

FINAL

**FORMER NAVAL AIR STATION MOFFETT FIELD
RESTORATION ADVISORY BOARD MEETING
MOUNTAIN VIEW SENIOR CENTER
MOUNTIAN VIEW, CALIFORNIA**

NOTE: An acronym list is provided on the last page of these minutes.

Subject: RAB MEETING MINUTES

The Restoration Advisory Board (RAB) meeting for former Naval Air Station (NAS) Moffett Field was held on Thursday, September 8, 2011, at the Senior Center in Mountain View, California.

Community RAB Members in attendance:

Bill Berry, Gabriel Diaconescu, Linda Ellis, Patricia Guerrieri, Libby Lucas, Diane Minasian, Bob Moss, Arthur Schwartz, Lenny Siegel, Steve Sprugasci, Peter Strauss, Dan Wallace, and Steve Williams

Regulatory Agency and Navy RAB Members in attendance:

Scott Anderson (Navy), Melinda Dragone (U.S. Environmental Protection Agency [EPA]), Alana Lee (EPA), and Elizabeth Wells (San Francisco Bay Regional Water Quality Control Board [Water Board])

Other Navy, Regulatory Agency, National Aeronautics and Space Administration (NASA), City, Army, and Consultant Representatives in attendance:

Bryce Bartelma (Navy), Don Chuck (NASA), Dr. Ann Clarke (NASA), Deb Feng (NASA), Mark Hightower (NASA), Valerie Harris (Navy), Neil Hey (Shaw Environmental Inc. [Shaw]), Carolyn Hunter (Tetra Tech EM Inc. [Tetra Tech]), John Inks (City of Mountain View), Lynne Kilpatrick (City of Sunnyvale), Mike Mewhinney (NASA), Michael Moeller (Army Fort Hunter Liggett), Gary Munekawa (Navy), Terrance Pickens (NASA), George Sloup (NASA), Kevin Woodhouse (City of Mountain View), and Tommie Jean Valmassy (Tetra Tech)

Other Community Members in attendance:

Paul Asmus (Humanitarian Air Logistics), Roderick Bersamina (Representative from Congresswoman Anna Eshoo's Office), Beth Bunnenberg (Palo Alto Resources Board), Truman Cross (Oakland Cloud Dusters), Daniel DeBolt (*Mountain View Voice*), Larry Ellis (Air and Space West Foundation for Education), Rebecca Feind, Jane Horton, Georgina Hymes, Marty Rawson, Tammy Skoog, Jim Van Pernis, and Marti Wright

WELCOME

Bill Berry (RAB community co-chair) and Scott Anderson (Navy RAB co-chair) opened the meeting at 7:00 p.m. and welcomed everyone in attendance. Mr. Berry reviewed the agenda. Lenny Siegel (RAB member) said that the Save Hangar 1 Committee is circulating a petition to be submitted to Senator Diane Feinstein to receive funding to re-side the hangar. The Save Hangar 1 Committee will have a booth at the upcoming art and wine festival in Mountain View to obtain petition signatures. Anyone interested in volunteering to staff the Save Hangar 1 Committee booth at the art and wine festival can inform Mr. Siegel.

NASA UPDATE

Deb Feng (NASA) said there is no additional information on Hangar 1 to present to the RAB. The hangar has received interest from Senator Feinstein's office. The Navy and NASA hosted a Hangar 1 site tour for the senator's office.

- Mr. Berry asked if there was an update on the NASA's Office of Inspector General's (OIG) report on the hangar. Ms. Feng said that OIG is assessing all of the results, and an update will be provided to the RAB in November 2011.

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RAB COMMUNITY CO-CHAIR ELECTIONS

Mr. Anderson said that RAB community co-chair elections will take place in November 2011. Mr. Anderson asked for community co-chair nominations.

- Peter Strauss (RAB member) nominated Mr. Berry to continue as the community co-chair for another year. Mr. Berry confirmed that he would be willing to continue his position as community co-chair for another year.
- No additional nominations were made.

Because there were no further nominations, Mr. Anderson asked the RAB if they wanted to vote at this meeting instead of waiting until November. The RAB voted and approved Mr. Berry for another year as the RAB community co-chair.

- Mr. Berry asked that Bob Moss (RAB member) continues as the RAB vice community co-chair for another term. Mr. Moss said that he would be willing to continue as vice community co-chair for another year.

