



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

January 10, 2013

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.; Daniel Hoy; George Humphreys;
James Leach; Skip McIntosh; Bert Morgan; Kurt Peterson; Bill Smith; Michael John Torrey.
Jim Sweeney was excused.

Community Members/ Public Attendees

Helen Harris; Tom Jenckes; Gretchen Lipow; Brian Schumacher; Linda Weinstock

Navy Attendees

Doug DeLong, Environmental Compliance, Safety & Security Manager (BRAC PMO West)
Bill McGinnis, Lead Remedial Project Manager (Lead RPM)
Cecily Sabedra, RPM

Regulatory Agencies

James Fyfe, California EPA Department of Toxic Substances Control (DTSC)
Wayne Hagen, DTSC
Xuan-Mai Tran, United States Environmental Protection Agency (EPA)
John West, San Francisco Bay Regional Water Quality Control Board (Water Board)

City of Alameda

Doug deHaan, Alameda City Council
Peter Russell, Russell Resources, City of Alameda

Contractors

John McGuire, Shaw Environmental and Infrastructure
John McMillan, 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 January 2013 former Naval Air Station Alameda (Alameda Point [AP]) RAB meeting to order. He welcomed all to the first meeting of the new year and asked for introductions.

Dale Smith (RAB Community Co-chair) requested a change in the agenda to vote on RAB membership for Skip McIntosh, whose application was submitted in November 2012 and sent out to the RAB prior to this meeting. Ms. Smith felt this should precede the co-chair and vice co-chair vote. The RAB members agreed to vote on the new RAB member first. Michael John Torrey (RAB Member) moved to accept Mr. McIntosh and Ms. Smith seconded the motion. Mr. McIntosh was voted in as a new RAB member.

II. 2013 RAB Community Co-chair and Vice Co-chair Election

The election for the 2013 RAB Community Co-chair and Vice Co-chair was held. The nominees were Dale Smith and Carol Gottstein for RAB Community Co-chair and George Humphreys and Richard Bangert for RAB Community Vice Co-chair.

Ballots were handed out and the results counted. Ms. Smith was reelected as RAB Community Co-Chair and Mr. Humphreys was elected as RAB Vice Co-chair.

III. Community and RAB Comment Period

Bill Smith (RAB Member) said that he received the new petroleum standard templates from John West (Water Board) and noted that the standards rely heavily on institutional controls. Mr. B. Smith suggested discussion of the petroleum standard templates as a future RAB meeting agenda item. Ms. Smith said that in 2002 the RAB looked extensively at the AP petroleum program. She also noted confusion with the petroleum templates. Mr. West suggested RAB members who have questions should e-mail him and he will respond. If questions remain, then perhaps he can meet separately with the RAB members to address their concerns.

Mr. Humphreys noted there was an article on January 4, 2013, in the *Alameda Sun* by RAB Member Richard Bangert. Mr. Humphreys also observed that the RAB meeting notice in the newspaper incorrectly stated that the RAB meetings are held on the first, rather than the second, Thursday of every other month. Tommie Jean Valmassy (Contractor) said she will correct that for future announcements.

Mr. B. Smith noted that a lawsuit is pending for Fleet Industrial Supply Center Annex (FISCA) Site 25 in the Shinsei Gardens housing area. The lawsuit addresses whether the condition of the area is acceptable for housing. Ms. Smith noted that Site 25 is listed in the Action Items table as a future RAB agenda topic. Mr. Robinson said that FISCA Site 25 is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Site and it will be on the March 2013 RAB meeting agenda as part of the Operable Unit (OU)-5/Installation Restoration (IR)-02 discussion.

Mr. Humphreys noted that an article in the January issue of *Scientific American* addresses a massive storm that hit California in 1861-62 and lasted 43 days. He commented that such storms have occurred every two centuries and could be exacerbated by global warming; thus, one can reasonably anticipate such a massive storm and flooding of low-lying areas at AP within the next 50 years. Susan Galleymore (RAB Member) said the City of Alameda (City) Engineer gave a public presentation about the effects of sea level rise on drains within the City. Mr. Humphreys expressed concern about stormwater pumps in the Alameda Bayport area near Shinsei Gardens and that the lack of emergency power could cause the drains to overflow and the area to flood.

