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

September 13, 2012

N00236_004095
ALAMEDA POINT
SSIC NO. 5090.3.A

www.bracpmo.navy.mil
950 West Mall Square, Alameda City Hall West
Room 140, Community Conference Room
Alameda Point
Alameda, California

The following participants attended the meeting:

Co-Chairs:

Derek Robinson	Base Realignment and Closure (BRAC) Program Management Office (PMO) West, BRAC Environmental Coordinator (BEC), Navy Co-chair
Dale Smith	Restoration Advisory Board (RAB) Community Co-chair

RAB Members

Richard Bangert; Susan Galleymore; Carol Gottstein, M.D.; George Humphreys; Bert Morgan; Kurt Peterson; James Sweeney; Michael John Torrey. James Leach was excused.

Community Members/ Public Attendees

Irene Dieter; Leora Feeney; Gretchen Lipow; Skip McIntosh; William Smith; Bob Sullwold; Jane Sullwold

Navy Attendees

Bill McGinnis, Lead Remedial Project Manager (Lead RPM)

Cecily Sabedra, RPM

Regulatory Agencies

James Fyfe, California EPA Department of Toxic Substances Control (DTSC)

Chris Lichens, U.S. Environmental Protection Agency (EPA)

John West, San Francisco Bay Regional Water Quality Control Board Water Board

City of Alameda

Peter Russell, Russell Resources, City of Alameda

Contractors

Russ Bunker, AMEC

John McGuire, Shaw Environmental and Infrastructure

Betty Schmucker, Trevet

Tommie Jean Valmassy, Tetra Tech EMI

The meeting agenda is provided as Attachment A.

MEETING SUMMARY

I. Welcome and Introductions

Derek Robinson (RAB Navy Co-chair) called the September 2012 former Naval Air Station Alameda (Alameda Point [AP]) RAB meeting to order. He welcomed all to the meeting and asked for introductions.

Chris Lichens (EPA) was introduced as the EPA representative replacing Pankaj Arora. He spoke briefly about his experience, which includes nine years with EPA and his work with the Navy at Pearl Harbor in Hawai'i.

II. Community and RAB Comment Period

Dale Smith (RAB Community Co-chair) announced that an application for RAB membership was received from Susan Galleymore (Community Member). Jim Sweeney (RAB Member) moved that Ms. Galleymore be accepted as a RAB member and Michael John Torrey (RAB Member) seconded the nomination. Ms. Galleymore was unanimously elected as a RAB member. Ms. Smith said she will provide RAB members with a copy of Ms. Galleymore's application for their information. She will also submit a list of materials needed by new RAB members to the Navy and Ms. Galleymore. Mr. Robinson said the material contains e-links instead of printing numerous hard-copy pages. Ms. Smith said William Smith (community member) had also applied for RAB membership. He spoke briefly about his background, including that fact that he was one of the original RAB members. He is an engineer and is familiar with some of the technologies used in environmental cleanup. Mr. Smith said his goal is to see the cleanup completed to background levels for transfer to the City of Alameda (City). He noted that the cleanup has gone on for about 20 years. It was agreed that his application will be reviewed by the RAB and his membership will be voted on at the November RAB meeting.

Ms. Smith said one other individual has expressed interest in RAB membership, but no application has been received yet.

Ms. Smith presented to the Navy a list of the documents received from April to June 2012 (Attachment B-1).

George Humphreys (RAB Member) raised the issue of a fence around Site 2. He believes that a fence is needed around the site to prevent contact, since he feels that much of the landfill contents are unknown, and that grading to contour the landfill surface may spread contamination. Ms. Galleymore asked Mr. Humphreys to elaborate on his comment, as she felt a fence would not be needed if the area was supposed to be cleaned up. Mr. Humphreys said adequate sampling has not been done and the area should not be open to the public. He feels the site is not

seismically stable and the potential exists for exposure to the public. Carol Gottstein (RAB Member) said she agrees that the site should not be accessible to the public.

Mr. Robinson said that Mr. Humphreys' concerns are also the Navy's concerns. He explained that the clean soil will be placed on top of the landfill surface and then contoured. The landfill waste will not be moved around. Mr. Robinson explained the surface grading of the two feet of clean soil cover and loss of wetlands that will have to be replaced. Further, the area is proposed as a nature preserve and a trail is planned around the edge of Site 2 so people will not be walking into the area. Mr. Robinson explained that this has been discussed many times with the RAB and the high price tag to dig up all the contents and remove off-site was prohibitive. Mr. Humphreys reiterated his concern about the need for a fence to isolate Site 2. Dr. Gottstein had a map from Veterans Affairs (VA), who will receive the property, showing the proposed area as a least tern preserve with no fence around it; however, that map may be outdated. Ms. Smith said the area will be managed by East Bay Regional Parks and will be fenced, allowing only authorized personnel to access (e.g., Audubon, U.S. Fish and Wildlife Service [USF&WS]) to Site 2. Ms. Galleymore asked if the East Bay Regional Parks is still involved, as there is much misinformation about who will manage the site. Further, she expressed concern about the potential for sea level rise affecting Site 2. Mr. Robinson said the Navy considered sea level rise in its plans for Site 2. Even with the property transfer to VA, the Navy is still liable for Site 2.

III. Co-Chair Announcements

Mr. Robinson said the November meeting will include a vote on William Smith as a new RAB member and nominations for the RAB Community Co-chair for 2013. Any ideas for November meeting agenda topics should be forwarded to Ms. Smith.

Mr. Robinson announced that the Operable Unit (OU-) 2C Proposed Plan should be out for review in October. A public meeting is tentatively scheduled for the second Thursday in October (October 11, 2012). He asked if the RAB would like an informal briefing before the formal public meeting. Ms. Smith asked how long the RAB pre-meeting would be; Mr. Robinson suggested up to one hour. Ms. Smith and Kurt Peterson (RAB Member) suggested combining the two meetings. Mr. Bangert asked if the two meetings need to be held separately. Mr. Robinson said there are legal reasons for holding the CERCLA Proposed Plan public meeting separately. There is a court stenographer at the public meeting to record comments for response in a Responsiveness Summary that becomes part of the Record of Decision (ROD). Mr. Humphreys said he was told that the Navy only recognizes written comments, so anything discussed orally at the RAB would not be recognized by the Navy. Mr. Robinson indicated that the court stenographer would be recording verbal comments in a written record for the Responsiveness Summary. Mr. Peterson said both meetings, RAB and public, would be a benefit in terms of information.

