked if the EPA or DTSC would conduct the same approach on a privately owned site. Ms. Cook replied that although she does not work on private sites, she believes this is a fairly novel approach, but she also thinks that more investigative work is conducted on DoD sites than on private sites.

Ms. Sweeney asked about how the regulators' RI comment of "no analysis of non-CERCLA chemicals" would be addressed. Ms. Cook replied that the regulators are creating lists of chemicals that need to be sampled for and included in the remedial design work plan.

Mr. Peterson asked if sampling would cost more during the remedial design phase than in the RI phase. Ms. Cook responded that the sampling would occur as the remedy is being implemented. If the remedy selected is not capable of handling the constituents found then another technology or remedy can be added. She added that she believes there is a cost savings at this point.

Mr. Humphreys stated that he is in favor of the remediation work getting started, and that the longer the wait to work on the groundwater plume the more spread out it becomes. Ms. Cook agreed, and stated she believes adjustments can be made for the situations as they arise.

Ms. Loizos commented that funding generally is more available after the ROD and asked about the difficulty in obtaining additional funding to continue a remedial design in the event that actual costs exceed the original estimates. Ms. Cook replied that it is generally easier to get additional funds for a continuation of a clean up once the equipment is set up in place, than to start a clean up.

Ms. Smith asked where the pilot study program fits into the CERCLA flow chart. Ms. Cook replied that the pilot studies or removal actions are not considered by EPA to be a major milestone. By Executive Order, the DoD has unilateral authority on removal actions, so the agencies cannot interfere unless human health is in danger. Ms. Smith asked about a pilot study being a test for a particular technology, and asked how the tests fit into the CERCLA flow chart. Ms. Cook replied the pilot study is a test of a particular technology that will remove contaminants from either soil or groundwater as part of a removal action. If the pilot study is successful then it can be expanded to a full-scale removal action. Results from removal actions and pilot studies are evaluated during the FS stage.

Mr. Peterson commented that he is concerned about constituents being dropped from the risk assessments without significant justification. Ms. Cook stated that she agrees and explained that there are many reasons for it to happen such as using older data that used higher detection limits. Ms. Cook added that all the chemicals dropped from the risk assessments have been documented and will be investigated during the remedial design.

## **V. BCT Activities**

Ms. Cook presented an update of BCT activities from the previous month. A handout was provided and is included in Attachment B-4. Ms. Cook stated that the regular BCT meeting was the only meeting held. Ms. Cook summarized each of the agenda items discussed.

- Presentation and discussion of the offshore sampling workplan. Discussion focused on sampling areas at Oakland Inner Harbor and Todd Shipyard, offshore from Sites 1 and 2, Breakwater Beach, the Pier Area, and potentially the debris piles located in the Sea Plane Lagoon (SPL). The document was issued on September 29, 2004 for comments.
- Presentation of the Site 32 RI workplan, similar to tonight's presentation.
- Summary and discussion of PCB equipment sampling. In response to the regulators request for further sampling of PCB-containing equipment for OU-1, it was discovered that the Navy has already performed an extensive survey and sampling effort of all PCB-containing equipment on Alameda Point by the Navy's Resident Officer in Charge of Construction (ROICC) Office. The Navy and regulators are currently deciding what parts of the ROICC report can be used to support the CERCLA decisions and to identify any remaining data gaps.

Mr. Humphreys commented that the FS for the SPL is due to come out next month. He asked how the sampling data from the debris pile would be integrated into the SPL FS report. Ms. Huang stated that the debris pile is a data gap for the SPL; to address the data gap and not hold up the SPL FS, the debris pile would probably be handled with onshore issues. Mr. Macchiarella stated that the scope of work for the debris pile sampling is in place but the Navy has not initiated the work.

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

Mr. Torrey announced that construction of the Webster Street Renaissance Project would begin with a groundbreaking ceremony on Thursday, October 21, 2004 at 3:30 p.m. at the corner of Webster Street and Pacific Avenue in Alameda. A reception will follow at the Alameda Art Center, 1701 Webster Street.

Mr. Torrey commented that he received the RAB Charter package from Ms. Sweeney and requested a meeting be held to discuss it. He added that participation in the RAB is voluntary and noted some items are too restrictive in the Charter, such as not separating excused absences from unexcused absences and also stating that the RAB members will not be compensated for their time.