IV. Co-Chair Announcements

Ms. Smith noted that the 2013 RAB Calendar shows an OU-2B Proposed Plan meeting in February, and that she has not received the preceding documents or work plans, and wondered how the Navy can go forward with OU-2B. Mr. Robinson said the Proposed Plan meeting will be delayed until April 2013 and the Proposed Plan will be submitted to the RAB and community at the same time.

Ms. Smith said she has not seen the Technical Memorandum (Tech Memo) for FISC Site 25 for review. Mr. Robinson said the Tech Memo is not an official CERCLA document for public review, but is part of working with the regulators for reaching Operating Properly and Successfully (OPS) for a site. He explained the requirement for distributing CERCLA documents but noted that if someone would like to see a particular (non-CERCLA) document, to let him know. Mr. B. Smith complimented Jim Fyfe (DTSC) and DTSC for posting environmental documents on DTSC's EnviroStor web site. Mr. B. Smith also noted that the RAB is now receiving more documents for review than in the early stages of the RAB, 20 years ago. Mr. Fyfe said that only final documents are posted on the portion of EnviroStor that the public can access. Dr. Gottstein observed that EnviroStor is a great resource and DTSC provides a tutorial for its use. Mr. Robinson said that draft CERCLA documents are provided to the public and that other, non-CERCLA documents are part of the Navy's compliance program. He said that there are no changes at FISC Site 25 since the work plan and that the remediation system is still operating there. Wayne Hagen (DTSC) said that there is a button on EnviroStor that can be selected to receive "alerts" when documents are posted.

V. Site 32 Status

Mr. Robinson introduced Cecily Sabedra (RPM) to give an update on the status of Site 32 ([Attachment B](#)). She noted that the Site 32 boundary has changed over time as investigations proceeded and most of the site is open space.

During review of Slide 4, Dr. Gottstein said that the "Alameda Training Wall" on the northern (Oakland) side has been studied extensively and is a well-known monument. She asked if anyone cares about the south side of the Training Wall and asked if the Navy has to consider its historic value. Ms. Sabedra said the Navy does take historic value into consideration during CERCLA actions.

Ms. Smith noted that rail lines were removed from the Site 32 area and asked if they were naval rail lines or the mole pier lines. Ms. Sabedra said there were mole pier rail lines running through the area. Ms. Smith said it was stated historically that ordnance was stored at the site; one source said it was underwater ordnance and one source said it was underground ordnance and the area is

remote. Ms. Sabedra said records show a building was constructed with the intent to store underwater ordnance.

Ms. Smith said that a previous regulator, Marcia Liao with DTSC, said she thought a volatile organic compound (VOC) plume entered the northeast estuary from Site 32. Ms. Smith said that in 2005 trenches with five gates, possibly containing iron filings or other treatment media, were located between Site 32 and the bay. Ms. Sabedra was not familiar with a project that addressed this but she would address VOCs later in the discussion.

