

**FORMER NAVAL AIR STATION MOFFETT FIELD
RESTORATION ADVISORY BOARD MEETING
BUILDING 943, EAGLE ROOM
MOFFETT FIELD, 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, 8 January 2009, at Building 943 in the Eagle Room at Moffett Field, California. Bob Moss, RAB community co-chair, and Darren Newton, U.S. Navy Base Realignment and Closure (BRAC) Environmental Coordinator (BEC) and RAB co-chair, opened the meeting at 7:00 p.m.

WELCOME

Mr. Newton and Mr. Moss welcomed everyone in attendance. Mr. Moss asked those present to introduce themselves and provided a brief overview of the agenda.

The Moffett Field RAB meeting was attended by:

RAB Members	Regulators	Navy	Consultants & Navy Support	NASA	Public & Other
9	7	3	3	5	22

ANNOUNCEMENTS

- Mr. Newton introduced Angela Lind as the new Lead Remedial Project Manager (RPM) for Former NAS Moffett Field. Ms. Lind was the Lead RPM for Former Naval Weapons Station Seal Beach Detachment Concord and has worked for the government for 24 years.
- Mr. Newton said that he will post the RAB meeting schedule for 2009 on the Navy website.
- Mr. Newton announced that Ralph Otte (historian for the Moffett Field American Legion Post 881) has applied to become a RAB member. Mr. Otte's application will be reviewed at the 12 March 2009 RAB meeting.
- Mr. Newton reviewed Moffett Field points of contact information, including the information repository and administrative record locations, and the 2009 RAB meeting schedule. A handout listing Moffett Field points of contact information was made available at the sign-in table.
- Mr. Newton reminded RAB members to call him or Mr. Moss for an excused absence if they are unable to attend a RAB meeting.
- Mr. Newton announced that he has taken another position within the Navy and will be leaving the Former NAS Moffett Field team. Mr. Newton said that the Base Closure Manager, John Hill (619) 532-0985 or john.m.hill@navy.mil, will be the Navy's contact until a new BEC is assigned for Former NAS Moffett Field.
- Mr. Newton stated the public meeting for the Site 25 Proposed Plan (PP) will be held on 22 January 2009 in the World Room in Building 943. The Site 25 PP will be issued to the community on 9 January 2009.

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- Mr. Newton said that a card was included in the November 2008 and January 2009 RAB packet mailing to 1,600 community members asking if the community member would like to continue to receive hard copies of the RAB packet or to receive the RAB packet electronically via e-mail. In March 2009, the revised electronic and hardcopy mailing lists for RAB packets will be activated. Community members who are interested in receiving the RAB packets electronically via e-mail or as a hard copy should inform the Navy's Community Involvement Manager, Carolyn Hunter, at (510) 302-6297 or carolyn.hunter@ttemi.com.

APPROVAL OF MEETING MINUTES

Mr. Moss asked for corrections to the 13 November 2008 meeting minutes. Kevin Woodhouse, City of Mountain View, requested on page 3 under the Site 29 Hangar 1 update to correct his statement "NASA is working with the City of Mountain View to reside Hangar 1." to read "NASA indicated to the City of Mountain View it is working with the Navy to reside Hangar 1." The 13 November 2008 meeting minutes were approved as corrected. Meeting minutes are posted to the 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 CD-ROM format. Sign-up sheets for the documents listed below were circulated during the meeting.

<u>#</u>	<u>DOCUMENT</u>	<u>APPROXIMATE SUBMITTAL DATE</u>
1.	Final Site 28 West-Side Aquifers Treatment System (WATS) Optimization Evaluation Report	March 2009
2.	Draft Site 28 WATS 2008 Annual Report	June 2009
3.	Final Site 27 – The Northern Channel Site Restoration Plan Report	January 2009
4.	Draft Sites 1 and 2 – Runway Landfill and Golf Course Landfill 2008 Annual Report	April 2009
5.	Draft Final Site 26 – East-Side Aquifer Treatment System (EATS) Area Pilot Test Work Plan	March 2009

SITE 29, HANGAR 1 PROGRESS UPDATE

Mr. Newton announced the Navy has released the action memorandum (AM) for Site 29, Hangar 1. It is available on the Navy's website. Mr. Newton said the AM includes responses to all comments received from the regulatory agencies, RAB members, and public on the engineering evaluation/cost analysis (EE/CA) for Site 29, Hangar 1.

- Lenny Siegel (RAB member) requested an update from National Aeronautics and Space Administration (NASA) management on the reuse options for Hangar 1.

