FORMER NAS MOFFETT FIELD
RESTORATION ADVISORY BOARD
MOUNTAIN VIEW CITY HALL, FOURTH FLOOR GALLERY
MOUNTAIN VIEW, CALIFORNIA 94041

NOTE: Glossary provided on the last page of these minutes

Subject: RAB MEETING MINUTES

The Restoration Advisory Board (RAB) meeting for the former Naval Air Station (NAS) Moffett Field was held on Thursday, 14 July 2005, at the Mountain View City Hall, fourth floor gallery, in Mountain View, California. Mr. Rick Weissenborn, the Base Realignment and Closure (BRAC) Environmental Coordinator for Moffett Field and RAB Co-Chair, opened the meeting at 7:15 p.m.

WELCOME

Mr. Weissenborn introduced himself and welcomed everyone in attendance, then asked for self-introductions of those present. The Moffett Field RAB meeting was attended by:

RAB Members	Regulators	Navy	Consultants & Navy Support	NASA	Public & Other
8	5	4	5	3	15

DOCUMENTS FOR REVIEW

Sign-up sheets for the following documents were circulated during the meeting:

#	DOCUMENT	APPROXIMATE SUBMITTAL DATE
1	Site 29 (Hangar 1) Engineering Evaluation/Cost Analysis (EE/CA)	August 2005
2	Final Site 22 Operation and Maintenance (O&M) Plan Addendum	September 2005
3	Final Site 1 Landfill 2004 Annual Report	September 2005
4	Building 88 Report	September 2005
5	East-Side Aquifer Treatment System (EATS) Completion Report	September 2005
6	Draft Site 27 Remedial Design	September 2005
7	Draft Final Site 25 Feasibility Study Addendum	October 2005

APPROVAL OF MINUTES

Mr. Steve Sprugasci, RAB member, moved to approve the 12 May 2005 meeting minutes; Mr. Moss seconded the motion. The minutes were approved without changes.

RAB ELECTION

Mr. Weissenborn introduced the RAB Community Co-Chair, Mr. Bob Moss, who explained RAB membership: RAB elections provide an opportunity for interested community members to request to join the RAB. Each candidate for membership is asked to make a short self-introduction and

state why they want to join. Current RAB members then vote to approve membership. The only requirement to maintain RAB membership is to regularly attend RAB meetings. If three consecutive meetings are missed, a RAB member may be dismissed. It is encouraged that RAB members sign up to receive documents and reports. A document sign-up sheet is circulated at each meeting and documents are distributed in CD-ROM format. Hard copy documents are available for review in the information repository at the Mountain View Public Library.

The candidates for RAB membership were Mr. Gabriel Diaconescu, Ms. Patricia Guerrieri, Mr. Marc E. Kowalski and Mr. Kirk Willard; Mr. Kowalski was not present. Each candidate in attendance made a brief self-introduction and stated their interest in the RAB. The eight RAB members present voted to approve all four candidates as RAB members.

SITE 29 (HANGAR 1) PRESENTATION AND DISCUSSION

Mr. Art Tamayo, Remedial Project Manager for Hangar 1, presented an update on the status of the Engineering Evaluation and Cost Analysis (EE/CA), and the remaining two alternatives under consideration. RAB members and other individuals asked questions and voiced the following concerns:

- RAB member Mr. Peter Strauss stated that using the EE/CA process was not typical for Moffett Field cleanup. He said that while he was not suggesting it not be used, he pointed out differences between this process and the Remedial Investigation/Feasibility Study (RI/FS) process: there is no Record of Decision (ROD) and no required public hearing with the EE/CA. Also, under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, community involvement and acceptance is a major step. Mr. Strauss urged the community to make their voice heard. He added it appeared that the Navy had eliminated all the alternatives for cleanup of Hangar 1 except two.
- Mr. Moss said the Navy's basis for eliminating the chemical stripping of polychlorinated biphenyls (PCBs) alternative because "it does not address lead paint and asbestos" was not acceptable. He stated that these chemicals were not identified as contaminants. Often, old buildings retained and used have lead-based paint and asbestos and as long as these chemicals are not disturbed, there is no contamination. There are many cases where a contaminated surface is permanently sealed that have been acceptable approaches for preventing contaminant release. This should be applied to Hangar 1, and demolition should not be an alternative.

