

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

www.navybracpmo.org

Building 1, Suite 140, Community Conference Center
Alameda Point
Alameda, California

June 1, 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:

Steve Bachofer	St. Mary's College
Doug Biggs	Alameda Point Collaborative (APC) Representative
Dave Cacciatore	Shaw Environmental and Infrastructure Inc. (Shaw)
Neil Coe	RAB
Anna-Marie Cook	U.S. Environmental Protection Agency (EPA)
Tommie Jean Damrel	Tetra Tech EM Inc. (Tetra Tech)
Doug deHaan	RAB
Jamie Hamm	Sullivan International Group (Sullivan)
Judy Huang	Regional Water Quality Control Board (Water Board)
Craig Hunter	Tetra Tech
Linda Janssen	California Environmental Protection Agency (Cal/EPA) Department of Toxic Substances Control (DTSC)
Elizabeth Johnson	City of Alameda
Joan Konrad	RAB
James D. Leach	RAB
Dot Lofstrom	DTSC
John McGuire	Shaw
John McMillan	Shaw
Derek Robinson	BRAC PMO-West, Remedial Project Manager (RPM)
Peter Russell	Russell Resources

Dale Smith

RAB/Audubon Society

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. Humphreys asked for comments on the minutes from the RAB meeting held on May 4, 2006.

Mr. Humphreys provided the following comments:

- Page 8 of 8, Section V, first paragraph, eighth sentence, will be changed to, “Mr. Humphreys responded that if the RAB approves the application, it will be considered as having been submitted to the Navy and that the minutes of the meeting showing the majority vote will constitute RAB approval.”
- Page 8 of 8, Section V, first paragraph, tenth sentence, will be changed to, “Ms. Sweeney asked about other sources of funds for the grants, and Mr. Humphreys clarified that the City of Alameda was considered, but there is no money for this type of grant.
- Page 8 of 8, Section V, first paragraph, sixth sentence from the bottom, will be changed to, “Mr. Humphreys responded that the agencies are already providing reviews of this information.”

Ms. Smith asked about the origin of the RAB tour since it is not discussed in the previous month’s minutes. Mr. Macchiarella responded that he had conceived the idea for the tour and he approached Mr. Humphreys about the tour after last month’s meeting. Mr. McGuire added that there is a limited window in which the RAB could tour Site 5 due to safety concerns once the system comes online within the next week or so.

The minutes were approved as amended.

II. Co-Chair Announcements

Mr. Humphreys distributed his list of documents the RAB received during May 2006 (Attachment B-1). Noteworthy documents received include the reissued draft final remedial investigation (RI) report for Installation Restoration (IR) Site 2 and two sets of agency comments on Sites 20 and 24. Concerning the comments on Site 20, both agencies noted that the report indicated a temporal change in the on-site contaminants; however, the agencies noted that the second round of samples was collected at different locations and farther from the outfalls.

Mr. Humphreys announced that he and some other RAB members submitted comments to the Navy on the proposed plans (PP) for Operable Unit (OU)-1. Mr. Humphreys provided copies of his comments to the RAB members (Attachment B-2).

Mr. Macchiarella said that he has been working with the Navy’s contracting department to complete processing on the RAB’s technical assistance public participation (TAPP) grant. He reminded the RAB that other organizations have applied for three previous TAPP grants at the base and there is a limit on the amount of money that an installation can use under the TAPP grants. A limit of \$100,000 has been set; to

date, the previous TAPP grants have used \$49,700. The limit per TAPP grant is \$25,000. He hopes to have an update on the status of the grant by the next RAB meeting.

Mr. Macchiarella distributed a list of upcoming documents that are planned to be issued in June and July 2006 (Attachment B-3).