Mr. Peterson asked Ms. Johnson about the sod next to the old diesel tanks. Ms. Johnson replied the sod is being laid for new soccer fields.

Mr. Matarrese requested that the community take a close look at the City's workshop on December 2, 2004, specifically concerning historical buildings. He stated that a large portion of Alameda Point is being flagged as industrial because of contamination and not by choice. He added that the targets for clean up were set by the reuse plan and therefore defined by those uses. The intent of the council is to get a broader view from the community besides from the usual participants, and determine how the community feels about the current property use, the proposed reuse, and costs for redevelopment.

Ms. Loizos asked what the next step is for the RAB Charter. Ms. Sweeney replied that a draft was developed and reviewed by Mr. Macchiarella and Mr. Saunders, whose comments were then submitted back to the committee. Mr. Macchiarella added that once the subcommittee has agreed on the draft version he would distribute it to the other RAB members for review. The plan is to have a discussion at the November RAB meeting and a vote at the December RAB meeting. Mr. Macchiarella stated that he would also send out a copy of the current RAB rules for comparison. Ms. Loizos asked if a meeting would be held to discuss comments or if the comments should be emailed back to Ms. Sweeney. Ms. Sweeney stated that a meeting would be best and Mr. Morgan suggested having a meeting after the RAB meeting.

Ms. Sweeney requested clarification on Ms. Loizos comments during the September RAB meeting of the PAH clean-up standards changing from  $10^{-6}$  to  $10^{-5}$  (1 in 1,000,000 to 1 in 100,000). Ms. Loizos commented that she would like to continue the PAH discussion in a focus group meeting to discuss the screening level of  $10^{-5}$ . She added that she would contact everyone interested and set up a meeting time.

Ms. Cook stated that the OU-5 Site 25 soil FS is currently under review and comments are due on October 15, 2004. She stated that the EPA is requesting a 30-day extension under the Federal Facility Agreement.

Mr. Macchiarella corrected one of his previous statements by noting that the groundwater risks in OU-5 would be included in the soil site reports that are located above the groundwater plume.

Mr. Macchiarella stated that the next RAB meeting would be held on Thursday November 4, 2004. The meeting was adjourned at 9:00 p.m.

**ATTACHMENT A**

**NAVAL AIR STATION ALAMEDA  
RESTORATION ADVISORY BOARD MEETING AGENDA  
October 7, 2004**

(One Page)

# ***RESTORATION ADVISORY BOARD***

***NAVAL AIR STATION, ALAMEDA***

## ***AGENDA***

**OCTOBER 7, 2004 6:30 PM**

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

**COMMUNITY CONFERENCE ROOM**

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

<b><u>TIME</u></b>	<b><u>SUBJECT</u></b>	<b><u>PRESENTER</u></b>
<b>6:30 - 6:45</b>	<b>Approval of Minutes</b>	<b>Jean Sweeney</b>
<b>6:45 - 7:00</b>	<b>Co-Chair Announcements</b>	<b>Co-Chairs</b>
<b>7:00 – 7:30</b>	<b>Presentation on the Site 32 Draft Remedial Investigation Workplan</b>	<b>Jennifer Stewart and Bechtel Environmental, Inc.</b>
<b>7:30 – 8:00</b>	<b>Presentation and Discussion of Regulatory Comments/direction of RI/FS process for OUs 1, 2A and 2B</b>	<b>Anna-Marie Cook</b>
<b>8:00 – 8:10</b>	<b>BRAC Cleanup Team Activities</b>	<b>Anna-Marie Cook</b>
<b>8:10 – 8:30</b>	<b>Community &amp; RAB Comment Period</b>	<b>Community &amp; RAB</b>
<b>8:30</b>	<b>RAB Meeting Adjournment</b>	

## **ATTACHMENT B**

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

- B-1 List of significant Navy CERCLA program documents for October and November 2004, presented by Thomas Macchiarella, SWDIV. October 7, 2004. (1 page)
- B-2 Site 32 draft RI workplan overview. Presented by Jennifer Stewart, SWDIV and Michele Dermer, Bechtel. October 7, 2004. (11 pages)
- B-3 CERCLA clean up process and regulatory comments and direction of RI/FS process for OU-1, OU-2A, and OU-2B. Presented by Anna-Marie Cook, EPA. October 7, 2004. (3 pages)
- B-4 September 2004 BCT activities update. Presented by Anna-Marie Cook, EPA. October 7, 2004. (1 page)