Mr. Robinson agreed to hold a RAB meeting before the scheduled public meeting for the OU-2C Proposed Plan and have a court stenographer there for both meetings. Further, if the date for the public meeting is postponed to a later date, it was agreed that a later date would be acceptable, as long as it did not occur on a Monday or a Tuesday, when the City Council has meetings. Thursdays are preferable.

Mr. Robinson noted that the cleanup is complete at both Site 17 and Site 27, and both sites are being reused. He said that sailboats are currently moored at Site 17 for the America's Cup races.

IV. Site 1 Groundwater Remedial Action

Mr. Robinson introduced Cecily Sabedra (Navy) to present an update on the groundwater remedial action at Site 1 (Attachment B-2). The selected remedy implemented at Site 1 was in situ chemical oxidation (ISCO), followed by monitored natural attenuation (MNA), institutional controls, and groundwater monitoring. A handout for the presentation was not available at the meeting but will be sent to the RAB members.

During the review of slide 5, Ms. Smith said that when the ISCO technology was implemented, EPA was concerned that the Navy would have difficulty controlling variables such as rate of acceleration of temperature, ground swelling, and backflow, as occurred at OU-2B and Site 26, due to poor characterization. She asked the Navy to explain how the process went forward. Russell Bunker (AMEC) answered that the ISCO process went well and no problems were encountered. The process reached its target temperature range of 40 to 60 degrees Celsius (˚C); the process was adjusted at around 60˚C and did not exceed 80˚C. Ms. Sabedra turned over the presentation to Mr. Bunker to explain the ISCO process.

During the review of slide 7, Mr. Peterson asked how close to San Francisco Bay the ISCO system is working. Mr. Bunker said within about 100 feet. Mr. Peterson asked for confirmation that the groundwater is moving in the direction of the Bay, and asked how the Navy is regulating the amount of oxidant flowing toward the Bay. Mr. Bunker said the groundwater flow gradient is extremely slow and that the injected chemicals in the groundwater, although persistent in groundwater for months, are not likely to reach the Bay. He also discussed the funnel-and-gate structure and sheet-pile that is slowing down groundwater contact with the Bay. Mr. Peterson was concerned that the funnel-and-gate system allows the ISCO chemicals to move into the Bay. Mr. Bunker explained that there are two openings in the system and confirmed that the gates are open, not closed. Ms. Smith said the RAB has been told that the gates are closed, and there is concern that the iron filings in the 20-year-old funnel-and-gate system should have been replaced. She is also concerned about the groundwater moving toward the Bay, and pressure caused by the ISCO temperature that would force the groundwater toward the Bay. Mr. Bunker explained that there is no driving force (e.g., no back-pressure system) pushing chemicals through the gates and into the Bay. Only natural processes (e.g., rainwater) are at work, and the rate of groundwater flow is slow. Mr. Humphreys said that one concern is the mobilization of heavy metals in groundwater resulting from the ISCO treatment. Mr. Bunker agreed that metals mobilization in treated groundwater is a side effect of the ISCO process, but the mobilization does not persist and there is adequate distance to the Bay to allow for temporary impacts to subside. Further, tidal action and the sheet-pile funnel-and-gate system help to keep groundwater from reaching the Bay.

During the review of slide 8, Mr. Bunker explained that the plume source area is dominated by trichloroethene (TCE) and that downgradient the breakdown products dichloroethene (DCE) and vinyl chloride (VC) are reported. The most concentrated part of the plume is a very small area, about 30 feet wide by about 10 to11 feet below ground surface (bgs), at the east end of the plume (away from the Bay). Mr. Peterson asked where the "hot spot" (source area) was located. Mr. Bunker said it is at the east end, upgradient of the Bay. Mr. Humphreys asked if a "waste pit" is the same thing as a "waste cell." Ms. Sabedra replied that about six waste cells were noted via

aerial photos and were where waste was dumped. Trenching and borings confirmed the waste cells.

During the review of slide 8, Mr. Bangert asked if some of wells shown would remain as long-term monitoring wells. Mr. Bunker said some of the wells may be used for long-term monitoring. The remedy will transition from ISCO to MNA and monitoring well locations will be specified during subsequent work plan preparation.

During the review of slide 10, Mr. Peterson asked how wide the gates are and Mr. Bunker said the two gates are each 8-10 feet wide. Mr. Bunker showed the downgradient wells outside of the funnel-and-gate system used for baseline comparison with the monitoring wells. He showed where DCE extends through the treatment area and explained that the model used for assessing groundwater took into consideration groundwater moving through the gates. He explained that the sheet-pile wall causes groundwater to slow, and that groundwater moves slightly south and does not head toward the shed shown on slide 10.

During the review of slide 11, Mr. Humphreys noted that during the last presentation for Site 1, increased concentrations were shown to occur along the sheet-pile wall. Mr. Bunker explained that concentrations at depth are different at different locations. But the concentrations at depth are not large, and most of the plume has stayed above 10 to 11 feet bgs in shallow groundwater, making the plume easier to clean up. The plume is about 5 to 6 feet thick. The increase in the breakdown product VC downgradient (westward) shows degradation is occurring. Mr. Bangert noted that there is no real tidal action and, without rainfall, the plume seems to be moving at "glacial speed." He noted that when the treatment is complete it should not matter what the funnel-and-gate system looks like, since the problem should be solved. Mr. Humphreys said he understood there is a tidal effect in the water levels in groundwater monitoring wells, at least 50 feet back from the shoreline. Mr. Bunker said direct tidal effects were not evaluated at this site, but tidal fluctuations are being evaluated elsewhere at AP. He noted that some wells feel a tidal effect and assured the RAB that there is no reliance on dilution to reach cleanup goals before reaching the Bay.