The RAB voted and approved Mr. Moss for another year as the RAB vice community co-chair.

APPROVAL OF MEETING MINUTES

Mr. Anderson asked for corrections to or comments on the minutes for the July 14, 2011, RAB meeting. Libby Lucas (RAB member) asked that on page 6 that the statement “which is raising levees at the Redwood Shores to temporarily store pickle weed” be added to the meeting minutes. The RAB voted to finalize the minutes for the July 14, 2011, meeting with RAB comments incorporated. Final RAB meeting minutes are posted to the former NAS Moffett Field project website at:

<http://www.bracpmo.navy.mil/basepage.aspx?baseid=52&state=California&name=moffett>.

DOCUMENTS FOR REVIEW

Documents are available in compact disk (CD)-ROM format. A sign-up sheet for the document listed below was circulated during the meeting to the RAB members.

<u>#</u>	<u>DOCUMENT</u>	<u>APPROXIMATE SUBMITTAL DATE</u>
1.	2010 Annual Report of Landfill Sites 1 and 22	September 2011

REGULATORY AGENCIES UPDATE

WATER BOARD PETROLEUM PROGRAM UPDATE

Elizabeth Wells (Water Board) provided an update on the petroleum program. The Water Board is working with the Navy on three types of petroleum sites at Moffett: no further action (NFA), active/transferred, and open/requiring further action. In April 2008, the Navy was 74 percent complete with the petroleum program. In 2011, the Navy is 84 percent complete with the UST sites and 100 percent complete with the aboveground storage tank sites. Ms. Wells said that the Water Board is working to issue the Navy 10 UST closure letters by the end of September 2011. There are a few miscellaneous petroleum projects, such as the Zook Road Fuel Spill, that are still in progress. Ms. Wells said she would like to thank NASA, the Navy, and the contractors for completing work at these sites and moving the petroleum program along.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) VAPOR INTRUSION UPDATE

Alana Lee (EPA) introduced the new EPA Remedial Project Manager (RPM), Melinda Dragone, as the replacement for Sarah Kloss. Ms. Dragone is a local of the Mountain View area and attended Stanford University to obtain her Master's Degree. Ms. Dragone has worked on Treasure Island, Alameda, and Concord as an EPA RPM. Ms. Lee welcomed Ms. Dragone to the former NAS Moffett Field team.

Ms. Lee provided an update on vapor intrusion. Ms. Lee presented the shallow TCE groundwater plume boundary and the areas of responsibility between Navy, NASA, and MEW Companies to implement the vapor intrusion remedy on Moffett Field. The Middlefield-Ellis-Whisman (MEW) group sampled 12 occupied buildings in July 2011 and NASA plans to sample six occupied buildings this Fall. EPA worked with the responsible parties to finalize a statement of work (SOW) to implement the entire vapor intrusion remedy in the MEW and Moffett Field Areas. The SOW is attached to the two enforcement documents for the MEW Parties. EPA has posted the Site-wide Indoor Air Sampling and Analysis Work Plan for the Unsampled Buildings on EPA's website. www.epa.gov/region9/mew and will continue to post vapor intrusion documents to its website.

- Mr. Strauss asked how many vapor intrusion sampling events EPA is anticipating. Ms. Lee said that it is building-specific and will depend on what the responsible parties propose in the work plans they submit to EPA.
- Mr. Strauss asked if there is a particular season in California where vapor intrusion concentrations seem to be elevated. Ms. Lee said EPA has not seen a significant increase in vapor intrusion in any particular season based on the thousands of indoor and outdoor air sample results in the Mountain View area. EPA noted a two-to-three fold increase in indoor air concentrations in residences (including the former Orion Park and Wescoat Housing residences) during the colder months.
- Mr. Berry asked if the building-specific air sampling report for Moffett Field will be available for public review by September 13, 2011. Ms. Lee said that EPA will provide the building-specific air sampling report to NASA to post on its website and to the Navy to circulate to the RAB.
- Mr. Moss asked if EPA plans to sample all of the buildings at former NAS Moffett Field and how many buildings would be included. Ms. Lee said that Site-wide there are over 100 buildings in the MEW and Moffett Field Areas that may require sampling. Mr. Moss asked about the vapor intrusion levels that require action. Ms. Lee said that EPA has set indoor air cleanup levels that the responsible parties will have to meet. Mr. Moss asked if EPA can require that buildings be retrofitted with vapor intrusion mitigation measures. Ms. Lee said that for all new construction, a vapor barrier and passive sub-slab ventilation system with the ability to be active is required unless multiple lines of evidence demonstrates that there is no potential for vapor intrusion to exceed indoor air cleanup levels. For existing buildings, if the vapor intrusion indoor air concentrations exceed indoor air cleanup levels, then the remedy an active sub-slab ventilation system, Jane Horton (Community member) said the Google building has a 10-year lease. She asked how much vapor intrusion mitigation has been done for that building and what the plans are for all of the buildings over the groundwater plume. Kevin Woodhouse (City of Mountain View) said that a passive ventilation system and vapor barrier is required for all new buildings over the groundwater plume. All new construction will require that standard safety practices are followed. Ms. Lee said that EPA works with the City of Mountain View to monitor all new construction projects to ensure all of the vapor intrusion remedy requirements are met.