Mr. Macchiarella presented an overview diagram of the various types of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) response actions. A handout of this diagram is included as Attachment B-4. He said that a *remedial* action response occurs after the CERCLA record of decision (ROD) has been completed. This process begins with a preliminary assessment/site inspection, followed by a remedial investigation and feasibility study and then a proposed plan and ROD. After the ROD is the remedial design and remedial action, after which the site is closed. Additionally, a *removal* action can be conducted at any point in the CERCLA process if deemed necessary. In this case (illustrated on the diagram), an engineering evaluation/cost analysis is followed by an action memorandum and then a removal action. Mr. Macchiarella said that the sites on the RAB tour are in the removal action process and additional actions, if necessary, will be taken by way of a remedial action. He noted that the term removal action does not necessarily denote a "removal of waste". Rather, it can be any action that reduces a threat to human health or the environment (e.g., a fence). Mr. Leach commented that this information could have helped on other projects such as preventing the spread of groundwater plumes. Mr. Macchiarella responded that indeed the Navy has used removal actions for such cases, including removal actions at sites 5 and 9.

III. RAB pre-Tour Brief

Mr. McGuire gave a pre-tour briefing to the RAB members. He said that the RAB members would be transported by bus to Building 5, tour the building interior, and observe the six-phase heating and vapor extraction system and electrodes located in the ground. The RAB will then leave the building and view part of the treatment system, which is outside. The tour will then board the bus and travel to Site 9 to observe the groundwater treatment system. Mr. McGuire cautioned that the RAB members need to be aware of the uneven pavement and site equipment at all times. He distributed several handouts to the RAB on the tour locations; an overview of the current six-phase heating system, and a schematic diagram of the groundwater plume under Building 5 (Attachment B-5), and an overview of the history of the chemical oxidation injection system at Site 9 (Attachment B-6).

IV. Community and RAB Comment Period

There were no community or RAB comments.

The meeting was adjourned at 7:00 p.m. after which the RAB attended a tour of sites 5 and 9 until 8:10 p.m. Attachments B-5 and B-6 contain informational handouts that were discussed during the RAB tour.

ATTACHMENT A

**NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING AGENDA
June 1, 2006**

(One Page)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

JUNE 1, 2006, 6:30 PM

ALAMEDA POINT – BUILDING 1 – SUITE 140

COMMUNITY CONFERENCE ROOM

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

***** THIS AGENDA IS ABBREVIATED TO ACCOUNT FOR THE RAB TOUR *****

***** PLEASE WEAR APPROPRIATE ATTIRE FOR OUTDOOR WALKING, INCLUDING CLOSED SHOES *****

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 - 6:35	Approval of Minutes	Mr. George Humphreys
6:35 - 6:40	Co-Chair Announcements	Co-Chairs
6:40 – 6:45	RAB Tour Pre-Brief	John McGuire, Shaw
6:45 – 7:00	Community & RAB Comment Period	Community & RAB
7:00	Adjourn RAB Meeting and Begin Tour to Sites 5 and 9 Removal Action Areas (Group transportation will be provided)	
8:15	Conclude Tour and Return to Building 1 (RAB meeting location)	

ATTACHMENT B

NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING HANDOUT MATERIALS

- B-1 List of Reports Received during May 2006, George Humphreys, RAB Community Co-Chair. (1 page)
- B-2 Comments on Proposed Plan for OU-1 (IR Sites 6, 7, 8, and 16), submitted by George Humphreys and RAB members. Dated May 24, 2006. (2 pages)
- B-3 Significant Navy CERCLA Documents for June/July 2006, Thomas Macchiarella. (1 page)
- B-4 CERCLA Response Actions, presented by Thomas Macchiarella, Navy. (1 page)
- B-5 Current Six-Phase Heating Work at Building 5 and Map of Groundwater Plume under Building 5, presented by John McGuire, Shaw. (5 pages)
- B-6 Site 9 Shallow Chemical Oxidation History, presented by John McGuire, Shaw. (2 pages)

ATTACHMENT B-1

LIST OF REPORTS RECEIVED MAY 2006

(One Page)

Restoration Advisory Board
Reports and Correspondence
Received during May 2006

Reports

1. April 28, 2006, "Final Report-First Statutory Five-year Review for Remedies on Shallow Soils IR Site 02 FISCA, Marsh Crust FISCA and Alameda Point, Alameda, California", prepared by Brown and Caldwell for BRAC Program Management Office West.
2. May 12, 2006, "Draft, Field Work plan for Data Gap Sampling Installation Restoration Site 26", prepared by Innovative Technical Solutions, Inc. for BRAC Program Management Office West.
3. May 13, 2006, "Installation Restoration Program Fact Sheet (Statutory 5-year review)", prepared by BRAC Program Management Office West.
4. May 24, 2006, "Draft Final Remedial Investigation Report Installation Restoration Site 2, West Beach Landfill and Wetlands, Alameda Point, California", Two volumes prepared by Battelle and Blasland, Bouck & Lee Inc. for BRAC Program Management Office West.