During the review of slide 15, Mr. Bangert asked if MNA is coming into play at the end of the treatment. Mr. Bunker said it is not expected that ISCO will do the job all by itself and that MNA will be used if needed to meet remediation goals. He said the question that is often asked during work plan development is how you know you did enough. He explained that the oxidation reduction potential starts out as negative values and, after treatment, values become positive, indicating change in the groundwater chemistry by oxidizing the contaminants. If needed, another round of ISCO treatment will be conducted before the rainy season. Mr. Humphreys asked if the Navy looked for drums in the disposal pits and asked, if present, would a small hole in a leaking drum recontaminate the area once treatment stops. Mr. Bunker said a geophysical survey was conducted in 2010 prior to subsurface borings, and no drums or tanks were detected. Ms. Smith asked how deep the survey was conducted. Mr. Bunker explained that the geophysical survey instruments used detected to 20 feet bgs. William Smith (Community Member) asked if the benzene plume started downgradient of the source area or whether it decayed faster near the source area. Mr. Bunker said the source area for benzene was believed to be at the east end.

V. Site 2 Plant Recommendations

Mr. Robinson announced that Jacques Lord (Navy) met with the members of the RAB Seed Committee and reached agreement on recommended seeds to be used in the plant mixture for revegetating Site 2 following placement of the soil cover. He thanked committee members Richard Bangert, Carol Gottstein, Dale Smith, and Michael John Torrey for their time, expertise, and effort in developing the seed list.

Ms. Smith explained the history of public involvement in revegetating sites with native plants at AP. She discussed each of the selected plants for Site 2, both grasses and flowering plants, and the characteristics of each. She noted that most of the proposed plants are grasses and they will do best in clay-type soil. However, high-quality sand from Decker Island in the delta area will be imported as the base and she hoped the grasses will "take." She also noted that the Navy has guaranteed no damage to the existing lupine against the fence line, which is endemic to Alameda. Peter Russell (City of Alameda) asked if all the plants will be sown from seed. Ms. Smith said yes, and they will be planted via hydroseeding. Mr. Robinson said the seeds are being ordered now and they will be planted in 2013. Planting will depend on when the soil cover is finished.

Leora Feeney (Community Member, Friends of the Alameda Wildlife Refuge) asked if the USF&WS was consulted when developing the list; Ms. Smith said no. Ms. Feeney expressed concern that Site 2 currently is an important area for attracting predators. Since Site 2 won't be available for one or two seasons, she wondered where the red-tailed hawks and other predators will forage. She also noted that the proposed plants don't serve the birds that currently forage there, and wanted to be sure that the revegetation will not simply be creating habitat for Canada geese on AP. Mr. Robinson noted that the USF&WS does not want trees or tall shrubs on the site that could harbor predators. Ms. Smith concurred that roost sites for raptors preying on the least terns are not desirable.

VI. BCT Update

John West (Water Board) gave an update on what the Base Realignment and Closure [BRAC] Cleanup Team (BCT) discussed at the July and August meetings. Discussions included:

- The California Department of Public Health (CDPH) presented information on the radiological materials license exemption process.
- The screening level for polycyclic aromatic hydrocarbons (PAHs) was discussed. PAHs are present in the fill underlying AP and discussions covered acceptable background levels. The screening level of 0.62 parts per million (ppm), which was agreed upon for Site 25, will be formalized as the baseline background concentration for other AP sites. Mr. West explained that the Marsh Crust is a PAH source and is a "legacy waste" from pre-Navy refinery activities. Mr. Bangert asked if this PAH screening value will be the standard set for AP; Mr. West said yes, based on risk assessments the 0.62 ppm will be the base-wide screening value. Mr. Smith asked if ecological risk was considered in setting this PAH value; Mr. West said yes.
- The OU-2C Proposed Plan will be distributed for public review in October and a public meeting will be held, possibly the second week of October.

- The Draft-Final Site Management Plan (SMP) was distributed on August 13, 2012. Mr. Robinson said when the document goes final, an e-file will be sent out to RAB members and hard copies will be available at the November RAB meeting.
- The Groundwater Beneficial Use Exception letter for the southeast portion of AP was signed and sent out today (September 13, 2012) by the Water Board, with concurrence from the partner BCT agencies. Mr. West explained that the exception was largely based on the high total dissolved solids (TDS) in the shallow groundwater, precluding its use as a drinking water source or a commercial source. Mr. Peterson asked whether this exception will extend to the adjacent residential area east of the southeast portion. Mr. West said this will not extend to the residential area.

VII. Approval of July 12, 2012, RAB Meeting Minutes/Review Action Items

Mr. Humphreys made the following comments:

- Page 2 of 9, under Community and RAB Comment Period," fourth paragraph: change "… that this is a gas collection system…" to "…that there is a gas collection system." Change "…referred to them as gas collection lines…" to "referred to gas collection lines." Change "… and said there is very little…" to "…and Mr. Lord said there is very little." Add "…because of the long time period that has elapsed" to the end of the next to last sentence in the paragraph.

Ms. Smith made the following comment:

- Page 3 of 9, fifth bullet: The title of the manual should be *The Jepson Manual of Vascular Plants of California*.

Mr. Fyfe made the following comment:

- Page 6 of 9, under RAD Building Scans, second paragraph: add "Environmental Management Branch of" to "the California Department of Public Health." Add "Report" to "Final Status Survey" throughout and change acronym FSS to FSSR throughout.

Mr. Humphreys moved that the July 12, 2012, meeting minutes be approved with the noted changes and Mr. Torrey seconded. The motion carried.

The status of previous action items was reviewed and is provided in the updated table below. New action items from this meeting are included.

Action Items:	Previous Item #/ Action Item Status/ Action Item Due Date:	Initiated by:	Responsible Person:
1. Request for Presentations: a. Site 25 Plume Status Tracking b. Site 1 Radiological RD/RA work plan	Pending	RAB	Mr. Robinson
2. Navy report to RAB whether there are institutional controls in place at Site 35 that AP Collaborative should be following with regard to planting. If no ICs, explain how that decision was reached and where it is documented.	Pending	Mr. Humphreys	Navy
3. Ms. Smith and Mr. Humphreys to confer about which action items from the RAB's November 2011 letter still need to be added to the action item list. Ms. Smith will let Mr. Robinson know and he will have the items added.	Pending	Mr. Humphreys	Ms. Smith
4. Include the RABs comment letter regarding the 90 percent Remedial Design for Site 2 to the next packet of meeting minutes.	Complete	Ms. Smith	Navy
5. Decide whether the OU2C PP meeting will take place after an abridged RAB meeting or on a separate night. a. Send an email detailing two meeting options to Ms. Smith. b. Ms. Smith to gather RAB feedback to determine the best plan for the meeting and recommendation to Navy.	a. Complete b. Complete	Mr. Robinson	a) Mr. Robinson b) Ms. Smith
6. Send hard copies of the Site 1 presentation to RAB members.	New/before next meeting	RAB	Navy
7. Distribute the Draft-Final SMP electronically to RAB members and provide several hard copies at the November RAB meeting.	New	Navy	Navy

The meeting was adjourned at 8:45 PM.