**ATTACHMENT B-1**  
**LIST OF UPCOMING CERCLA DOCUMENTS FOR**  
**OCTOBER/NOVEMBER 2004**

**(One Page)**

**Alameda Point Restoration Advisory Board Meeting  
October 7, 2004**

***Significant Navy CERCLA program documents planned for  
October/November 2004***

- Site 17 (Seaplane Lagoon) Draft Feasibility Study Report
- Draft Feasibility Study Report for OU-1 (Sites 6, 7, 8, and 16)
- Site 13 (Former Oil Refinery) Final Action Memo for Time Critical Removal Action
- Site 2 (West Beach Landfill) Draft Final RI Workplan
- OU-5 IR02(Annex)/Site 25 Final RI/FS Report
- Site 28 (Todd Shipyard) Draft FS Report
- EDC-5 Draft Final Site Inspection Report
- PBC-1A Draft Site Inspection Report
- Site 9 Draft Final Action Memo
- Site 9 Project Report (for the intermediate zone pilot study)

**ATTACHMENT B-2**  
**SITE 32 DRAFT RI WORKPLAN**  
**(11 Pages)**



ALAMEDA POINT

# IR Site 32 Draft RI Work Plan Overview

Restoration Advisory Board Meeting  
October 7, 2004

Jennifer Stewart, SWDIV and  
Bechtel Environmental Inc.

1



ALAMEDA POINT

## Agenda

- Site Description and History
- Aerial Photograph Review
- Previous Investigations
- Proposed Analytical Program
- Proposed Schedule

2



## ALAMEDA POINT

# Site Description

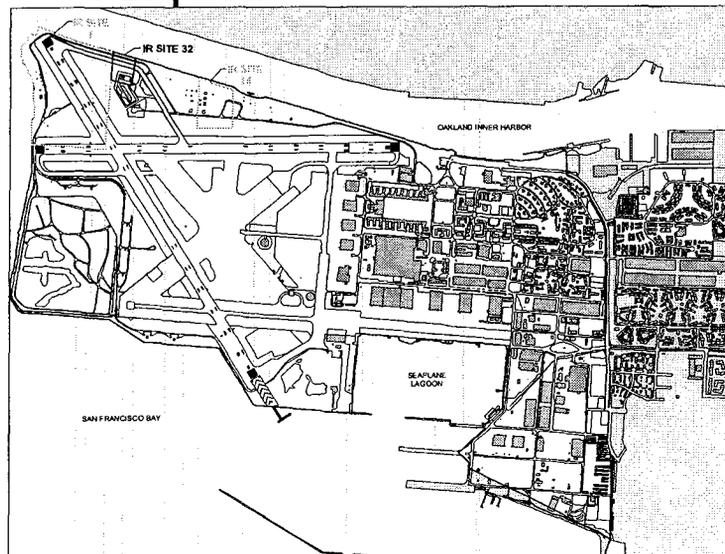
- Northwestern Ordnance Storage Area
- 5.8 acres in size
- ~99 percent of site is open space
- Building 82 – previously used as a guard shack
- Building 594 – previously used for office space and living quarters for Marine guards and may have been formerly used to store and repair underwater weapons
- Site underlain by hydraulic fill/dredge materials and some construction fill

