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**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, 10 September 2009, at Building 943 in the Eagle Room at Moffett Field, California.

Community RAB Members in attendance:

William Berry, Gabriel Diaconescu, Libby Lucas, Diane Minasian, Bob Moss, Ralph Otte, Arthur Schwartz, Lenny Siegel, Steve Sprugasci, Peter Strauss, and Dan Wallace

Regulatory Agency, City Representative, and Navy RAB Members in attendance:

Sarah Kloss (U.S. Environmental Protection Agency [EPA]), Alana Lee (EPA), Kathy Stewart (Navy), Elizabeth Wells (San Francisco Bay Regional Water Quality Control Board [Water Board]), and Kevin Woodhouse (City of Mountain View Assistant to the City Manager)

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

Don Chuck (NASA), Dr. Ann Clarke (NASA), Lauren Cason (Sealaska Environmental), Julie Crosby (Navy) Viola Cooper (EPA), Deborah Feng (NASA), Mark Hightower (NASA), Carolyn Hunter (Tetra Tech EM Inc.), Lisa Lockyer (NASA), Mike Lewis (Sealaska Environmental), Angie Lind (Navy), Lili Pirbazan (NASA), George Sloup (NASA), and Keith Siuda (NASA)

Other Community Members in attendance:

Beth Bunnenberg (Save Hangar 1), Gus Holweger (Airship Ventures), Jim Morris, Jack Nadeau (Save Hangar 1), Martin Rawson, Jeff Segall, A. Sinclair, Duncan Simmons (Midpeninsula Regional Open Space District [MROSD]), Jim Van Pernis (SHOC), Steve Williams

WELCOME

Bob Moss, RAB community co-chair, and Kathy Stewart, U.S. Navy Base Realignment and Closure (BRAC) Environmental Coordinator (BEC), opened the meeting at 7:05 p.m. and welcomed everyone in attendance. Mr. Moss said the Navy will provide updates on Site 29 (Hangar 1), Site 27, the basewide groundwater program, and the Site 25 Record of Decision (ROD) during the meeting. Mr. Moss also said the board will review and vote on a RAB applicant.

APPROVAL OF MEETING MINUTES

Mr. Moss asked for corrections to the 9 July 2009 meeting minutes. Ralph Otte (RAB member) said he is experienced in working with city council and various community groups meetings; therefore, he requested the RAB members present at the meeting be listed at the beginning of the minutes. Mr. Otte also asked that the meeting minutes be provided to the RAB members 1 month after the meeting. Ms. Stewart asked if the RAB members agreed with presenting their names in an attendance list in the meeting minutes. The RAB members agreed with the addition of the attendance list in the minutes.

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Alana Lee (EPA) said she had a number of corrections she will provide to the Navy on the 9 July 2009 RAB minutes. Mr. Moss also said he also had a number of corrections he will provide the Navy after the meeting. Mr. Moss proposed the RAB members provide their corrections to Ms. Stewart by 15 September 2009 for incorporation into the final 9 July 2009 RAB meeting minutes. He asked that the Navy resubmit them to the RAB for review and approval at the 12 November 2009 meeting once the comments received on the 9 July 2009 RAB minutes are incorporated.

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 Sites 1 and 2 Landfill – 2008 Annual Groundwater Report	September 2009
2.	Final Site 22 Landfill – 2008 Annual Groundwater Report	September 2009
3.	Draft Final Site 25 ROD	September 2009
4.	Draft Basewide Five-Year Review	October 2009

ANNOUNCEMENTS

Ms. Stewart announced that RAB member Richard Eckert had resigned from the RAB due to health issues.

Ms. Stewart stated the RAB had a new applicant and introduced Mr. William Berry. Ms. Stewart stated Mr. Berry is the President and Chief Executive Officer of University Associates-Silicon Valley (UA-SV) LLC. Mr. Berry then introduced himself and provided information on his organization. He stated he formerly worked for NASA, and his organization is undertaking an ambitious agenda. He and his organization are working with NASA Ames Research Center to develop 77 acres of the property through a lease to create a model 21st century sustainable community dedicated to education, research, and innovation. He is currently working through the California Environmental Quality Act (CEQA) process for the proposed development. The RAB voted on and approved Mr. Berry's application. Mr. Moss and Ms. Stewart welcomed Mr. Berry to the former NAS Moffett Field RAB.