ATTACHMENTS

NAVAL AIR STATION ALAMEDA
RESTORATION ADVISORY BOARD MEETING ATTACHMENTS

A. Naval Air Station Alameda Restoration Advisory Board Meeting Agenda, September 13, 2012 (1 page) and Calendar (1 page)

B-1 List of Documents Received by the RAB Community Co-chair, April-June 2012

B-2 Site 1 Groundwater Remedial Action (distributed post-RAB meeting)

Attachment A (2 pages)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

SEPTEMBER 13, 2012, 6:30 PM

ALAMEDA POINT – 950 WEST MALL SQUARE, ALAMEDA CITY HALL WEST
SUITE 140/COMMUNITY CONFERENCE ROOM
(FROM PARKING LOT ON W. MIDWAY AVENUE, ENTER THROUGH MIDDLE WING)

TIME	SUBJECT	PRESENTER
6:30 – 6:35	Welcome and Introductions	Community and RAB
6:35 – 6:50	Community and RAB Comment Period*	Community and RAB
6:50 – 7:10	Co-Chair Announcements	Co-Chairs
7:10 – 7:50	Site 1 Groundwater	Cecily Sabedra
7:50 – 8:15	Site 2 Plant Recommendations	RAB
8:15 – 8:25	BCT Update	BCT
8:25 – 8:45	Approval of Minutes Review Action Items	Dale Smith
8:45	RAB Meeting Adjournment	

* If there is time at the end of the agenda, additional comments will be taken.

January	**Feb**	**Mar**
	Feb 6 – Draft OU2B FS Addendum	**Thursday, March 8** – RAB Meeting: 6:30-8:30 pm, Building 1, Alameda Point
April	**May**	**June**
April 27 – Site 32 Revised Draft Remedial Investigation/ Feasibility Study	**Thursday, May 10** – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point	RAB/Community Site Tour – June 23rd
July	**August**	**September**
Thursday, July 12 – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point		**Thursday, September 13** – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point OU-2A Record of Decision
October	**November**	**December**
Proposed Plan Meeting for OU-2C (Date TBD)	**Thursday, November 8** – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point (Co-Chair Nominations) *Proposed Plan Meeting for OU-2B (Date TBD)*	

Attachment B-1 (1 page)

Documents Received
April 2012 – June 2012

Navy Communication

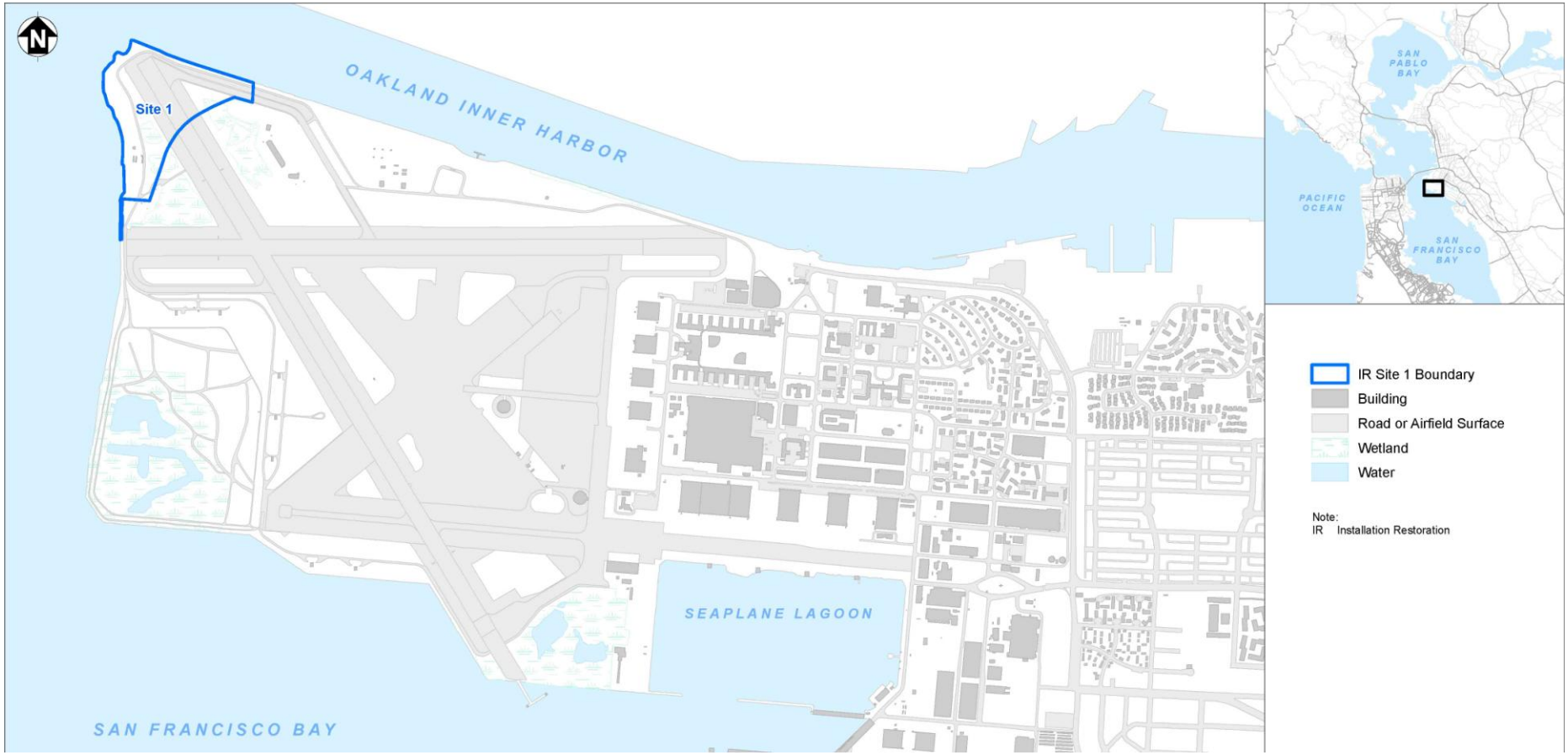
1. *Draft Time-Critical Removal Action Work Plan, IR Site 33,* Oneida Total Integrated Enterprises , March 30, 2012
2. *Final Scoping Survey Report, Former Smelter Area,* Chadux Tt, May 4, 2012
3. *Draft Remedial Design/Remedial Action Work Plan (90%) IR Site 2,* TetraTech, May 4, 2012
4. *Draft Action Memo Time Critical Removal Action, IR Site 33,* Oneida Total Integrated Enterprises, May 18, 2012
5. *Draft 2011 Annual Groundwater Monitoring Report, Basewide Groundwater Monitoring Program,* SES-Tech, June 6, 2012