During review of Slide 6, Mr. Humphreys asked if it is still true that the lateral extent of radium-226 is not defined to the south of Site 32 and the east of Site 1. Ms. Sabedra said that was the case in 2009 but recent fieldwork expanded the boundary to address this. Kurt Peterson (RAB Member) said it appears that the Navy did not detect radium-226 in soil because not enough samples were taken. Ms. Sabedra said initially, there was no known contamination there to lead the Navy to address the area. Ms. Smith said that, based on information in a letter from Ms. Liao, the Navy did not do a full chemical analysis. Mr. Torrey asked whether the low levels of radium-226 in soil are a human health risk. Ms. Smith commented that low-level radiation is not a risk if adequate protections are taken. Bill McGinnis (Navy) said the human-health risk will continue to be evaluated and it will be included in the upcoming Revised Remedial Investigation/Feasibility Study (RI/FS). Mr. Torrey expressed concern that the low levels of radium-226 are spreading. Mr. Peterson asked if follow-up samples were taken in the areas of concern. Ms. Sabedra said yes, additional excavation and removal were done and more samples were taken in some elevated areas. Ms. Smith asked how deep the excavations were done in soil. Ms. Sabedra said excavation was done to as much as 3 feet below ground surface. Ms. Smith asked if “bottom samples” were taken to see if the area was “clean.” Ms. Sabedra said confirmation samples were taken. Mr. Peterson asked if follow-up samples were taken and anything found. Ms. Sabedra said some anomalies were located in discrete areas. Ms. Smith asked if radiological materials mobilize petroleum into groundwater. Ms. Sabedra said she was not aware of that happening. Mr. Torrey asked how far below drinking water standards the rad concentrations fell. Ms. Sabedra said she will get the number for Mr. Torrey.

During review of Slide 7, Ms. Galley more asked Ms. Sabedra to elaborate on the VOC results. Ms. Sabedra said that due to natural reductive dechlorination, the VOC results from the monitoring wells were reduced to below screening-level criteria. Mr. Humphreys asked about the numerical values for screening criteria and cancer risk. Ms. Sabedra said that trichloroethene (TCE), vinyl chloride (VC), and chlorobenzene were evaluated for potential indoor air risk to human health. The screening values are 700 micrograms per liter ($\mu\text{g/L}$) for chlorobenzene, 15 $\mu\text{g/L}$ for TCE, and 5 $\mu\text{g/L}$ for VC. Ms. Smith asked if the Navy investigated leakage into the estuary beyond the wall. Ms. Sabedra said the wall Ms. Smith referred to was a proposed in situ chemical oxidation treatment alternative that was considered. Additional monitoring wells were installed to gather more data.

During review of Slide 9 Mr. Humphreys asked about biased samples. Ms. Sabedra said biased samples were collected in areas where the surface gamma scan showed elevated readings. Ms. Smith asked how far down samples were taken. Ms. Sabedra said samples were collected in the top one foot of soil. Six hundred soil samples were collected over 75 acres of unpaved surface and two isolated anomalies were located in the biased samples and removed. Mr. Humphreys asked where the two anomalies were located; Ms. Sabedra showed the two locations on the map.

Mr. Peterson asked if the Navy performed further sampling after removing the two anomalies; Ms. Sabedra said yes, the items were removed and additional soil samples were collected. Additional sampling and analyses are being conducted.

During review of Slide 10, Mr. Peterson asked how far apart the samples were taken. Mr. Robinson said the area was gamma scanned and about 10 random soil samples per acre were taken. Ms. Sabedra explained that the towed-array scan was conducted over the entire area. Mr. Bangert asked why the soil was excavated to 1 foot and not deeper. Ms. Sabedra said the site conceptual model indicates the soil was moved around by grading activities, and there was no history of disposal at Site 32. The disposal cells were at Site 1, not Site 32, as seen in historical aerial photographs. Ms. Smith disagreed that materials, such as those from the Cold War, were not disposed of at Site 32. She said there probably was disposal at Site 32, because they know that is true for Treasure Island and Hunters Point. She agreed with Mr. Bangert about the possible depth of materials.

Mr. Peterson said that perhaps 40 percent of the area is concrete runway and asked if the Navy surveyed over concrete. Ms. Sabedra said the survey would not be effective over concrete. Mr. Peterson noted that there could be unknown radiological materials under the concrete, which could be a problem if the City of Alameda decides to remove the runways as part of reuse.

During review of Slide 10, Dr. Gottstein said the Veterans Administration (VA) plan for a cemetery looks like it conforms to the Site 32 boundary. Mr. Robinson said the Navy has looked at the VA's plans and has evaluated the area taking into consideration future land use. The Navy has spoken with the VA and has told them the site is still under investigation.