3



## ALAMEDA POINT

# Map of Alameda Point



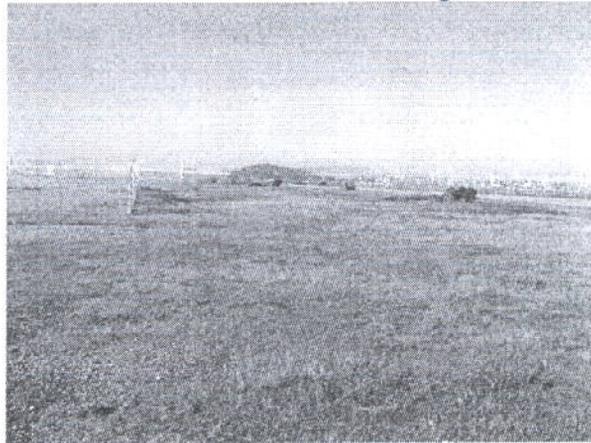
4



## ALAMEDA POINT

### Site Photos

- View of Site looking west



5



## ALAMEDA POINT

### Site Photos (cont.)

- View of Site looking south from runway



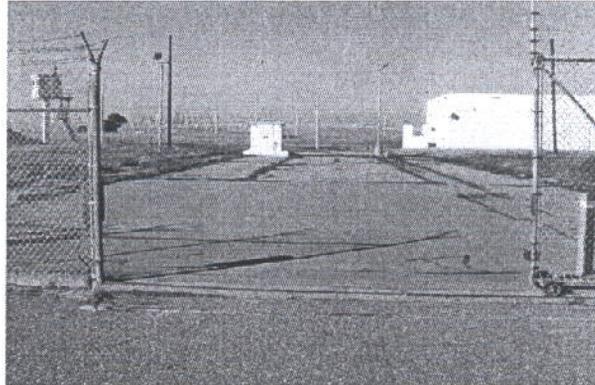
6



## ALAMEDA POINT

### Site Photos (cont.)

- View of Building 594 and Building 82 looking west



7



## ALAMEDA POINT

### Site History

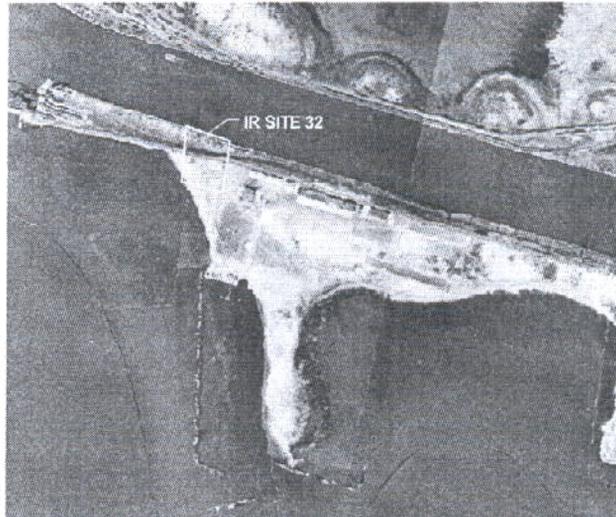
- Rail causeway constructed in 1883; Fire in 1902; then reconstructed following the fire
- Fill Material Placed (1919-1936)
- Open space until late 1970
- Railroad tracks removed (1960)
- Building 594 and Building 82 built in late 1970's  
(all dates are approximate and based on Aerial Photographic interpretation – these photos have some data gaps)
- Two 1,000 gallon USTs removed 1994

8



ALAMEDA POINT

1937

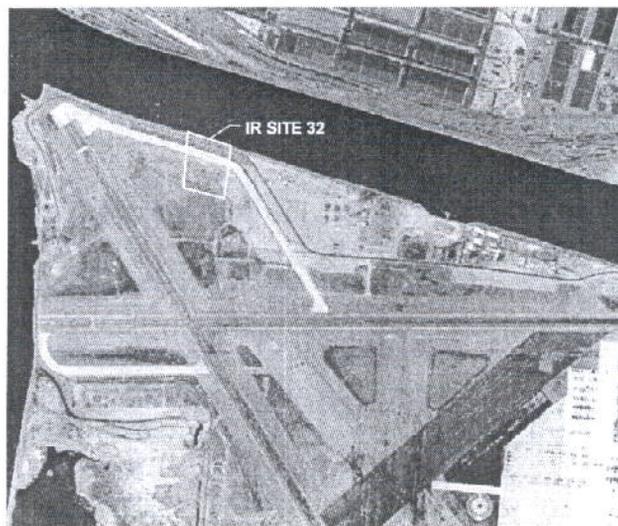


9



ALAMEDA POINT

1963



10



## ALAMEDA POINT

1985



11



## ALAMEDA POINT

### Previous Investigations

- Underground Storage Tank Summary (Tetra Tech)
  - 1994 – USTs 594-1 and 594-2 removed (no visible hole or failures noted during removal)
  - 1995 – follow on investigation (gasoline, diesel, motor oil and jet fuel detected in soil)
  - 1999 – another follow on investigation (diesel, motor oil, jet fuel, 1,2-DCE, cis-1,2-DCE, and TCE detected in groundwater)