Correspondence

1. April 28, 2006, "Review of Draft Feasibility Study Report for Operable Unit (OU) 2B, Sites 3, 4, 11, and 21, Alameda Point, Alameda, California", Ms. Dot Lofstrom, P. G., Department of Toxic Substances Control to Mr. Thomas L. Macchiarella, BRAC Program Management Office West.
2. May 18, 2006, "Review of the Draft Remedial Investigation Report IR Site 20 (Oakland Inner Harbor) and IR Site 24 (Pier Area), Alameda Point, Alameda, California, March 2006", from Xuan-Mai Tran, U. S. EPA to Mr. Thomas Macchiarella, BRAC Program Management Office West.
3. May 22, 2006, "Review of Draft Remedial Investigation Report, IR Site 20 (Oakland Inner Harbor) and IR Site 24 (Pier Area), Alameda Point, Alameda, California", from Ms. Dot Lofstrom, P. G. , Department of Toxic Substances Control, to Mr. Thomas L Macchiarella BRAC Program Management Office West.

ATTACHMENT B-2

RAB MEMBER COMMENTS ON PROPOSED PLAN FOR OU-1 (IR SITES 6, 7, 8, AND 16)

(Two Pages)

George B. Humphreys
25 Captains Drive
Alameda, CA 94502-6417
May 24, 2006

Mr. Thomas Macchiarella
BRAC Environmental Coordinator
BRAC Program Management Office
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

Subject: Proposed Plan, Former NAS Alameda Operable Unit 1, IR Sites 6, 7, 8, and 16.

Dear Mr. Macchiarella:

Based on a review of the above- referenced Proposed Plan, statements by community RAB members at the May 4, 2006 RAB meeting, and input from the RAB Audubon Society representative, the following comments are offered:

1. General. The risks to ecological receptors have been consistently overlooked and the species chosen for investigation have not been appropriate. Canada Geese and ground squirrels will readily colonize the residential sites and Site 16. Soil cleanup should consider this possibility.
2. Site 7- Former Navy Exchange. It was pointed out by Mrs. Jean Sweeney that she had taken an auto-repair class in a portion of the site which was then unpaved. That area was subject to spillage of oils, solvents, petroleum products, antifreeze, and battery contents. The area has since been paved over. In view of the fact that Site 7 is planned for future residential development, it would be prudent for soil borings to be made throughout Site 7 in areas which are presently paved or occupied by buildings. It can reasonably be anticipated that any buildings and paving will eventually be demolished or removed for future residential development. It is obviously undesirable to leave "undiscovered" contamination in place which could eventually result in future public exposure and/or costly removal actions.
3. Site 16- Former Container Storage Area. During the May 4, 2006 RAB meeting, Mr. Kurt Peterson voiced his concerns about soil contamination between and possibly under the large storage containers. He said that the proximity of the site to Encinal High School and students makes this concern more critical. During the May 4th RAB meeting, the Navy reported that they had performed a removal action to excavate and remove contaminated soil in 1997. However, neither the Navy nor its contractor was able to satisfactorily answer whether soil under the containers has ever been sampled or tested for contamination. It appears unlikely that these large storage containers will remain in place as

permanent structures. Whether the containers are removed by the Navy or someone else, the soil under these containers should be sampled and tested, by slant drilling, by drilling through the floors of the containers, or by moving the containers and then sampling the exposed soil. Because contaminated soil was found between the containers and removed in the 1997 removal action, it appears credible that there is some contamination under the containers.