Lewis Braxton (NASA) said that there has been substantial work "behind the scenes" on reuse of Hangar 1. NASA Headquarters has had extensive discussions with Navy management to develop a memorandum of understanding (MOU) for the transfer of Navy environmental restoration (ER) sites at Former NAS Moffett Field. NASA and the Navy are working out the details of the MOU, and the ER work transfer will most likely

occur before 2011. NASA is working with the Pentagon and the BRAC PMO West office to obtain funding for the ER sites at Former NAS Moffett Field. NASA is currently working with private companies on potential reuse for Hangar 1 after the Navy completes the ER. Mr. Braxton said he is working with these private companies to obtain funding for the re-siding and reuse capabilities for Hangar 1. NASA and the Navy will meet at the end of January 2009 to review details of the MOU. NASA hopes to complete the transfer of the ER sites in about 18 months.

- Mr. Siegel asked if it would be helpful to NASA for the RAB or community to write letters to congressional representatives to encourage the release of funding for the re-siding of Hangar 1. Mr. Braxton responded that support from the RAB and the community is not needed at this time. The congressional representatives are aware of the community's interest in the reuse of Hangar 1. Mr. Braxton said NASA will make sure the community is informed throughout the process of identifying the reuse of Hangar 1.
- Mr. Siegel said he is concerned that the Navy and NASA are working on separate actions. The Navy is working toward Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) closure. CERCLA actions involve a restoration component which is not planned for Hangar 1. Mr. Siegel wants to make sure NASA does not have to complete additional CERCLA work once it takes over Hangar 1. Dr. Ann Clarke (NASA) said NASA is reviewing all of the previous Navy's ER actions and documentation to complete the restoration of Hangar 1.
- A community member suggested to NASA it include a space next to Hangar 1 for a historic shop and museum when planning its reuse of the site. Mr. Braxton said that NASA will work on the future use of the Hangar 1 and the space available. Currently, NASA is in the preliminary stages of identifying the reuse of Hangar 1. NASA will use Hangar 1 for scientific progress, which is more likely to receive funding.
- A community member said Hangar 1 is a historic monument in the area that should be partially available to the public. Mr. Braxton said the reuse is being assessed and the community's interest will be considered. NASA will need to review the future use and whether there are public health and safety concerns before it can decide whether public access to Hangar 1 is feasible.
- Community member Steve Williams said that NASA should use the community's passion and interest in future use of the hangar as part of its reuse plan. Mr. Williams stated that community access and particularly space set aside for the Moffett Historical Society Museum must be a primary consideration for reuse of Hangar 1. Mr. Braxton said NASA's primary goal is to make sure Hangar 1 is reused after the Navy's removal action is complete.

Mr. Newton said the Navy plans to begin removing the siding in the fall of 2009 since the asphalt emulsion on the siding will wear out. The Navy is working with NASA to accommodate a partnership for cleanup and reuse.

- Mr. Siegel requested regular NASA updates at future RAB meetings. Mr. Braxton confirmed that NASA will provide updates on reuse of Hangar 1 at future RAB meetings.
- Mr. Williams said the community does not want the Navy to begin its removal action until a reuse plan is in place.
- Arthur Schwartz (RAB member) assured the Navy that a lawsuit will be initiated if it begins removing the siding of Hangar 1 before plan of action is in place to reside the hangar.
- A community member said there was a suggestion made to NASA in 1998 to create a museum in Hangar 1 to house a space shuttle.