Ms. Lee reviewed the NASA website that discusses vapor intrusion and showed the RAB members where they can find information and reports.

HANGAR 1 UPDATE

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Bryce Bartelma (Navy) provided an update on the Navy's work at Hangar 1. There have been no issues with air emissions or wildlife during the removal action. The Navy has been managing the stormwater BMPs and continually implements ground surface protection from debris throughout the removal action. The Navy has begun salvaging up to 25 corrugated windows for NASA. Mr. Bartelma said the Navy has been working with NASA to prepare an interactive CD on the history of Hangar 1, which will be finalized and available to the public in the upcoming months. The Navy conducted multiple site visits to the hangar for NASA Headquarters and Ames staff in July and August 2011 to inspect the hangar construction and observe the removal action. The Navy is working on scaffolding relocation and installation on the next zones where the removal action will be conducted. The Navy is continuing to remove the redwood and siding. As the frame of the hangar is exposed, it is pressure washed and the coating is applied. There are quality control and quality assurance inspections of each zone that is coated and touchups are completed if necessary. The Navy is continuing removal action through the six zones of the hangar and is on track to complete the field work, confirmation sampling, and demobilization in the spring of 2012. Once the work is completed, a completion report will be issued in the summer of 2012.

- Ms. Horton said she was surprised that the salvageable redwood is not being reused on the hangar. Mr. Berry said that the Navy's contractor will sell the salvageable redwood once it is cleaned. Mr. Anderson said that the redwood was not identified as historically significant. In addition, NASA has indicated that they do not intend to utilize flammable materials in the re-skinning designs. The plan is for it to be sold.
- Steve Williams (RAB member) said that when the community was interested in preserving the cork from the cork room the Navy responded it was contaminated and could not be saved. Mr. Williams said that the cork had historical value and it was disconcerting that it could not be cleaned and preserved. Mr. Anderson said that the cork could not be cleaned adequately to be preserved, but the redwood can be cleaned. Mr. Bartelma said that the contamination is removed from all four sides of the redwood before it is salvaged, but that decontamination was not possible with the cork.
- Mr. Siegel said that the Navy's sampling results from the cork showed deep contamination in it. He asked if the Navy has adequately tested the redwood for the depth of contamination. Mr. Anderson said that the Navy will sample the redwood to determine the amount of contamination present. Mr. Anderson said that NASA was not interested in preserving the redwood. A community organization that is interested in the redwood can talk to the Navy. The contractor has indicated previously that they can provide a discount to NASA.
- Larry Ellis (Community member) said he is concerned that materials that are already on the hangar are being sold by a contractor. A reuse for the redwood should be determined by discussing it with the Navy, NASA, and the State Historic Preservation Office (SHPO).
- Mr. Moss asked about the timeline to identify a reuse for the redwood. Mr. Berry asked for another update on the redwood and its reuse at the next RAB meeting. Mr. Anderson said that a hangar update will be provided at the RAB meeting in November 2011. There is time to identify a reuse for the redwood if the community wants to look into purchasing it.
- Ms. Horton asked how much of the redwood could be reused. Mr. Williams said that it could be about a million square feet of redwood that can be salvaged. Mr. Bartelma said it will depend on how much material remains after the contaminated paint is removed off of all four sides. The Navy indicated that there is a cost to the contractor to remove contamination which would allow the redwood to be reused. To make this a viable option, these costs would need to be recouped through the sale of the redwood. If it is not economically feasible to remove the contamination from the redwood or if the boards are in too poor of condition to salvage, then they will be disposed of as hazardous material.