4. Site 6, Former Aircraft Maintenance Area. Although the preliminary remediation goals for soil and groundwater are stated to be residential levels, page 5 of the Proposed Plan states that the expected future use of Site 6 is commercial/industrial. Last year, I attended a series of workshops presented by the City's planning department. Among the alternatives being considered was the building of condominiums, apartments, or live/work units between and among the hangers on the north side of the seaplane lagoon. Thus, it is possible that the site will, in the future, be used for residential purposes. Also, consideration is being given to moving the Hornet to the northeast corner of the seaplane lagoon to free up space for the Maritime Administration ships at the docks in the seaplane lagoon. This part of the lagoon is immediately adjacent to Site 6 and the Naval Air Museum. There could be live-on-board staff on the Hornet, plus periodic occupancy by Sea Scouts, Sea Cadets and other groups. Therefore, it is important that cleanup levels be maintained at residential levels, and not relaxed to commercial/industrial levels.

The magnitude and direction of the vertical component of groundwater flow between the first water bearing zone (FWBZ) and the second water bearing zone (SWBZ) at Site 6 could not be estimated since no wells are screened in the SWBZ. There does not appear to have been any investigation of the SWBZ since the feasibility study (FS). An investigation of the impact of contaminants on the SWBZ needs to be conducted.

The community RAB recommends that the soil in Site 6 be remediated as the high PAH levels attributed to background soils are unacceptable.

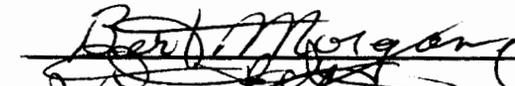
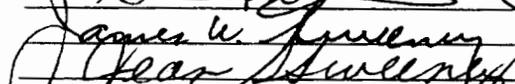
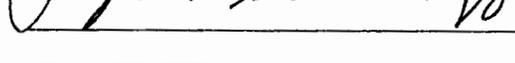
We appreciate the opportunity to comment on the proposed plan.

Sincerely,


George B. Humphreys,
RAB Community Co-chair


Dale Smith,
RAB Audubon /Sierra Club Representative

Copies to
Anna-Marie Cook, U. S. EPA
Elizabeth Johnson, City of Alameda
Dot Lofstrom, DTSC
Judy Huang, RWQCB
Frank Matarrese, Alameda City Council




(Kurt Peterson)

ATTACHMENT B-3

SIGNIFICANT NAVY CERCLA DOCUMENTS FOR JUNE/JULY 2006

(One Page)