- A community member asked if there will be a public venue for NASA to provide information. Mr. Braxton said the first priority is to clean up the hangar. NASA is working with the Navy to minimize the cost of removal and re-siding the hangar. The 18-month schedule NASA is working toward is aggressive and will require coordination with the Navy. NASA will be providing community updates at future RAB meetings. NASA will know in April 2009 if it will agree to the MOU with the Navy.
- Patricia Guerrieri (RAB member) asked if the reuse of Hangar 1 is part of the RAB's charter to discuss. Mr. Newton responded that the RAB will get information on the reuse based on the environmental and historic components of the mitigation plan. Dr. Clarke said NASA can use many different mechanisms to provide the community information on the reuse of Hangar 1.
- Laura Casas Frier (Foothill-De Anza Community College District Board of Trustees President) said that the college is assessing the availability of building space at Former NAS Moffett Field for educational purposes.
- Community member Bob Hobbs said that he supports NASA's approach to the reuse of Hangar 1. Mr. Hobbs asked about the importance of private funding in re-siding and reusing Hangar 1. Mr. Braxton said that private funding to re-side the hangar is important to NASA. The Navy's estimate to re-side the hangar seems to be low. NASA is anticipating additional expenses to re-side and reuse the hangar. Mr. Hobbs asked if NASA has a particular type of residing material it plans to use for Hangar 1. Mr. Braxton said that NASA does not currently have a particular type of material in mind to re-side the hangar. NASA is working on the historical preservation of the hangar and plans to reside the hangar so that it is similar to the current appearance. Mr. Braxton said NASA is open to innovative suggestions to re-side the hangar. NASA expects that the life cycle of the re-siding and reuse will be about 40 years. Programmatic reuse of the hangar has a higher likelihood of receiving funding as opposed to funding for a museum or historical shops.
- Mr. Moss stated that he spoke to Lockheed Martin about the rubberized coatings used at its similar hangar in Akron, Ohio. Using a rubberized coating to reside Hangar 1 would cost about \$17 million. Various emulsions also could be used on the inside of the hangar to prevent the polychlorinated biphenyls (PCBs) from becoming exposed. Lockheed has experience using these types of alternatives. Lockheed used various emulsions to prevent the release of asbestos and PCBs from the hangar skin, which cost about \$30 million and took 7 months to install. Mr. Moss said the Navy's costs are more expensive than his recommendations. Leaving a skeleton to be re-sided in the future would be more costly than using a coating to keep Hangar 1 available for immediate reuse. Mr. Moss said Hangar 1 would be a good place for Lockheed to station air ships. Mr. Moss added that he wants confirmation from the Navy and NASA that the removal and re-siding will be completed in conjunction to ensure the skeleton of Hangar 1 is not exposed. If there is going to be a delay between the removal and re-siding, some sort of protective coating should be applied to the hangar skeleton.
- Mr. Siegel said that the community provided comments to the Navy indicating it opposes executing Alternative 10 from the EE/CA. The community is disappointed the Navy is moving forward with Alternative 10 regardless of the input received. A plan of action to re-side the hangar needs to be provided to the community once it is selected.
- Mr. Moss requested a guarantee be provided to the community that Hangar 1 will be re-sided.
- Mr. Hobbs said that there is progress toward reaching a plan for reuse of Hangar 1.

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- Community member Georgina Hymes said that Former NAS Moffett Field should be kept available for future military activity. There are no open military bases in the Bay Area. Ms. Hymes continued that some of the funding that is being sent overseas for military efforts should be kept for activities at Former NAS Moffett Field.
- Mr. Moss made a motion to assure there is a system in place to re-side Hangar 1 before the Navy's removal action begins. Peter Strauss (RAB member) suggested Mr. Moss work on the wording of his motion and for a vote at a future RAB meeting. Mr. Moss agreed to work on his motion and provide it at a future meeting for a RAB vote.
- A community member asked who will sign off on the AM for Site 29, Hangar 1. Mr. Newton said that he has signatory authority on the AM. Mr. Newton said that in his absence the RAB members should contact Mr. Hill with their concerns. Mr. Siegel said that the assistant secretary to the Navy will be different with the upcoming political changes.

FORMER NAS MOFFETT FIELD ER PROGRAM UPDATE

Mr. Newton reviewed the status of the projects the Navy is completing under the ER program at Former NAS Moffett Field. The ER program includes six operable units (OUs), 29 Installation Restoration Program (IRP) sites, total petroleum hydrocarbon (TPH) sites and compliance areas.

IRP Sites 1 (Runway Landfill) and 22 (Golf Course Landfill) are currently in the long-term monitoring program. The Navy is conducting long-term groundwater monitoring at Sites 1 and 22, which will continue for 30 years.

The active IRP Sites are 25 and 27 (two wetland sites); 26 and 28 (the aquifers on the eastern and western sides of Moffett Field); and 29 (Hangar 1). Mr. Newton said that Site 28 is currently scheduled for a 5-year review. The Navy has decided to conduct a basewide 5-year review, and the draft report will be released in fall 2009.

Site 25 Status: Site 25 is the Eastern Diked Marsh and the stormwater retention pond. The Navy is in the PP phase at Site 25. The Navy plans to excavate and remove sediment contaminated with PCBs, DDTs, and metals at Site 25. Once remediation is complete, the site will support unrestricted reuse; therefore, no long-term monitoring or institutional controls will be necessary. The Site 25 record of decision (ROD) will be released in 2009, and remediation will occur in 2010.

Site 27 Status: Mr. Newton said the Navy remediated Site 27, the Northern Channel and associated drainage ditches, in 2006. In 2008 the Navy and agencies worked together to resolve issues related to selenium that remains in the sediments. The Navy removed the Western pond turtles until work was completed. In 2009 the Navy will finalize the site restoration work plan and conduct backfilling in limited areas at Site 27.