Ms. Stewart announced that NASA will be demolishing Building 943 and the RAB will need to relocate its meetings. Deborah Feng (NASA) said that Building 943 will not be removed until February 2010 and the RAB can continue to use the building until that date.

HANGAR 1 PROGRESS UPDATE

Ms. Stewart provided an update on the status on Hangar 1. She stated the initial planned award date for the Hangar 1 Removal Action had been July 31, 2009. Since the last RAB meeting on 10 July 2009, the Secretary of the Navy had received several letters: a letter from the City of Mountain View and a letter co-signed by the National Trust for Historic Preservation, the CA State Historic Preservation Office, the CA Preservation

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Foundation, and the Save Hangar One Committee. Ms. Stewart mentioned the identical co-signed letters were also sent to the White House Director of Public Affairs, the Secretary of Defense, and the NASA Administrator. These letters essentially requested Navy leadership engage in negotiations with NASA leadership to ensure a coordinated effort would be made to reside Hangar 1. Ms. Stewart stated these requests along with an earlier request from Congresswoman Eshoo resulted on a Navy decision to delay the contract award for 30 days to allow time for further discussions regarding ways for each organization to effectively meet respective obligations. Ms. Stewart stated that Navy leadership had been engaging in discussions with NASA leadership. However, the Navy and NASA had not reached agreement. As such, the two organizations jointly agreed to raise the issue to the Office of Management and Budget. To sum up her discussions, Ms. Stewart read a statement from the Navy on the status of Hangar 1:

“The disagreement between Navy and NASA over responsibility for residing Hangar 1 has not been resolved. In an effort to resolve the impasse, Navy and NASA requested the Office of Management and Budget (OMB) arbitrate the matter. That process is now moving forward. While the arbitration process works itself out, protection of human health and the environment remains a paramount requirement of the parties and the law.”

Ms. Stewart said the timeframe for OMB review was expected to be within a matter of weeks rather than months. Ms. Feng confirmed that OMB will review Hangar 1 as soon as 21 September 2009.

- Mr. Siegel asked who from OMB will review the case for Hangar 1. Ms. Feng stated it would be the “Management” side of the OMB organization. Mr. Siegel stated he would be in Washington D.C. during the week of 21 September 2009. As such, he requested a meeting with OMB while he is in town. Ms. Stewart stated she would pass along Mr. Siegel’s request.
- Mr. Schwartz said that he received an update from his brother on the Secretary of the Navy’s review of the documentation on Hangar 1. Mr. Schwartz had been provided the same update on OMB’s review of the future of Hangar 1 as Ms. Stewart had provided to the RAB.
- Ms. Stewart stated that her office had not yet received approval from Navy leadership to award the Hangar 1 removal action contract. However, she pointed out that two significant deadlines existed. Ms. Stewart stated that the end of the fiscal year and contract proposal expirations dates were both at the end of September. Mr. Moss asked if there is an expiration date on the proposals to remove the siding from Hangar 1. Ms. Stewart said there is an expiration date on the proposals as well as an issue on the availability of funding to remove the siding of Hangar 1. The Navy’s fiscal year ends on 30 September 2009.

SITE 27 UPDATE

Ms. Stewart said the Navy is currently evaluating the option of using soil in lieu of a geotextile liner and rock at Site 27, the Northern Channel. She stated surveys are currently being conducted to evaluate the viability of this option.

- Libby Lucas (RAB member) said she read an environmental assessment written by the National Guard, which noted there were only three turtles present in the Northern Channel. Ms. Lucas is concerned with the attrition of turtles at Site 27. Ms. Lucas asked if the turtles were able to move through the Northern Channel to the golf course pond. Ms. Stewart said the Navy has not recently worked at Site 27; therefore, the pathway for the turtles to move from the Northern Channel to the golf course pond has not been affected.