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## ALAMEDA POINT

### Previous Investigations (cont.)

- Data Gap Sampling – OU 1 and 2 –  
followup of UST studies (Tetra Tech, 2002)
  - 1,2-DCA, 1,2-DCE, vinyl chloride, benzene  
and chlorobenzene reported at concentrations  
above MCLs in groundwater
- Basewide PAH Investigation (BEI, 2003-4)
  - benzo(a)pyrene equivalent concentrations  
below human-health screening criterion of 620  
µg/kg

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## ALAMEDA POINT

### Previous Investigations (cont.)

- Other Investigations
  - installation of MW005-A in 1991
  - quarterly groundwater sampling 1991-92; 1994-95
- Supplemental EBS Investigation
  - new Subparcels 8A, and 5E created to establish  
boundary for IR Site 32
  - VOCs in groundwater listed as risk driver for IR Site 32
  - IR Site 32 buildings not listed as former ordnance  
storage areas (ordnance stored on Parcel 8, Bldg. 497)

14



## ALAMEDA POINT

### Remedial Investigation Objectives

To assess:

- if soil and/or groundwater is contaminated above regulatory levels with chemicals historically associated with the site
- risk to human health and the environment

15



## ALAMEDA POINT

### Proposed Sampling Plan

#### 17 soil gas borings

- Soil gas samples to be collected at 5 feet bgs
- Samples will be analyzed for VOCs

#### 27 soil borings

- Soil samples will be collected from two depth intervals: 0.5 – 2 and 4 – 6 feet bgs (above groundwater)
- Samples will be analyzed for: VOCs, SVOCs, pesticides/PCBs, and metals

16



## ALAMEDA POINT

### Proposed Sampling Plan (cont.)

#### 3 soil borings (for PAHs only)

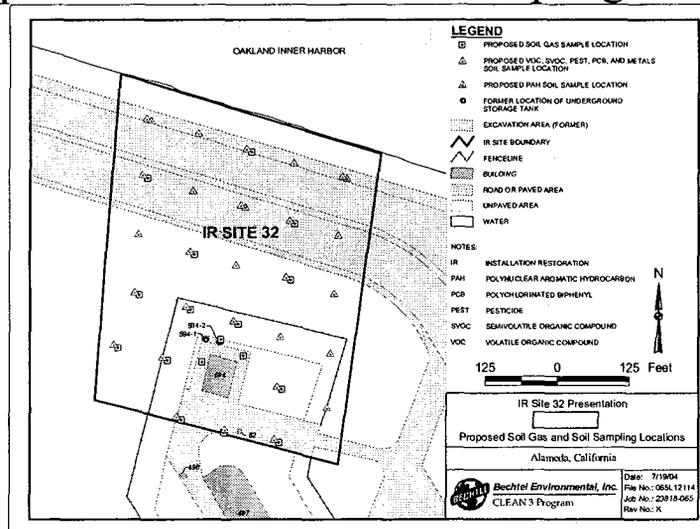
- Soil samples will be collected from four depth intervals: 0 – 0.5, 0.5 to 2, 2 to 4, and 4–6 feet bgs
- Samples will be analyzed for: PAHs