Mr. Humphreys asked about "systematic criteria" used for evaluation. Mr. McGinnis said the radiological value is 1 picocurie plus background. The background radiological value for the Site 32 survey is 0.716 picocurie, so the criterion (value) is 1.76 picocuries per gram of soil. He further explained that systematic sampling refers to sampling conducted on a grid laid over the site map and samples taken at specific intervals. Biased samples were then taken based on the results of the systematic samples and were targeted to specific scan results. Mr. Humphreys asked about the difference between "picocuries per gram" and "counts per minute." Ms. Sabedra explained that "counts per minute" refers to readings from the field equipment and "picocuries per gram" refers to the laboratory results. Background values are established for each area (unpaved area, soil area) and samples are compared to each background value. Ms. Smith asked if every place on AP has a different background value. Ms. Sabedra said the guidance used for the survey requires establishing background for each type of surface or material surveyed. Dr. Gottstein said this is complicated; the Navy should know what background is. Mr. Robinson explained that a gamma scan reports levels and that AP has mixtures of materials that are not easily identified for purposes of background values. Ms. Smith noted that background values for Building 66 were selectively established. Mr. Fyfe explained how the background value was established for Building 66; he said materials used for the background value at Building 66 were contaminated and would cause a skewed value. He said background values vary across the base and due to ages of materials. Dr. Gottstein asked how background is established and would like a reference chart. Mr. Robinson said the answer to that is not simple, and many agencies are trying to figure out how to measure background.

During review of Slide 13, Ms. Smith asked if the Site 32 Revised RI/FS and Proposed Plan are community documents. Ms. Sabedra said yes, the community will see the Revised RI/FS and

Proposed Plan. Mr. B. Smith said that Site 32 will be used by the VA for a cemetery/columbarium on part of the land and the rest will be a park to be managed by the East Bay Regional Parks District. Ms. Smith asked if the VOCs will no longer be a concern at Site 32. Ms. Sabedra said that the VOC levels continue to decline and likely will not need to be addressed in the future.

Mr. Bangert noted that the eastern boundary of Site 32 has an old fence, and within the last year a new fence has been placed inside and asked about the significance. Ms. Sabedra said the inner fence bounds the staging area for Site 1 soil. It is within the radiologically controlled area.

Mr. Humphreys said on the map it looks like the soil samples collected fall outside of the dotted line (boundary) and asked if this means Site 32 will expand. Ms. Sabedra said the survey area was extended beyond the site boundary for sampling purposes.

Ms. Smith asked if samples will be taken in smaller increments than 100 meters apart. Ms. Sabedra said additional random sampling will not be conducted in smaller intervals, but further investigation will be conducted in some areas. Mr. B. Smith asked if the Navy knows the sources of the VOCs and if there is a big “pocket” of contamination. Ms. Sabedra said there is no single known VOC source. Mr. McIntosh expressed concern about the sample spacing intervals and is not confident the samples are representative of the area. Ms. Sabedra said a lot of earlier sampling was done and, with the latest sampling results, Site 32 is well documented. That information will be included in the upcoming documents.

V. Approval of November 8, 2012, RAB Meeting Minutes/Review Action Items

Mr. Torrey made the following comment:

- Please correct the numbering of items VII (Page 5 of 7) and VII (Page 6 of 7) to VII and subsequent numbering (VIII, IX).

Mr. Humphreys made the following comments:

- Page 1 of 8, Community Members/Public Attendees: please move Bill Smith’s name to “RAB Members,” as he was voted onto the RAB at the last meeting.
- The RAB Calendar for 2013 does not show when nominations and elections will occur. After discussion it was decided to hold RAB co-chair/vice co-chair nominations in September and RAB co-chair/vice co-chair elections in November (the final meeting of the year). The 2013 Calendar will be updated to reflect this.
- Mr. Humphreys asked for clarification regarding Action Item 2, about Site 35 and whether institutional controls are in place. Mr. Humphreys asked why was no sampling was conducted there. Mr. Robinson said samples were taken in specific areas of concern and the results led to site closure. Mr. Humphreys said two feet of clean soil was placed on top and mixed in with deeper soil leading to “dilution.”