  Mr. Tamayo stated that results from the National Aeronautics and Space Administration's (NASA's) sampling indicated that lead is present and asbestos has been found in the hangar's siding material and runoff at levels above those requiring action. At some point, these contaminants will be released to the environment. Ms. Judy Huang of the RWQCB stated the NASA's sampling results of the storm water drainage system showed lead and asbestos. Mr. Weissenborn showed a presentation slide depicting the hangar's siding composition. He stated that the problem is the lead-based paint is present on the outside of the PCBs. To remove the PCBs, the lead-based paint and asbestos would have to be removed first.
- A public member suggested if the hangar were encapsulated inside and outside, it would be a 25-year solution. This individual further stated that there are solutions, but politics is interfering.
- Another public member said the Smithsonian extension at Dulles Airport is a hangar facility used as an aviation museum. Planners wanted to have a solar treatment on its surface, but the design was started too late in the process. As a result, the $56 million project was funded by a

single donor. It was suggested that Hangar 1 could be re-shelled with solar film and the structure could be used as an aviation museum.

- Mr. Weissenborn said the Navy is addressing the removal of the source of contamination, and in this case the source is a historic structure. Long-term coating only addresses the exterior of the hangar, not the interior. Leaving the interior contamination is unacceptable to the U.S. Environmental Protection Agency (EPA) and the San Francisco Bay Region of the California Regional Water Quality Control Board (RWQCB). In response to a community member's suggestion of coating the interior, Mr. Weissenborn stated that the hangar's interior is not considered a "CERCLA release."
- An attendee referred to the siding composition slide and asked whether the outside green layer was more toxic than the inside orange and blue layers. He asked why, if the outside layers are more toxic, the siding sheets cannot be removed from the site, cleaned to the less toxic layers and replaced. Mr. Weissenborn explained that the layers depicted in the figure cannot be peeled off because the siding layers are really one cohesive piece of material; the composition figure may be misleading in that way.
- An attendee said he was not happy with the presentation because the Navy is suggesting they are going to tear down the hangar and demolition is on a fast track, rather than trying to find alternate solutions.
- Another attendee said the Navy should not waste their time with additional public meetings given they seem to have already reached the conclusion that the hangar must be demolished.
- An attendee commented since the Navy just recently found out that there were PCBs, they should stabilize the hangar for a reasonable amount of time to determine options without demolition because Hangar 1 is a historic structure. Mr. Weissenborn said the Navy understood the historic nature of the building, but the Navy's primary responsibility is to make the site environmentally safe.
- Another attendee commented that Hangar 1 is an integral part of this area and this community. Since the Navy is expediting selecting an alternative because of the temporary coating, he suggested reapplying the coating to buy more time so that the Navy would not need to select an alternative expeditiously. Mr. Weissenborn said applying another coating does not remove the source of contamination and this would not be acceptable to regulatory agencies.
- Mr. Diaconescu, RAB member-elect, stated that the hangar should be preserved because it is a symbol of the community. He said a compromise solution could be determined to keep the symbol and solve the contamination problem.
- An attendee added that since there was sufficient interest in keeping the hangar, a discussion of alternatives that preserve the building was warranted. She said that NASA would value the hangar as an asset and resource.
- Mr. Richard Eckert, RAB member, stated Hangar 1 should not be demolished because it is only one of two such buildings in the world. The Navy should find the funds to preserve it. He asked for an informal vote by all attendees on whether they believed Hangar 1 should be preserved; the results were: yes – preserve: 38; no – demolish: 1.
- Mr. Eckert stressed that the Navy was throwing away a unique building, even though the majority of attendees are saying they don't want demolition. He questioned why there were only two remaining alternatives.