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- RAB member Arthur Schwartz said that the redwood has historical value to the community. Mr. Siegel suggested that the RAB write a letter to SHPO expressing its concern to save the redwood.
- Mr. Strauss said that most demolition contracts have a salvage value. Mr. Strauss would like the Navy to clarify its contract with AMEC Earth and Environmental to see if the redwood was specifically called out for salvage.
- Ms. Feng clarified that as a result of fire codes, NASA will not be able to reuse the redwood on the hangar.
- Libby Lucas (RAB member) said that redwood has different weight requirements and sheathing needs that will have to be assessed before a reuse can be identified.
- Mr. Berry asked if the RAB can have a site tour to the hangar. Mr. Bartelma said that he will look into hosting a site tour to the hangar and get back to Mr. Berry.
- Mr. Williams thanked Mr. Anderson for the information on the interactive CD. He said he is concerned that the source code is owned by the private contractor. Mr. Williams said that he is unsure how the information will be accessed in the future once technology has changed. Mr. Williams said that he hopes that the Navy will take into consideration the importance of ensuring the longevity of the information during future historical documentation projects.
- Ms. Ellis said that the Department of the Interior requires scale photos of historical sites and asked if the Navy provided the Department of the Interior scale photos of the hangar. Mr. Bartelma said that the Historical American Engineering Record (HAER) document contains all of the photos required by the Department of the Interior. The Navy will provide the HAER document to Ms. Ellis.

SITE 26 UPDATE

Valerie Harris (Navy RPM) introduced Neil Hey (Shaw Environmental Inc.) to provide an update on the Site 26, the eastside aquifer treatment system (EATS). The Navy is currently conducting a treatability study (TS) for the groundwater at Site 26. The Navy wanted to evaluate the effectiveness of EHC[®] to reduce chemical concentrations in the groundwater using a combination of abiotic and biotic treatments. The Navy installed five observation wells, injected EHC[®] at 16 locations, and performed 10 post-injection groundwater monitoring events. The TS concluded that EHC[®] is difficult to inject and distribute uniformly throughout the subsurface. However, there was a 98 percent reduction in the concentrations of chemicals of concern (COCs) in the treatment area. EHC[®] was shown to continue to treat the injection area during the 2 years that we have monitored.

Ms. Harris said the Navy's next step is to prepare a focused feasibility study (FFS) for EATS. The FFS will evaluate several technologies along with the selected remedy. The FFS will identify the remedial action objectives and applicable regulations for EATS. The FFS will identify and screen treatment technologies and evaluate the remedial alternatives against the National Oil and Hazardous Substances Contingency Plan (NCP) criteria. The alternatives will be compared against each other to determine the best path forward for the site. The alternatives being considered in the FFS are:

- Alternative 1 – No action
- Alternative 2 – Monitored natural attenuation (MNA)
- Alternative 3 – Optimized pump and treat
- Alternative 4 – Abiotic/biotic treatment and MNA

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- Alternative 5 – In situ biostimulation/bioaugmentation and MNA

Ms. Harris said the FFS will evaluate the sustainability of each alternative by considering energy and resource consumption, greenhouse gas and criteria pollutant emissions, water and ecological impacts, and worker and community safety. The Navy will issue the draft FFS on November 30, 2011, for regulatory agency and community review. The final FFS will be issued on April 30, 2012. Once the FFS is finalized, the Navy will prepare a Proposed Plan and a Record of Decision amendment.

- Mr. Williams asked about the source of the COCs at Site 26. Ms. Harris said that USTs and piping outside of Hangar 3 are likely responsible. The USTs have been removed. Ms. Wells said that the UST is still considered an open case until the groundwater at Site 26 is cleaned up. Once Site 26 is completed, the agencies will consider closure of the UST.
- Mr. Siegel asked whether the pump and treat alternative is favorable in the FFS. Mr. Hey said the Navy is still evaluating all of the alternatives.
- Mr. Strauss asked how EHC[®] compares with the other alternatives, because EHC[®] is expensive to use. Ms. Harris said the Navy is considering using ECH[®] in localized areas. Applying emulsified oils is more cost effective than EHC[®].
- Mr. Strauss asked how many EHC[®] injections were done. Ms. Harris said the ECH[®] was injected only once. Mr. Hey said that EHC[®] was injected at 2.5-foot intervals to 40 feet below ground surface. Mr. Strauss asked if the EHC[®] was injected into the vadose zone. Mr. Hey said the vadose zone was not targeted. Mr. Strauss asked if preliminary data are available. Mr. Hey said the data are being assessed and will be available in the draft FFS that will be out in November 2011. The first year of monitoring data is available in the Technical Memorandum for Site 26 that was issued in March 2011.
- Mr. Siegel asked about using EHC[®] injections site wide. Mr. Hey said that EHC[®] is not able to be injected uniformly and is an expensive technology.