Installation Restoration Site 1 Groundwater Remedial Action

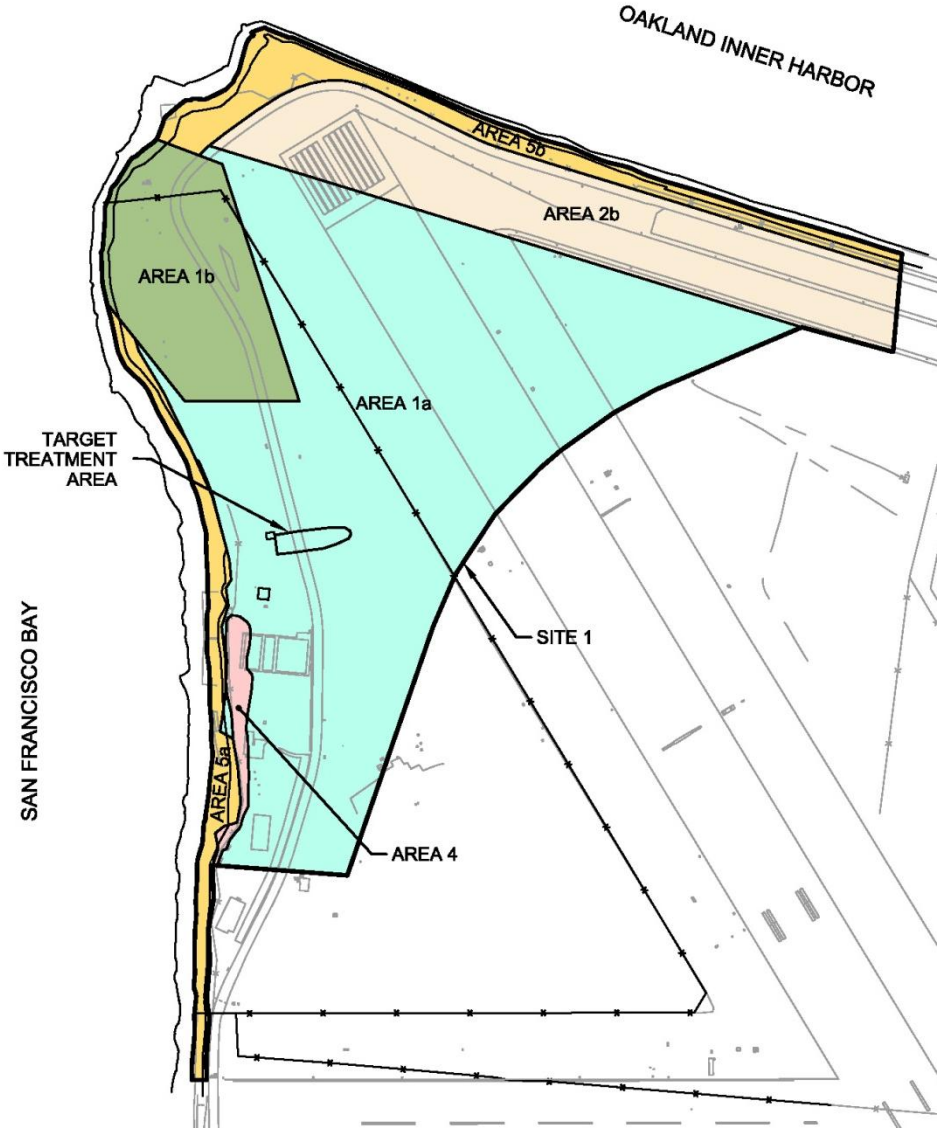
Cecily Sabedra
Navy Project Manager
Russ Bunker
AMEC Task Manager

Attachment B-2 (16 pages)

IR Site 1 Location



Groundwater VOC Plume



VOC Plume Selected Remedy

- In-situ chemical oxidation (ISCO)
- Monitored natural attenuation (MNA)
- Institutional controls
- Groundwater monitoring

Implementation Strategy

STEP 1: Pre-design characterization to identify high-concentration zones for treatment

STEP 2: Remedial Design (included bench and pilot testing)