**Alameda Point Restoration Advisory Board Meeting
June 1, 2005**

*Significant Navy CERCLA program documents planned for
June/July 2006*

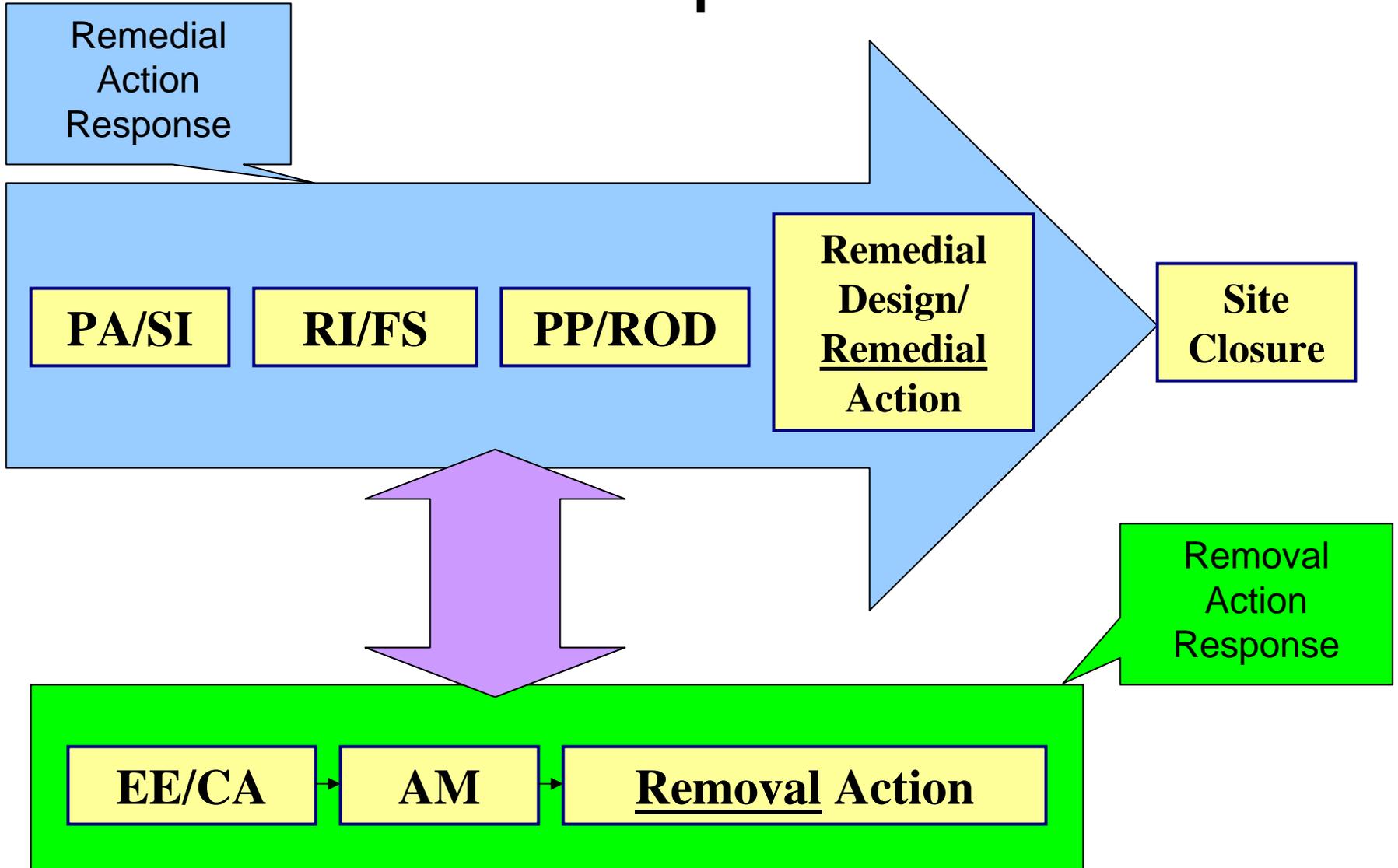
- Site 15 Final ROD
- Site 26 Draft Final ROD
- Site 28 Draft ROD
- Site 17 Draft ROD
- Site 35 Draft Remedial Investigation/Feasibility Study Report
- Site 14 Draft ROD
- Draft Annual Site Management Plan Amendment
- Final Site 2 Remedial Investigation
- Site Inspection Report for Western Bayside and Breakwater Beach

ATTACHMENT B-4

CERCLA RESPONSE ACTIONS PRESENTATION

(One Page)

CERCLA Response Actions



ATTACHMENT B-5

**CURRENT SIX-PHASE HEATING WORK AT BUILDING 5
AND GROUNDWATER PLUME MAP**

(Five Pages)

Current Six-Phase Heating (SPH) Work at Alameda Point

- **Plume 5-3 within Building 5**
 - Three phases
 - Approximately 13,000 square feet each phase
 - Depths to 20 feet
 - Target Temperature: 90°C
 - 3 – 4 months operation per phase
 - 35 electrodes per phase
 - Approximately 1,500,000 kW-hrs per phase