PUBLIC COMMENT PERIOD

Mr. Anderson opened the meeting for questions or comments from the public.

- A community member asked for an update on the appropriations and tenant requirements for the hangar. Mr. Siegel said that he has not heard anything from the Senate on the reuse of the hangar. Once more information is known, Mr. Siegel will provide the RAB an update.
- Mr. Moss said that if there is not a disaster relief plan at former NAS Moffett Field, one should be considered. Dr. Ann Clarke (NASA) said that all of the NASA facilities have an emergency response plan that will also account for natural disasters. Regularly scheduled emergency response plan drills are conducted at the NASA facilities.
- Mr. Siegel suggested that a contingency plan should be developed for landfills or where there are pump and treat systems. There should be a plan for flooding at the landfills if a pump fails or there is sea level rise. Ms. Well said that the Water Board, the Navy, and NASA are assessing the landfills and sea level rise. Mr. Anderson said the Navy is looking at backup plans if one of NASA's pumps fail. Mr. Strauss asked if there are monitoring contingency plan requirements for all Comprehensive Environmental Response Compensation and Liability Act (CERCLA) sites. Ms. Lee said she will look into it further and provide an update at a future RAB meeting.

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- Georgina Hymes (Community member) said that California has less military support than most states in the country. The community needs somewhere to go in an emergency, so she feels military installations should be reopened in California. There is funding available all over the U.S. to help re-side the hangar. She would like the Navy to look into getting funding to reside the hangar. Mr. Anderson said that NASA is working on a path forward to re-side and reuse the hangar.
- Mr. Ellis said that the Hangar 1 historical CD should have a tear sheet with common rights language and no copyrights.

Future RAB Meetings

Mr. Anderson announced that the next scheduled RAB meeting falls next to the Veterans Day holiday. The Navy is looking to reschedule the RAB meeting to Thursday, November 3, 2011, or Thursday, November 17, 2011. Mr. Anderson asked that if anyone has a preference for one of the dates over the other to let him know. Once the date is determined, the Navy will send out an announcement.

Adjourn

The meeting was adjourned at 9:00 p.m., and Mr. Anderson thanked all present for attending. The Navy can be contacted with any comments or questions:

- Mr. Scott Anderson
Base Realignment and Closure (BRAC) Environmental Coordinator, Former NAS Moffett Field, BRAC
Project Management Office West;
1455 Frazee Road, Suite 900, San Diego, CA 92108; Phone: (619) 532-0938; Fax: (619) 532-0940;
E-mail: scott.d.anderson@navy.mil

ACRONYM LIST

BRAC – Base Realignment and Closure

CD – Compact disc

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

COC – Chemicals of Concern

EATS – Eastside Aquifer Treatment System

EPA – U.S. Environmental Protection Agency

FFS – Focused Feasibility Study

HAER – Historical American Engineering Record

MEW – Middlefield-Ellis-Whisman

MNA – Monitored Natural Attenuation

NAS – Naval Air Station

NASA – National Aeronautics and Space Administration

NCP - National Oil and Hazardous Substances Contingency Plan

NFA – No Further Action

OIG – Office of the Inspector General

RAB – Restoration Advisory Board

RPM – Remedial Project Manager

SHPO – State Historic Preservation Office

SOW – Statement of Work

TS – Treatability Study

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UST – Underground Storage Tank
Water Board — Regional Water Quality Control Board

RAB meeting minutes are posted on the Navy's environmental Web page at:
<http://www.bracpmo.navy.mil/basepage.aspx?baseid=52&state=California&name=moffett>

Respectfully Submitted,

Scott Anderson
Navy Co-Chair,
Former NAS Moffett Field RAB