BASEWIDE GROUNDWATER PROGRAM UPDATE

Ms. Crosby provided an update on the former NAS Moffett Field basewide groundwater program. The basewide groundwater program includes measuring contaminant concentrations and groundwater elevations, conducting a pilot test at Site 26, and developing a pilot test at Site 28, the West-side Aquifer Treatment System (WATS). Ms. Crosby said the Navy submitted the 2008 Annual Groundwater Report on 15 June 2009, which included the groundwater sampling results and elevation measurements.

Ms. Crosby added that the trend from 2007 to 2008 indicates groundwater contamination is decreasing at Site 28. The Navy is actively treating and discharging water at WATS. Ms. Crosby said WATS removed 365 pounds of organics. The Navy applied for and received a renewed discharge permit from the Water Board for WATS, which will take effect on 2 October 2009.

Ms. Crosby reviewed the status of the Site 26 groundwater plume where the Navy is conducting a pilot test to evaluate the effectiveness of EHC[®] to decrease the concentrations of volatile organic compounds (VOCs). As part of the pilot test, the Navy injected EHC[®] into the subsurface and then collected groundwater samples from existing and newly installed wells to evaluate whether concentrations in the plume are decreasing. EHC[®] was injected directly into the subsurface to assist with transforming the chemical composition of the contaminants to nonhazardous substances.

- A community member asked if the concentrations of chemicals can migrate below the water table. Ms. Crosby said the Navy is collecting upgradient and downgradient samples of the groundwater plume ensure it is not moving.
- Mr. Siegel asked if the Navy has seen any indication that the chemical breakdown process may stall. Ms. Crosby said the Navy observed a stall at dichloroethene (DCE) during the Site 26 pilot injection of Hydrogen Release Compound (HRC); but the Navy does not anticipate a stall for this pilot test because the VOCs are being broken down through biotic and abiotic processes. Furthermore, the data shows an increase in ethene and ethane concentrations and this indicates complete reduction of VOCs.
- A community member asked about the Navy's experience in the difference between the chemical breakdown process between using HRC and EHC[®]. Ms. Crosby said the Navy anticipated the HRC would be effective and the DCE stall was unexpected. The Navy is including biotic and abiotic treatment at Site 26 during this current pilot test. During the previous HRC pilot test, only biotic chemicals were injected into the aquifer.
- Mr. Strauss asked if there is a trigger date to complete the pilot testing at Site 26 before EPA requests that EATS be returned to operation. Ms. Crosby said EPA is expecting a progress report on the Site 26 pilot test on 18 December 2009. If there are any problems with the pilot test, the Navy will discuss them with the regulatory agencies in December 2009. A final Site 26 pilot test report will be issued in mid-2010 once four quarters of groundwater monitoring data are available.

Ms. Crosby said the Navy conducts basewide groundwater sampling in November and December.

- Ms. Lucas asked if the groundwater level on site has been rising. Ms. Crosby said the Navy has not compared the groundwater levels. In the 1950s, former NAS Moffett Field consisted of farmlands, and there was overpumping of the groundwater for farming. Ms. Lucas said she has observed during walks along the levees in the summer that the seasonal water is not drying out as it has in the past.

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Ms. Crosby said the BRAC Cleanup Team (BCT) agreed to conduct a pilot test at Site 28. The Middlefield Ellis Whisman (MEW) group has begun preparation of the feasibility study (FS) for the regional plume. The Navy will provide the Site 28 pilot test results for inclusion in the regional FS. Ms. Crosby said the Navy will use a membrane interface probe (MIP) to assess VOCs at Site 28.

- Mr. Strauss asked about the purpose of an MIP. Ms. Crosby said the MIP measures the response from the VOCs in the groundwater plume. Larger responses correlate to higher concentrations. The Navy will use the MIP results to help guide them when injecting a substrate into the aquifer.