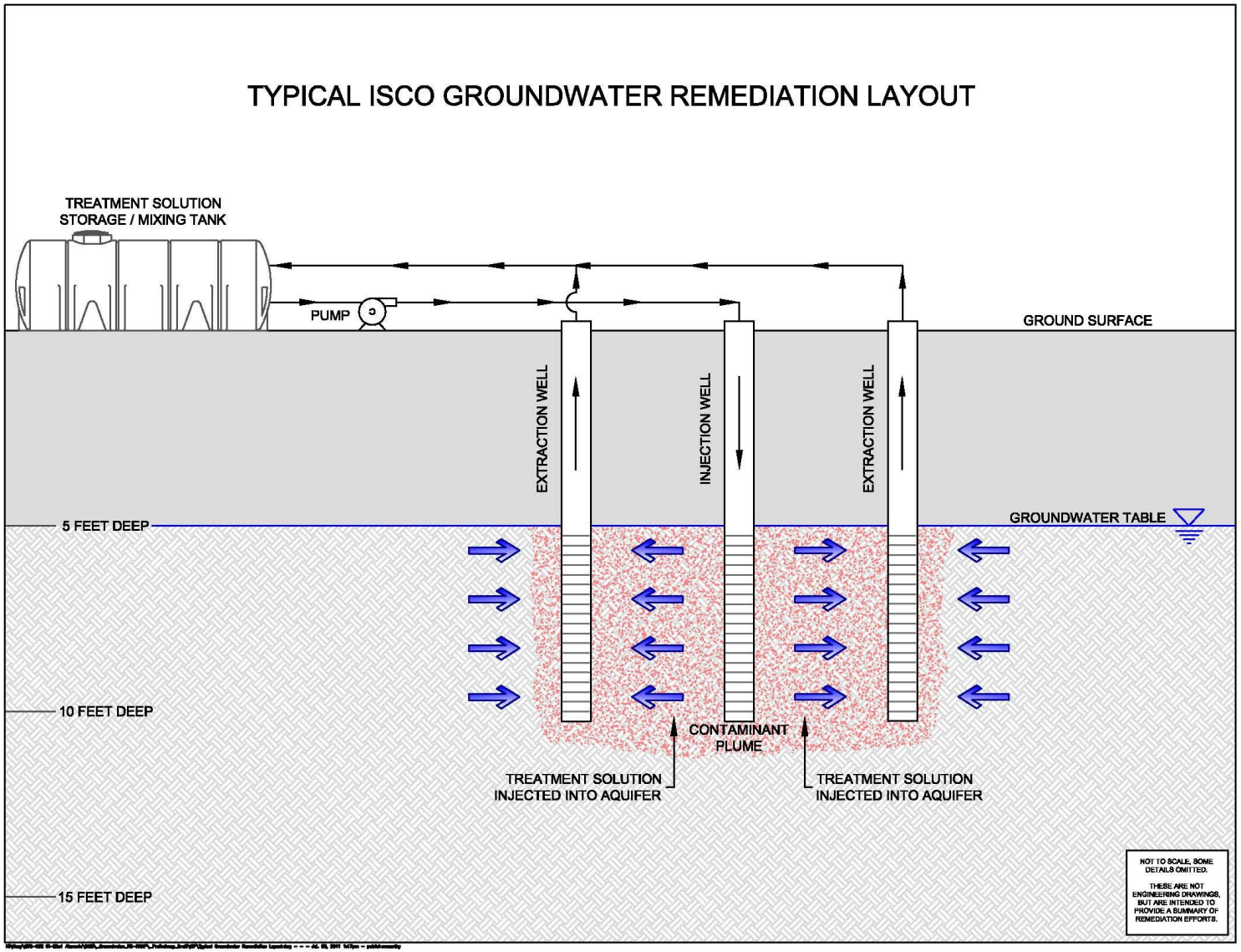
STEP 3: Full scale implementation and performance monitoring

STEP 4: Implement monitored natural attenuation

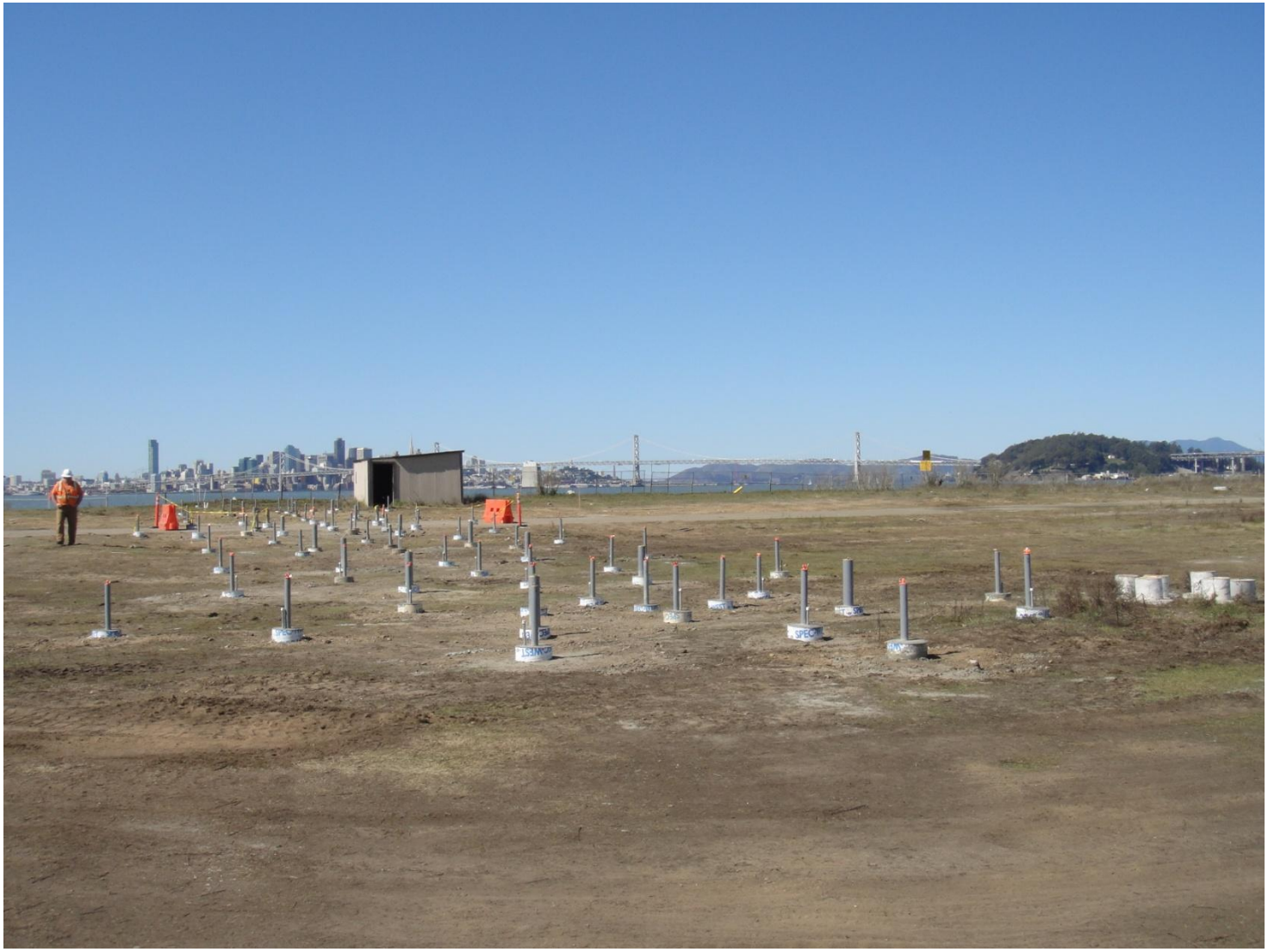
ISCO Bench and Pilot Study

- Bench test evaluated three oxidant types
- Pilot testing identified target treatment zones to achieve remediation goals based on characterization data
- Pilot study confirmed ability to achieve effective distribution and oxidizing conditions