78M022004D

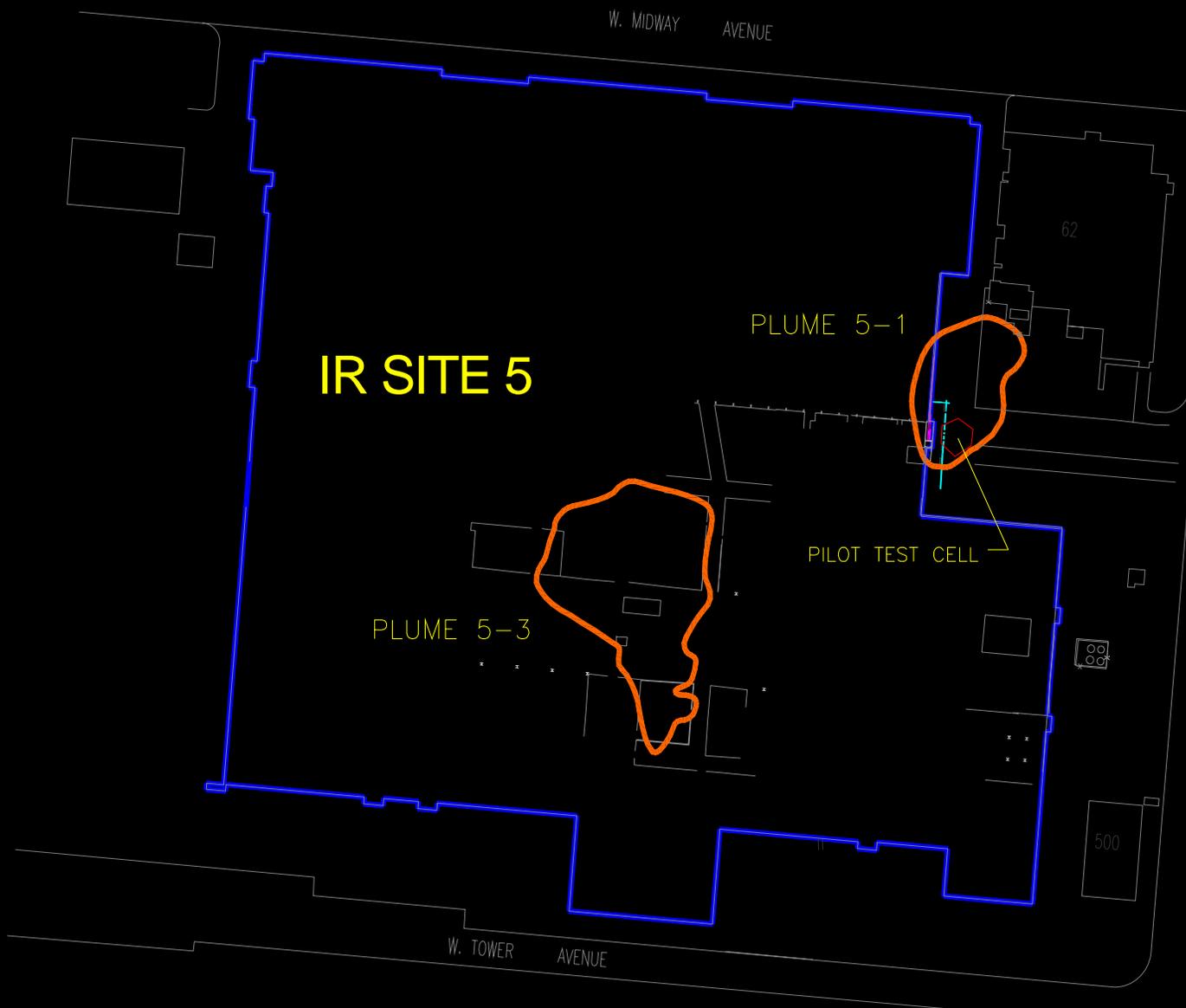


Contaminants of Concern (COCs)