Ms. Crosby said the Navy is focusing the EHC[®] injections in three areas at Site 28. EHC[®] is expensive and the Navy is looking at other alternatives.

- Mr. Siegel asked if the Navy is tracking annual energy use to operate WATS. Ms. Crosby clarified that NASA pays for the energy costs, and not the Navy. Ms. Lee said EPA is looking into providing greener energy and how to use power for groundwater treatment at other sites. Ms. Crosby stated that this information is available in one of the Navy's reports and will be provided to the RAB.
- Mr. Strauss asked if the RAB can have access to the former Moffett Field FFA schedule. Ms. Stewart agreed to provide the FFA to the RAB for its input.
- A community member asked about the Site 28 groundwater plume in comparison to sites such as Fairchild and Raytheon. Ms. Lee said that EPA is looking at other South Bay Area groundwater plume sites.

SITE 25 ROD UPDATE

Ms. Crosby said that Site 25 is on the northwestern portion of former NAS Moffett Field. MROSD owns a portion of the area. The Site 25 stormwater system is managed by NASA. The sediment in the storm drain system is contaminated by metals, polychlorinated biphenyls (PCBs), and dichlorodiphenyltrichloroethane (DDT). The risk to the wildlife is driving the cleanup at Site 25.

The Navy is cleaning up Site 25 under a tidal marsh scenario. Ms. Crosby said the remedial action objective (RAO) at Site 25 is to reduce exposure to concentrations of lead, zinc, DDT, and PCBs in sediment at Site 25 to levels that are protective of ecological receptors if the site contains a tidal marsh in the future. Ms. Crosby also said the Navy will remediate the site so that it can be turned into a tidal marsh in the future; however, the Navy will not be creating a tidal marsh during the cleanup. The contaminated sediment will be treated in focused areas, removed, and disposed of off site. The Navy will collect confirmation samples after the excavation to ensure the RAO is met.

Ms. Crosby revised the schedule for Site 25 as follows: the proposed plan (PP) was submitted in January 2009 and the Draft ROD was submitted in April 2009. The Navy will issue the Draft Final ROD for Site 25 on 29 September 2009. The Final ROD for Site 25 is slated for signature on 29 October 2009. Ms. Crosby said the Navy held a public meeting to take comments on the PP for Site 25 on 22 January 2009. The Navy prepared responses to all of the comments received on the PP that were compiled into an appendix in the ROD called the Responsiveness Summary.

- Mr. Strauss asked if the RAO in the ROD is the same as is listed in the PP. Ms. Crosby confirmed the RAO is the same in both documents. Mr. Strauss asked why the word "if" appears in the RAO. Ms. Lee said the "if" is included because the ROD is asked to anticipate the future reuse in selecting the remedial action for the site.

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Ms. Crosby said that once the final ROD is signed, the remedial design will be drafted in 2010 and the field work will take place in 2011.

- Ms. Lucas asked if there will be a delay to work at Site 25 because of the delay at Hangar 1. Ms. Crosby said Hangar 1 could delay the schedule at Site 25.
- Ms. Lucas suggested the Navy alter the drainage swales and vegetation at Site 25 to reduce contamination. A vegetation expert from Berkeley who can be called for a consultation if the Navy is interested.
- Community member Steve Williams asked if DDT was applied at Site 25. Mr. Chuck said that DDT was applied for mosquito control.
- Mr. Moss said that a large wetland restoration project is being developed in the South Bay Area by the park districts. Mr. Moss asked who will be responsible for reuse at Site 25 after the Navy has completed the cleanup. NASA will continue to manage the stormwater program at former NAS Moffett Field. Dr. Clarke said Site 25 will probably not be a tidal marsh but generally will be managed as a wetland site. Ms. Wells said the Navy is conducting cleanup to levels to protect the most sensitive receptors.
- Mr. Siegel said he believed NASA would use Site 25 during the dry months as a tidal marsh and during the wet months as a stormwater retention pond.
- Mr. Strauss said there is a long history at Site 25. There was an issue of whether there were fish in the stormwater retention pond. NASA had planned to open the levee and dikes of the stormwater retention pond to allow tidal flow into the site. Mr. Chuck said he did not recall NASA's plans to open the stormwater retention pond. Mr. Siegel said he could provide a letter from NASA regarding the stormwater retention pond and tidal flow.
- Mr. Williams said there was a presentation at least 2 years ago to the RAB on Site 25 regarding maintaining the area as open space. There was pressure from Save the Bay for the Navy to set higher cleanup standards at Site 25 to protect the wildlife.