Ms. Smith made the following comment:

- Page 5 of 7, second paragraph under “Site 33 Removal Action Update:” please add “...at San Bruno” so the third sentence reads: “Ms. Smith said the records should be available, such as were found for Treasure Island *at San Bruno.*”

Mr. Humphreys moved that the November 2012 Meeting Minutes be approved as amended and Mr. Bangert seconded the motion. 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. The next RAB meeting will be held on March 14, 2013.

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 c. Basewide Radiological Contamination d. IR Site 1 Groundwater Plume e. IR Site 1 Burn Area f. IR Site 1 Radiological g. OU-2A Tarry Refinery Waste and Rail Cars h. OU-2B Six-Phase Heating i. OU-2B University Study	Pending (a, b) New (c – i)	RAB Mr. Humphreys	Mr. Robinson Mr. Robinson
2. Distribute the Navy’s Draft-Final SMP electronically to RAB members.	Complete	Navy	Navy
3. Navy to provide status update for Building 5 in OU-2C where radium paint was spilled.	Pending	Ms. Smith	Navy
4. Navy to provide radium-226 screening-level value (in drinking water) to Mr. Torrey.	New	Mr. Torrey	Ms. Sabedra

VI. Additional Community and RAB Comment Period

Dr. Gottstein provided copies of “Our Nuclear Nation” calendar for 2013 for anyone who wants them.

Mr. Bangert noted that EnviroStor says the Site 2 100-Percent Work Plan has been postponed to February 28 and asked if this is a reliable date. Mr. Robinson said that date is possible but not yet confirmed, and the work plan is underway.

Ms. Galleymore asked when data on Seaplane Lagoon will be ready, as she was approached with a concern about children using Seaplane Lagoon for a boating class. Mr. Robinson said the northeastern portion of Seaplane Lagoon (Site 17) was released for use by America’s Cup boats. Data for the northwestern portion of Seaplane Lagoon have not been reviewed yet but will be included in the Site 17 completion report, due out mid-year. He noted that Site 17 is a sediment site (sediments underlying Seaplane Lagoon) and Lagoon water is not an environmental site. Mr. McGinnis reiterated that sailing on the water in Seaplane Lagoon is safe and there is no

radiological exposure in Seaplane Lagoon. Mr. West offered to talk with the person with the concern about using Seaplane Lagoon. The meeting was adjourned at 8:30 PM.

ATTACHMENTS

NAVAL AIR STATION ALAMEDA RESTORATION ADVISORY BOARD MEETING ATTACHMENTS

- A. Naval Air Station Alameda Restoration Advisory Board Meeting Agenda, January 10, 2013 (1 page) and 2013 Calendar (1 page)
- B. IR Site 32 Update (13 slides)

RESTORATION ADVISORY BOARD

NAVAL AIR STATION, ALAMEDA

AGENDA

JANUARY 10, 2013, 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)**

<u>TIME</u>	<u>SUBJECT</u>	<u>PRESENTER</u>
6:30 – 6:40	Welcome and Introductions	Community and RAB
6:40 – 6:50	Community Chair and Co-Chair Vote	RAB
6:50 – 7:10	Community and RAB Comment Period*	Community and RAB
7:10 – 7:30	Co-Chair Announcements	Co-Chairs
7:30 – 8:10	Site 32 Status	Cecily Sabedra
8:10 – 8:20	Approval of Minutes	Co-Chairs
8:20 – 8:30	RAB Meeting Adjournment	

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

January	Feb	Mar
<p>Thursday, January 10 – RAB Meeting, 6:30 – 9 PM, Building 1, Alameda Point</p> <p>RAB Co-Chair Vote</p>	<p>*Proposed Plan Meeting for OU-2B (Date TBD)</p>	<p>Thursday, March 14 – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point</p>
April	May	June
	<p>Thursday, May 9 – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point</p>	
July	August	September
<p>Thursday, July 11 – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point</p> <p>RAB Site Tour – date/time TBD</p>		<p>Thursday, September 12 – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point</p>
October	November	December
	<p>Thursday, November 14 – RAB Meeting: 6:30-9:00 pm, Building 1, Alameda Point</p>	