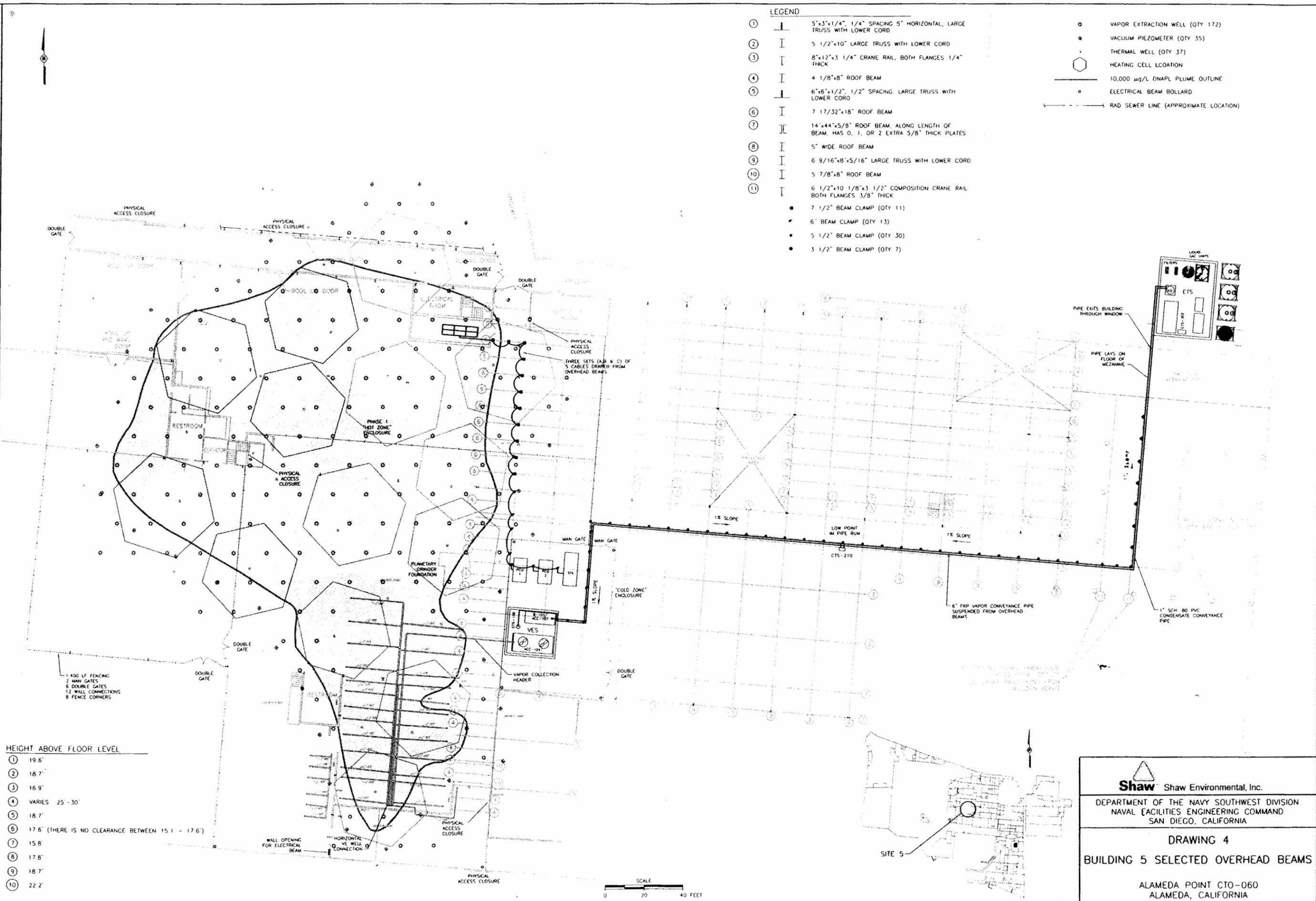
- TCE
- *cis* 1,2 DCE
- *trans* 1,2 DCE
- 1,1 DCA
- 1,1 DCE
- 1,1,1 TCA