Site 26, East-side Aquifer Treatment System (EATS) Area Status: The Navy is planning a pilot study to test two alternative technologies. The Draft Site 26 EATS work plan is currently under regulatory agency review. The Navy plans to conduct the pilot study in 2009. As the pilot study is conducted, the Navy will provide the RAB with updates.

Site 28, West-side Aquifers Treatment System (WATS) Area Status: The Navy is participating with the Middlefield Ellis Whisman (MEW) group in conducting a Site-wide groundwater feasibility study (FS). The Navy will participate in an EPA/Navy/NASA All Parties meeting to discuss the FS on 15 January 2009. The Navy will provide the RAB with updates as the FS is developed.

Site 29, Hangar 1 Status: The Navy is working with NASA to partner on the removal and re-siding of Hangar 1.

- Mr. Strauss asked if there is a public comment period on the AM for Site 29, Hangar 1. Mr. Newton said there is no public comment period for the AM. It is a response to the community comments on the EE/CA.

Site 8 Status: Mr. Newton said that the drainage swale adjacent to Site 8 was removed from the Site 25 PP and has been assigned to a separate cleanup track under TSCA. In 2004, NASA conducted a trichloroethene (TCE) removal action and identified PCBs in the drainage swale adjacent to Site 8. The Navy is working with the regulatory agencies to establish the path forward for the drainage swale adjacent to Site 8.

Petroleum Program Status: In 2008, the Navy held monthly meetings with the San Francisco Bay Regional Water Quality Control Board (Water Board) to discuss the petroleum program. The Navy plans to gain closure from the Water Board on 36 petroleum sites in 2009.

- Mr. Woodhouse asked about the Navy's budget for 2009. Ms. Lind agreed to provide a budget presentation to the RAB in March 2009.

Compliance Program Status: The Navy has been working with NASA on areas that have been identified to contain PCBs. The Navy is working on reviewing the previous work NASA has completed on the compliance sites and preparing a path forward for remediation and closure. In 2009, the Navy will work with the regulatory agencies to conduct Toxic Substances Control Act (TSCA) maintenance actions on the compliance sites.

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) GROUNDWATER UPDATE AND REMEDIAL OPTIMIZATION PROCESS OVERVIEW

Alana Lee (EPA) provided an overview of the Middlefield-Ellis-Whisman (MEW) Study Area regional groundwater plume cleanup efforts. The primary contaminants of concern are volatile organic compounds (VOCs), including TCE. The groundwater plume extends from the area south of U.S. Highway 101 along Middlefield Road, Ellis Street, and Whisman Road (hence MEW) and migrates north and co-mingles with Navy and NASA contamination on Moffett Field. Ms. Lee said EPA issued a ROD for the soil and groundwater cleanup in 1989. EPA is the regulatory agency overseeing the cleanup. EPA issued an administrative order in 1990 requiring the MEW parties to clean up the soil and groundwater in accordance with the ROD. The Navy also agreed to clean up its source areas in the regional plume area in accordance with the ROD in the 1993 amendment to the Federal Facility Agreement (FFA). The soil cleanup by soil excavation and soil vapor extraction was completed at all the former MEW facilities, and the groundwater cleanup is ongoing. To date, the 10 groundwater treatment systems have removed over 75,000 pounds of VOCs.

Ms. Lee said the groundwater cleanup and redevelopment at the Site has been successful. In 2003, community concerns about the air stripping technologies being used led to their removal and replacement with a different treatment method. In 2004, EPA conducted a Five-year review that recommended development and implementation of various optimization plans at each of the facilities and Regional Program to improve the effectiveness of the groundwater remedy. The Five-Year Review also recommended evaluating the monitoring and extraction well network to assess contamination and to enhance VOC mass removal and plume capture and evaluating the applicability of alternate cleanup technologies to expedite VOC mass removal and cleanup time. In 2008, EPA requested the MEW parties, Navy and NASA to prepare optimization evaluation reports for each of its areas. EPA is reviewing the optimization evaluation reports and discussing the path forward with all the Parties. EPA will continue to provide information to the community and welcomes any questions and suggestions that community members may have. EPA has awarded two Technical Assistance Grants (TAG) to Lenny Siegel's organization (the Pacific Studies Center), who has hired Peter Strauss as a Technical Advisor to assist the community with reviewing technical documents and providing educational outreach for both the MEW and NAS Moffett Field sites. Ms. Lee said that EPA plans to complete a second Five-year review for the MEW Site in 2009.