REGULATORY AGENCY UPDATE

EPA

Ms. Lee said that the comment period on the MEW study area PP for the vapor intrusion pathway was extended to 8 October 2009. She indicated that EPA received comments on the PP from residents that will require major changes to the remedial action. Ms. Lee also said she will provide updates to the community via e-mail. Current information on the MEW study area will also be posted on EPA's website. For questions, Ms. Lee is available by telephone 415-972-3141 or e-mail at lee.alana@epa.gov.

- Mr. Siegel said the Center for Public Environmental Oversight will provide EPA comments on the MEW study area PP. If RAB members are interested in providing comments on the PP, they should contact Mr. Siegel.
- Mr. Strauss said there will be major changes to the PP to provide flexibility to the remedial action at the MEW study area. The PP is not a final document.

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RAB BUSINESS

Future RAB Topics

Ms. Stewart announced the next RAB meeting will be held on 12 November 2009. Ms. Stewart noted Veterans Day is 11 November 2009 and is a holiday for government employees. Ms. Stewart asked for suggestions for topics at future RAB meetings. The RAB discussed the following items as potential topics for future meetings:

- Hangar 1 Update
- Site 27 Update
- Basewide 5-Year Review
- Site 26 Recommendations and Status Update

Ms. Stewart said RAB co-chair elections will take place in January 2010. The RAB should nominate co-chair candidates at the 12 November 2009 meeting in order to vote in January 2010.

Ms. Stewart will provide the Federal Facilities Agreement schedule to the RAB at the 12 November 2009 meeting.

- Ms. Lucas suggested the Navy invite an expert on vegetative bioremediation for the Site 26 status update presentation in November 2009. Mr. Chuck said that the Navy will not be using vegetation for bioremediation at Site 26 based on the impacts to the aviation in the area. The Navy is reassessing bioremediation options.

Public Comment

Ms. Stewart opened the floor to public comment. No public comments were provided.

RAB Schedule

The RAB meetings are held from 7 to 9:00 p.m. at Building 943 in the Eagle Room at Moffett Field, California. Ms. Stewart said the Navy will provide a list of tentatively scheduled RAB meetings for 2010 at the November RAB meeting. The next RAB meeting will occur on:

- 12 November 2009

Adjourn

The meeting was adjourned at 8:35 p.m., and Ms. Stewart thanked everyone for attending. Ms. Stewart can be contacted with any comments or questions:

- Ms. Kathy Stewart
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ACRONYM LIST

BEC – BRAC Environmental Coordinator
BCT — BRAC Cleanup Team
BRAC – Base Realignment and Closure
CEQA – California Environmental Quality Act
DCE — Dichloroethene
DDT — Dichlorodiphenyltrichloroethane
EATS – East-side Aquifer Treatment System
EPA – U.S. Environmental Protection Agency
FS – Feasibility Study
HRC — Hydrogen Release Compound
MEW – Middlefield-Ellis-Whisman
MIP – Membrane Interface Probe
MROSD — Midpeninsula Regional Open Space District
NAS – Naval Air Station
NASA – National Aeronautics and Space Administration
OMB - Office of Management and Budget
PCB — Polychlorinated biphenyl
PCE — Tetrachloroethane
PMO — Program Management Office
PP — Proposed Plan
RAB – Restoration Advisory Board
ROD — Record of Decision
RPM – Remedial Project Manager
TCE – Trichloroethene
VOC – Volatile Organic Compound
Water Board – San Francisco Bay Regional Water Quality Control Board
WATS – West-side Aquifers Treatment System

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>