78M022004D





Plume 5-3 at IR Site 5

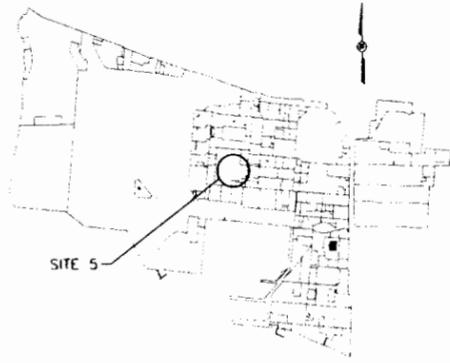


LEGEND

①	5" x 3 1/4" x 1/4" SPACING 5" HORIZONTAL, LARGE TRUSS WITH LOWER CORD	○	VAPOR EXTRACTION WELL (QTY 172)
②	5 1/2" x 10" LARGE TRUSS WITH LOWER CORD	●	VACUUM PIEZOMETER (QTY 35)
③	8" x 12" x 3 1/4" CRANE RAIL, BOTH FLANGES 1/4" THICK	+	THERMAL WELL (QTY 37)
④	4 1/8" x 8" ROOF BEAM	○	HEATING CELL LOCATION
⑤	6" x 6" x 1/2", 1/2" SPACING, LARGE TRUSS WITH LOWER CORD	○	10,000 µg/L DNAPL PLUME OUTLINE
⑥	7 1/2" x 32" x 18" ROOF BEAM	○	ELECTRICAL BEAM BOLLARD
⑦	14" x 44" x 5/8" ROOF BEAM, ALONG LENGTH OF BEAM, HAS 0, 1, OR 2 EXTRA 5/8" THICK PLATES	—	RAD SEWER LINE (APPROXIMATE LOCATION)
⑧	5" WIDE ROOF BEAM		
⑨	6 9/16" x 8" x 5/16" LARGE TRUSS WITH LOWER CORD		
⑩	5 7/8" x 8" ROOF BEAM		
⑪	6 1/2" x 10 1/8" x 3 1/2" COMPOSITION CRANE RAIL BOTH FLANGES 3/8" THICK		
	●	7 1/2" BEAM CLAMP (QTY 11)	
	●	6" BEAM CLAMP (QTY 13)	
	●	5 1/2" BEAM CLAMP (QTY 30)	
	●	3 1/2" BEAM CLAMP (QTY 7)	

HEIGHT ABOVE FLOOR LEVEL

①	19.6'
②	18.7'
③	16.9'
④	VARIES 25 - 30'
⑤	18.7'
⑥	17.6' (THERE IS NO CLEARANCE BETWEEN 15.1 - 17.6')
⑦	15.8
⑧	17.8'
⑨	18.7'
⑩	22.2'



Shaw Shaw Environmental, Inc.
 DEPARTMENT OF THE NAVY SOUTHWEST DIVISION
 NAVAL FACILITIES ENGINEERING COMMAND
 SAN DIEGO, CALIFORNIA

DRAWING 4
BUILDING 5 SELECTED OVERHEAD BEAMS

ALAMEDA POINT CTO-060
 ALAMEDA, CALIFORNIA

ATTACHMENT B-6

SITE 9 CHEMICAL OXIDATION INJECTION HISTORY

(Two Pages)

Site 9 Shallow – Building 410 Chemical Oxidation Injection

Site History

- Building 410 used as aircraft paint stripping facility (1958-1990)
- Garbage contractor and stockpiling drilling soil cuttings (1990-1996)
- Drain lines connected to storm sewer lines (possible flow pathway)
- Building 588 northeast of Building 410 was an industrial waster water plant

Contaminants of Concern

- Cis-1,2-dichloroethene (DCE)
- Vinyl chloride
- Trimethylbenzene (both 1,2,4 and 1,3,5)
- Total petroleum hydrocarbons (gasoline, diesel, and motor oil range)

Site Location



Chemical Oxidation - Modified Fenton's Reagent

- "Controlled" reaction
- Reagent consists of 12 percent hydrogen peroxide and patented chelated iron
- Minimal temperature increase
- $Fe^{+2} + H_2O_2 \rightarrow Fe^{+3} + OH^- + OH^*$
- Fe^{+2} – ferrous iron, H_2O_2 – hydrogen peroxide, Fe^{+3} – ferric iron,
- OH^- - hydroxide ion, OH^* - hydroxyl free radical

Site 9 Shallow – Building 410 Chemical Oxidation Injection

Pilot Test Conducted November 2002

- 1 injection well and 4 monitoring wells
- Injected 940 gallons of reagent (hydrogen) peroxide and catalyst

Full Scale

- Installed 6 new monitoring wells (F9SMW01 thru F9SMW06)
- During well development, floating product observed at well F9SMW04
- Full scale activities suspended
- Installed and operated dual vapor extraction system to remove hydrocarbons
- DVE system operations removed over 8,000 pounds of fuel hydrocarbons
- The system was shut down on February 21, 2006 after successful removal of free product in all observation and DVE wells.
- Full scale activities restarted December 2005
- 3 planned injection events, collected new round of baseline groundwater samples
- Through 3rd injection event (completed May 26, 2006), injected approximately 26,000 gallons of reagent and installed 150 temporary injection points