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- Gabriel Diaconescu (RAB member) asked about the criteria EPA uses to determine if a new treatment technology is an improvement. Ms. Lee responded that EPA considers effectiveness, cost savings and efficiency to measure improvement.
- Libby Lucas (RAB member) asked if seasonal aquifers and salinity were affecting the groundwater plume. Ms. Lee said there is no impact to the groundwater plume by seasonal aquifers or salinity.

REMEDIAL PROCESS OPTIMIZATION OVERVIEW

Mr. Strauss is a technical advisor to community groups through the TAG program funded by EPA. Mr. Strauss provided a presentation on the remedial process optimization for the MEW site. Mr. Strauss reviewed the optimization reports and found the Parties focused their assessments of the existing groundwater systems on their efficiency. If alternative technologies would be more effective and efficient than the pump and treat systems, then EPA wants the Parties to evaluate these alternative technologies to expedite VOC mass removal and groundwater cleanup time. Each Party charted the amount of contamination that was being removed from the groundwater plume to see if there was an acceptable decrease in concentrations of VOCs.

Mr. Strauss consulted with a community advisory board to devise criteria to assess each system currently in place. The community advisory board was interested in having the Remedial Process Optimization (RPO) focus on accelerating the removal of VOCs in the groundwater plume, reducing migration of the plume, increasing the rate of mass removal, improving health and safety, and improving the long-term monitoring system. The community advisory board agreed that cost and efficiency should be evaluated, but that they should not be the primary criteria for making a decision to implement new technologies.

- Ms. Lucas asked if the group has coordinated with the Santa Clara Water Valley District. Mr. Strauss said that the group has not coordinated with the Water District.

Mr. Strauss said that almost all of the optimization plans recommended removing groundwater monitoring wells instead of installing more. Mr. Strauss also said that the optimization plans did not recommend increasing extraction rates, which was a concern for the TAG group.

- Don Chuck (NASA) said that groundwater modeling equations were used to assess the amount of contamination extracted by the system in the optimization plans. Mr. Chuck continued that there is more than one technology that should be used to clean up the entire groundwater plume. Each facility area has different needs and treatment technologies that can be implemented. As a result, each Party issued its own optimization plan.
- Mr. Siegel said these optimization plans are breaking new ground in groundwater remediation. Technologies change and it is important to continuously assess treatment capabilities. The goal of EPA's optimization plan is to remediate the groundwater plume more effectively and efficiently.

RAB BUSINESS

Future RAB Topics

Mr. Newton announced the next RAB meeting will be held on 12 March 2009. The RAB will vote on the RAB application provided by Mr. Otte during the March 2009 meeting. Mr. Newton suggested potential presentation topics for future RAB meetings could include updates on Site 27, the EATS pilot test work plan, and a briefing on the cost-to-complete budget for Former NAS Moffett Field. Mr. Newton asked for additional suggestions for topics at future RAB meetings.

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RAB Schedule

The next RAB meeting will be held from 7 to 9:30 p.m. at Building 943, in the Eagle Room at Moffett Field, California. The 2009 RAB meetings are scheduled for Thursday evening at 7 p.m. as follows:

- 12 March 2009
- 14 May 2009
- 9 July 2009
- 10 September 2009
- 12 November 2009

Adjourn

The meeting was adjourned at 9:45 p.m., and Mr. Newton thanked everyone for attending. Mr. Hill can be contacted with any comments or questions:

- Mr. John Hill
Base Closure Manager, Former NAS Moffett Field, Navy BRAC Program Management Office West;
1455 Frazee Road, Suite 900; San Diego, CA 92108; Phone: 619-532-0985; Fax: 619-532-0940;
E-mail: john.m.hill@navy.mil

ACRONYM LIST

AM – Action memorandum

BEC – BRAC Environmental Coordinator

BRAC – Base Realignment and Closure

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

EATS – East-Side Aquifer Treatment System

EE/CA – Engineering evaluation/cost analysis

EPA – U.S. Environmental Protection Agency

ER – Environmental Restoration

FFS – Focused Feasibility Study

FS – Feasibility study

IRP – Installation Restoration Program

MEW – Middlefield-Ellis-Whisman

MOU – Memorandum of Understanding

NAS – Naval Air Station

NASA – National Aeronautics and Space Administration

OUs – Operable Unit

PCB – Polychlorinated biphenyl

PP – Proposed Plan

RAB – Restoration Advisory Board

ROD – Record of Decision

RPM – Remedial Project Manager

RPO – Remedial Process Optimization

TAG – Technical Assistance Grant

TCE – Trichloroethene

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TPH — Total petroleum hydrocarbon

TSCA – Toxic Substances Control Act

WATS – West-Side Aquifers Treatment System

Water Board — San Francisco Bay Regional Water Quality Control Board

VOC – Volatile Organic Compounds

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>