IR Site 32 Update

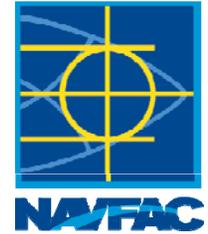


Prepared by: Cecily Sabedra, Navy RPM

Attachment B (13 slides)



Agenda



- Site background
- Remedial Investigation Summary (2008)
- Time Critical Removal Action Summary (2009)
- New Groundwater Monitoring Wells (2010)
- Radiological Survey (2012)
- Revised Remedial Investigation/Feasibility Study
- Next steps



Site Location





Site Background



- Historic structure (Alameda Training Wall)
- Two underground fuel storage tanks removed in 1994
- Two buildings built in 1977, neither used for ordnance storage
- Site used for equipment staging and storage prior to 1953





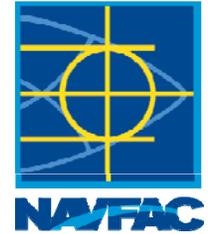
Remedial Investigation Summary (2008)



- No further action for soil
- Groundwater not a drinking water source
- Potentially unacceptable risk under residential scenario for VOCs in groundwater (indoor air pathway)



Time Critical Removal Action Summary



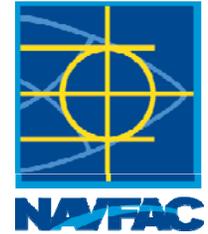
- ✓ Time Critical Removal Action (Sites 1, 2, and 32)
Report – August 2009

Conclusions:

- Low levels of radium-226 found in soil to a greater extent than anticipated.
- Lateral extent of radium-226 not defined to the south of Site 32 and east of Site 1.
- Include portions of Site 1 into Site 32 (Areas 2b, 3a, and 3b)



Groundwater Monitoring Wells



- ✓ Installation of three monitoring wells – June 2010.

Objective:

- Confirm the current maximum concentrations in the VOC groundwater plumes for the three chemicals of concern: TCE, chlorobenzene, and vinyl chloride.
- Assess whether radiological contamination has affected groundwater

Sampling results:

- VOC results below the screening criteria
- Radiological concentrations below drinking water standards

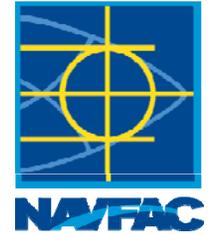


Groundwater Monitoring Wells





Radiological Characterization Survey



Tasks:

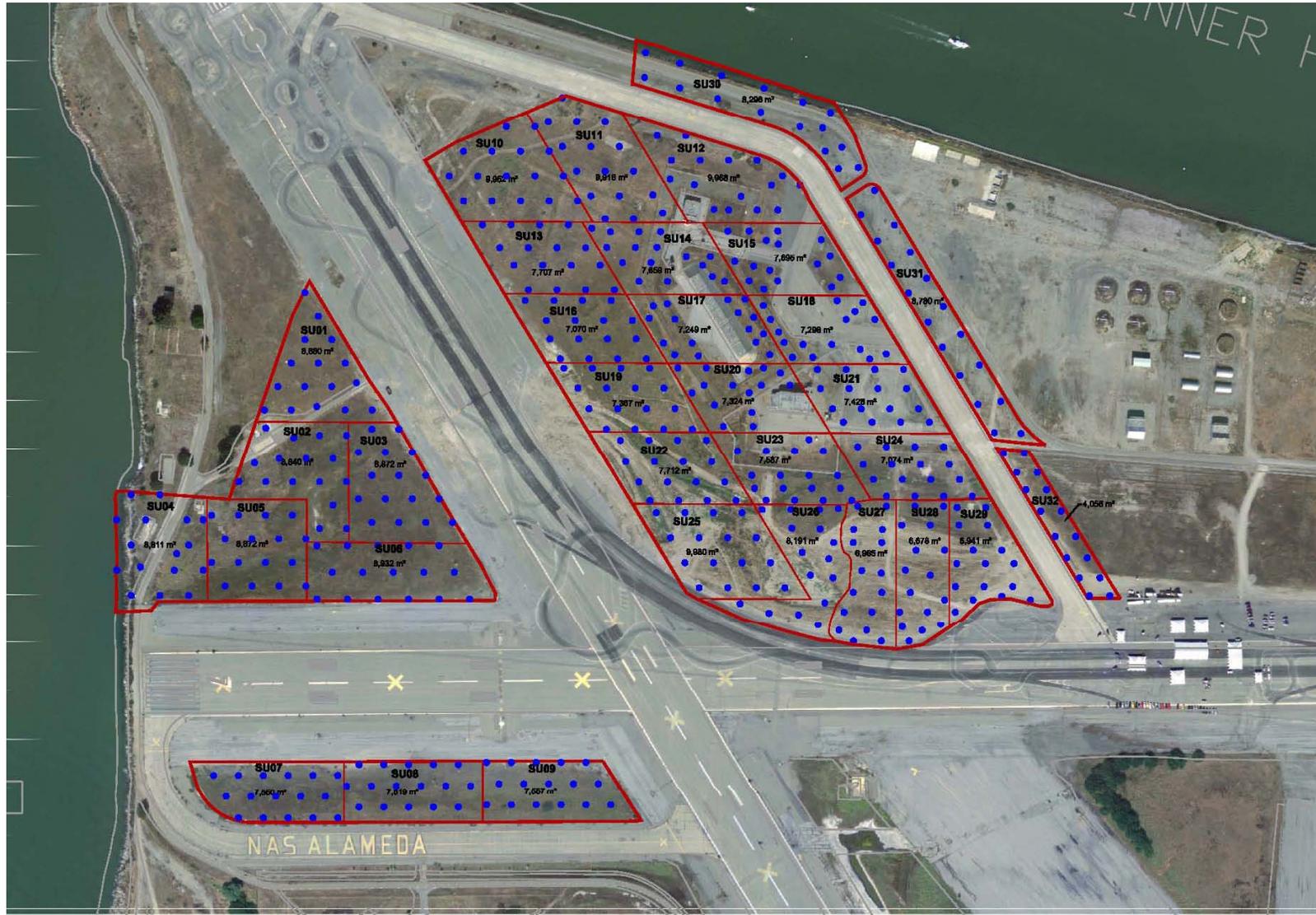
- Surface gamma scan to identify radiological anomalies
- Soil sampling and laboratory analysis

Results:

- Localized areas of elevated radioactivity greater than established investigation levels
- No systematic soil samples results exceed the release criteria for radium-226
- Discrete radium-226 in soils in four of the twenty five biased sampling locations and two anomalies were found and removed during biased sampling activities



Radiological Survey Units and Systematic Soil Sampling





Revised Remedial Investigation/ Feasibility Study



- ✓ Final Feasibility Study Report – 2008
- ✓ Radiological Characterization Survey - 2012
- Update the Conceptual Site Model for IR Site 32 to reflect the expanded area and addition of Site 1 areas
- Update radiological risk assessment
- Evaluate remedial alternatives for soil



Revised Remedial Investigation/ Feasibility Study



Potential remedial alternatives for soil:

- No Action
- Pavement Maintenance/Hotspot Removal/Institutional Controls
- Pavement Maintenance/Partial Soil Cover in Unpaved Areas/Institutional Controls
- Complete Removal/Backfill/Unrestricted Reuse



Next Steps



- Additional Radiological Investigation – March 2013
- Revised Remedial Investigation/Feasibility Study – June 2013
- Proposed Plan – December 2013
- Record of Decision - 2014