17



## ALAMEDA POINT

### Proposed Soil Gas and Soil Sampling Locations



18



## ALAMEDA POINT

### Proposed Sampling Plan (cont.)

#### 27 groundwater sample locations

- 1 depth interval (10 – 15 feet bgs)
- Samples will be analyzed for: VOCs

#### Installation of up to 5 monitoring wells

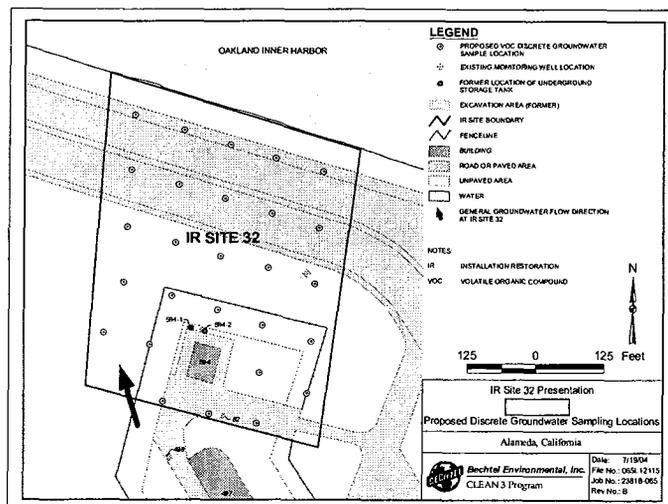
- Approximately 10-15 feet bgs
- Samples will be analyzed for VOCs, SVOCs, TPH, PAHs, pesticides/PCBs, metals, and gross alpha/beta (radionuclides)

19



## ALAMEDA POINT

### Proposed Groundwater Sampling Locations



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## ALAMEDA POINT

# Schedule

October 29, 2004	Agencies and RAB complete review of draft work plan
December 7, 2004	Draft Final Work Plan and response to comments
January 7, 2005	Agencies concurrence
February 2005	Conduct sampling program



## ALAMEDA POINT

# Discussion

**ATTACHMENT B-3**  
**CERCLA PROCESS AND REGULATORY COMMENT DISCUSSION**  
**(3 Pages)**

# CERCLA CLEAN UP PROCESS

## Major Milestones

**Remedial Investigation Workplan**  
*Describes the sampling that will be done to delineate areas and sources of contamination and determine which contaminants are present and their concentrations.*



**Remedial Investigation Report**  
*Based on site inspection and sampling results, report develops a conceptual site model, describes nature and extent of contamination, fate and transport mechanisms and human and ecological risk associated with contaminant concentrations found in soil and groundwater.*



**Feasibility Study**  
*Sets preliminary clean up goals and screens remedial alternatives to determine which ones are capable of meeting the clean up goals in soil and groundwater. The most suitable remedies are subjected to an in-depth analysis using the CERCLA nine evaluation criteria.*



**Proposed Plan**  
*Lead agency proposes the remedy they think best meets the clean up goals and provides the best balance of the nine criteria. The proposed remedy is put out for public review and comment in the Proposed Plan.*



**Record of Decision**  
*Upon receipt of the public comments on the Proposed Plan, and with EPA concurrence, a remedy is selected, the details of which are memorialized in a Record of Decision.*



### **Remedial Design**

*The remedy concept must be designed and approved prior to field implementation. There is usually a 30% and 90% design stage approval prior to the final design, but simpler designs may go straight to 90% design.*



### **Remedial Action Workplan**

*This workplan outlines the design specifications of the remedial equipment and presents a plan to further delineate soil and groundwater contamination in order to optimize placement of the remedial equipment. Data gaps are included in this sampling effort to verify that all contamination will be incorporated into the clean up effort.*



### **Remedial Action Report**

*Verifies that all remedial action is complete and clean up goals have been met for soil and/or groundwater. EPA has to make the determination that the remedy is operating properly and successfully.*



### **5-Year Review**

*EPA reviews and concurs on the effectiveness of all ongoing and completed remedies every five years for as long as there is waste left in place.*



### **ROD Amendments/Explanation of Significant Differences**

*If a remedy is determined to not be working or protective, it can be altered or a new remedy selected through an ESD or a ROD Amendment, depending on the scope of the change.*

## Moving Forward to Remediation for Sites in OUs 1, 2A and 2B

**Goal:** Expedite the clean up of OUs 1, 2A and 2B while ensuring that all necessary remediation of soil and groundwater occurs.

**Problem:** The OU 1, 2A and 2B Remedial Investigation Reports issued by the Navy are not completely adequate and have significant data gaps. The problems fall into these general categories:

- Nature and Extent Discussions are incomplete: Soil and groundwater has not been adequately sampled to determine the nature and extent of all contaminants. As examples, many oil water separators have no soil samples taken around and beneath them, so it is unknown whether the soil is impacted and whether the o/w separators provide a continuing source of contamination to groundwater. Groundwater step out sampling has not been followed through to the extent needed in order to delineate the outer contours of the plumes to non detect.
- Fate and Transport assessment is incomplete: Fate and transport mechanisms have not been fully addressed. For example, the potential for storm and sewer lines and associated bedding material to act as preferential pathways for contaminant plume migration has not been adequately examined.
- Risk Assessment is inadequate: In the opinion of the regulators, the risk assessment underestimates risk for each site. The regulators believe that many contaminants of potential concern (COPCs) were dropped from the risk assessment without sufficient justification.