ISCO Treatment Approach



Installed Well Network



Baseline TCE Concentrations

NOTE:

AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123

amec

DWN BY:	PM
CHK'D BY:	—
DATUM:	NAD27
PROJECTION:	CA SP III Ft.
SCALE:	1" = 25'

PROJECT: ALAMEDA IR 1 CTO 2

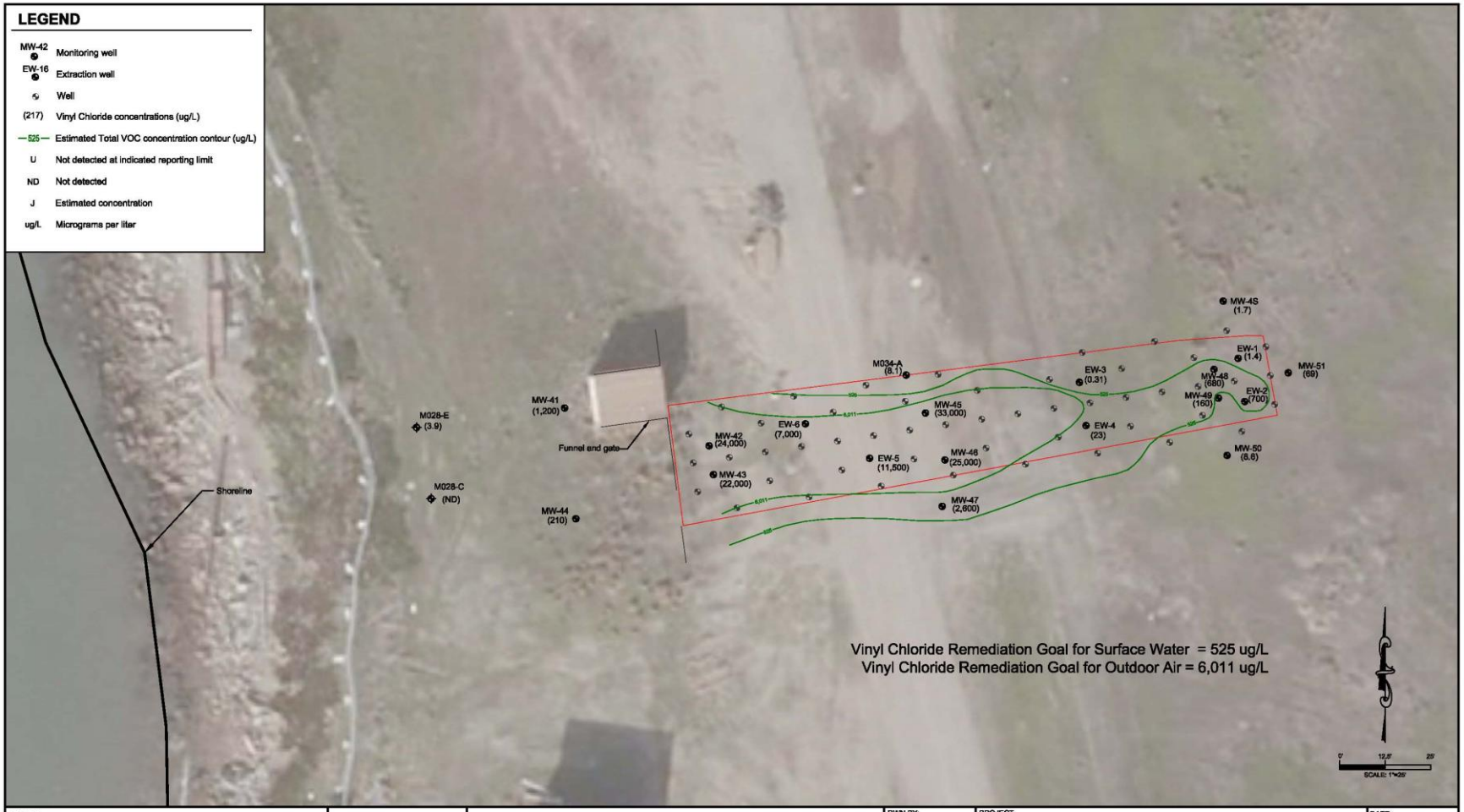
TITLE: TCE GROUNDWATER CONCENTRATIONS

DATE:	SEPTEMBER 2012
CONTRACT NO:	—
REV. NO.:	0
FIGURE NO.	2

Baseline 1,1-DCE Concentrations

NOTE:		DWN BY: PM CHK'D BY: — DATUM: NAD27 PROJECTION: CA SP III Ft. SCALE: 1" = 25'	PROJECT: ALAMEDA IR 1 CTO 2 TITLE: 1,1-DCE GROUNDWATER CONCENTRATIONS	DATE: SEPTEMBER 2012 CONTRACT NO: — REV. NO.: 0 FIGURE NO. 3
	AMEC 9210 Sky Park Court, Suite 200 San Diego, CA 92123	amec		

Baseline Vinyl Chloride Concentrations



NOTE:	DWN BY: PM CHK'D BY: — DATUM: NAD27 PROJECTION: CA SP III Ft. SCALE: 1" = 25'	PROJECT: ALAMEDA IR 1 CTO 2	DATE: SEPTEMBER 2012 CONTRACT NO: — REV. NO.: 0 FIGURE NO. 4
AMEC 9210 Sky Park Court, Suite 200 San Diego, CA 92123		TITLE: VINYL CHLORIDE GROUNDWATER CONCENTRATIONS	

Baseline Benzene Concentrations

NOTE:

AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123

amec

DWN BY:	PM
CHK'D BY:	—
DATUM:	NAD27
PROJECTION:	CA SP III Ft.
SCALE:	1" = 25'