**Solution:** In spite of the problems with the RI reports, we believe it is possible to move forward to the Feasibility Study, Record of Decision and Remedial Design/Action phases of the clean up program by using the following approach:

- To be conservative, all sites will be carried into the Feasibility Study, Record of Decision and Remedial Design/Action phase.
- Existing data gaps will be documented and carried through to the Remedial Action Workplan. The RA Workplan is a primary document which will be reviewed by the regulators, the City and the community to ensure that sampling of the remaining data gaps are adequately addressed. Data gap sampling will complete the nature and extent and fate and transport shortcomings in the RIs.

**Benefits to this Approach:** Rather than waiting several years for further rounds of sampling and reissuance of reports (Sampling Workplans and Remedial Investigation Reports), all of which are dependent on the availability of funding for the Navy clean up program, we keep moving forward and roll the sampling requirements in the Remedial Action phase of the program. Funding for remedial actions is more secure than funding for remedial investigation work. In addition, clean up will begin as soon as possible. We do not condone or accept substandard work and have documented the problems with the RI reports with extensive comments. Future RI reports need to be written adequately.

**ATTACHMENT B-4**  
**BCT ACTIVITIES UPDATE**  
**(One Page)**

## September 2004 BCT Activities:

### Monthly BCT Meeting, September 21, 2004

- A. **Presentation and Discussion of the Offshore Sampling Workplan:** The Navy and Batelle summarized the contents of the recently submitted workplan for the offshore sediment sampling. The sampling will be conducted in Oakland Inner Harbor, offshore from Sites 1 and 2, along the area termed Western Bayside and the Breakwater Beach Area. In addition, some sampling will be performed around the Pier Area and samples will also be taken of the debris pile in Seaplane Lagoon. The document was sent out on September 29 and comments are due back to the Navy on November 29.
- B. **Presentation of the Site 32 Remedial Investigation Workplan:** The Navy and Bechtel gave a presentation on the sampling workplan put together to investigate the contamination at Site 32, a new IR Site located just east of the Site 1 landfill. EBS samples have shown hits of solvents above PRGs in groundwater and further investigation is warranted. Soil, soil gas and groundwater samples will be taken. Soil and groundwater samples will be analyzed for inorganics, VOCs, SVOCs, pesticides and PCBs. The workplan was submitted by the Navy on August 23 and comments are due October 27.
- C. **Summary and Discussion of PCB Equipment Sampling:** The regulatory agencies have requested further PCB sampling as part of the data gap sampling for OU 1. The Navy's Resident Officer in Charge (ROIC) Office has apparently performed an extensive survey and sampling effort on PCB equipment on Alameda Point. The Navy and the regulators are in the process of deciding what information from the ROIC report can be used to support CERCLA clean up decisions and which former PCB areas require further sampling.

# SulTech

A Joint Venture of Sullivan Consulting Group and Tetra Tech EM Inc.

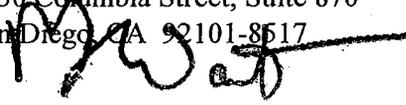
## TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. **N68711-03-D-5104**

Document Control No. TC . B010 . 10257

TO: Contracting Officer  
 Karen Rooney, Code 02RE  
 Naval Facilities Engineering Command  
 Southwest Division  
 1230 Columbia Street, Suite 870  
 San Diego, CA 92101-8617

DATE: 12/10/04  
 CTO: 010  
 LOCATION:  
Alameda Point, Alameda, California

FROM:   
**Michael Wanta, Contract Manager**

DOCUMENT TITLE AND DATE:

**October 7, 2004 Restoration Advisory Board Monthly Meeting Minutes**

TYPE:  Contractual Deliverable  Technical Deliverable (DS)  Other (TC)

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ADMIN RECORD: Yes  No  CATEGORY: Confidential

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