PROJECT: ALAMEDA IR 1 CTO 2

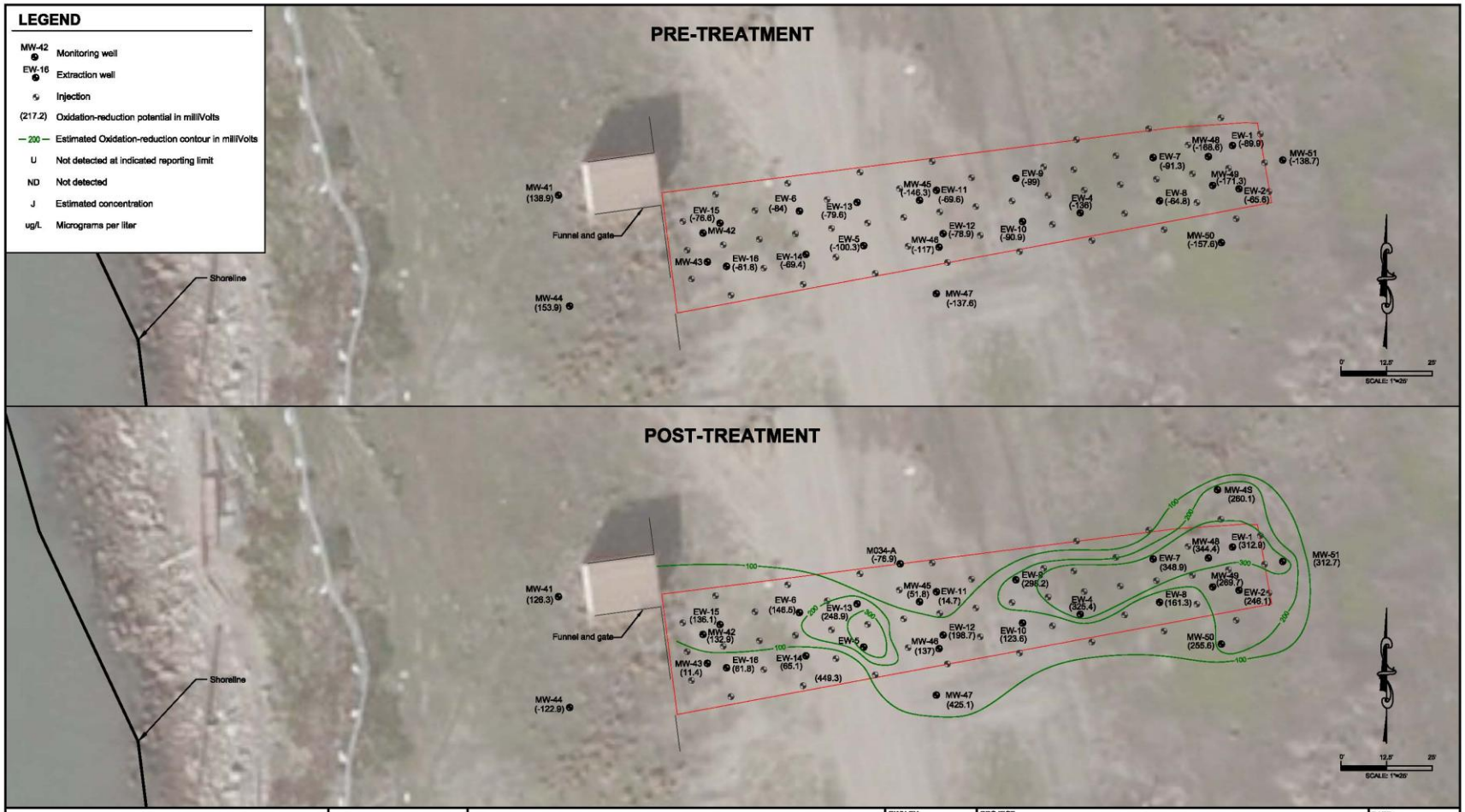
TITLE: BENZENE GROUNDWATER CONCENTRATIONS

DATE:	SEPTEMBER 2012
CONTRACT NO:	—
REV. NO.:	0
FIGURE NO.	5

ISCO Application

ISCO Application

ISCO Distribution



NOTE:

AMEC
9210 Sky Park Court, Suite 200
San Diego, CA 92123

amec

DWN BY:	PM
CHK'D BY:	—
DATUM:	NAD27
PROJECTION:	CA SP III Ft.
SCALE:	1" = 25'

PROJECT: ALAMEDA IR 1 CTO 2

TITLE: OXIDATION-REDUCTION POTENTIAL

DATE: SEPTEMBER 2012
CONTRACT NO: —
REV. NO.: 0
FIGURE NO. 1

Site 1 Remedial Action Timeline

2009	Record of Decision
2010-2012	Pre-Design Characterization
February 2012	Begin Remedial Action for Groundwater Remedy
September 2013	Final Remedial Design for Soil Areas
2013-2014	Complete Remedial Action for Soil Areas

9888 CARROLL CENTRE ROAD, STE 228
SAN DIEGO, CA 92126
(858) 578-8859

Trevet Project No. 4408-A068
Contract No. N62473-10-C-4408

REF: TRVT-4408-0000-0046

November 26, 2012

Contracting Officer
BRAC Program Management Office
Mr. Don Hatchett
1455 Frazee Road, Suite 900
San Diego, California 92108

Attention: Mr. Don Hatchett

Subject: **Final Naval Air Station Alameda**
Restoration Advisory Board Meeting Minutes
September 12, 2012

Dear Mr. Hatchett:

We are pleased to submit the Final Naval Air Station Alameda, Alameda, California, Restoration Advisory Board (RAB) Meeting Minutes for September 13, 2012. These minutes were approved at the November 2012 RAB meeting and prepared as directed by the Navy BRAC Remedial Project Manager, Derek Robinson. If you have any questions or comments, please contact me at (858) 578-8859, extension 123.

Sincerely,

Betty Schmucker

Betty Schmucker
Project Manager

Enclosure

TREVET
9888 CARROLL CENTRE ROAD, STE 228
SAN DIEGO, CA 92126
(858) 578-8859

TRANSMITTAL/DELIVERABLE RECEIPT

Document Control No. TRVT-4408-0000-0046

TO: Contracting Officer
BRAC PMO
Mr. Don Hatchett
1455 Frazee Rd., Suite 900
San Diego, CA 92108

DATE: November 26, 2012
Contract #: N62473-10-C-4408
LOCATION: Naval Air Station Alameda

FROM: Betty Schmucker
Betty Schmucker, Project Manager

DESCRIPTION: Final Naval Air Station Alameda
Restoration Advisory Board (RAB) Meeting Minutes
September 13, 2012

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