- Ms. Lida Tan from EPA said that although there are two remaining alternatives, a final decision has not been reached that demolition is the cleanup method. The Navy and regulators need to hear from the public and they are listening to the input.
- Mr. Kevin Woodhouse, alternate RAB member, said it appeared that the EE/CA report will evaluate only two alternatives, which is not acceptable to the community and will result in time delays. He observed that the public feels rushed because action is occurring within the next few months and suggested that the Navy address the public's qualm; significant public input is necessary. Mr. Woodhouse asked if it was acceptable to the Navy whether community input were to take longer than the current timeline. He suggested the hangar be recoated if more time is needed to include comprehensive community input. Ms. Tan said EPA will work with the Navy to clean up the hangar as fast as possible, and allow enough time for public comments.
- Another attendee commented that the EE/CA report would not show the alternative of removing the siding, cleaning the interior and replacing the siding because it was eliminated from the report.
- An attendee questioned the sequence of events: the coating was applied in late 2003, the community did not hear anything about the hangar for 18 months, and now the Navy was stating that demolition could occur in 6 months. This accelerated schedule makes the public uncomfortable and makes the public feel that they were losing control. The schedule should be decelerated to accommodate public input. Perhaps another coating should be applied to buy more time. He said that the very nature of the presentation did not explain why the Navy chose the EE/CA process over other options, why the Navy chose removing the source of contamination as an ultimate criterion, and why the Navy would not address the interior if in the end the exterior would remain. He noted that the dispute resolution process was resolved when the Navy agreed to take responsibility for the hangar, but that the Navy has not explained why it is not responsible for the interior. All of this should be explained before the EE/CA report comes out. The public has not received enough information about all of the other proposed alternatives and the Navy should give a more thorough explanation.

  Mr. Weissenborn said there is a clear explanation of what is occurring at Hangar 1 in RAB meeting minutes from 13 January, 10 March and 12 May 2005. A Draft Final Work Plan was made available to the public and sampling of the exterior was included. Sampling of the interior was not planned because it was not a CERCLA release. NASA found a rare PCB, Aroclor-1268, and a common one, Aroclor-1260, at Site 25. NASA determined that the source of PCBs was Hangar 1 when PCBs were not found upstream of the hangar. The next step was to sample the hangar materials. The siding, roofs and concrete flooring were sampled. Contaminants were found in the siding and on the floor. There was a high concentration of PCBs. Under the CERCLA process, the source of contamination needs to be controlled.
- An attendee asked why the Navy was looking to "remove" the source as opposed to just "controlling" it. Mr. Weissenborn said removal addresses health and safety concerns for the environment. Encapsulation, which is control, is not acceptable to regulatory agencies. The attendee also asked about the dispute resolution process. Mr. Weissenborn said the cause of the dispute was that the interior was not under CERCLA. Mr. Moss added that the Navy said it would examine the hangar interior, but not clean it up. Mr. Moss said another issue was funding. He said the RAB can encourage local representatives to get more funding for the Navy to clean up the hangar.

- Referring to the "removing the siding without replacement" alternative, Ms. Judy Huang from RWQCB stated that an outside source or third party could fund the siding replacement. The Navy could not fund the siding replacement because of appropriations funding, which can only be used for environmental cleanup. The Navy is prohibited from requesting additional funding from Congress.
- Mr. Strauss inquired whether a third party could replace the siding if the Navy chose the alternative to remove the siding without replacement. Mr. Weissenborn confirmed that this was correct. Mr. Strauss suggested that the Navy encapsulate the exterior and have a third party encapsulate the interior. Mr. Weissenborn said this could be done, but questioned who would do the work for the interior and again stated that the issue is cost rather than equipment. Mr. Strauss said sandblasting could be an option because sandblasting is used on aircraft carriers. Mr. Weissenborn said aircraft carriers are made of different materials.
- Mr. Sprugasci asked why the encapsulation alternative had been excluded. Mr. Weissenborn stated it was excluded because it does not address the interior contamination. Mr. Sprugasci said he understood the Navy agreed it would assume responsibility for the hangar's interior in the dispute resolution process. Mr. Weissenborn clarified that once the exterior is removed, the interior could be addressed because the interior walls would then become the exterior. Mr. Sprugasci then asked if there was another law or if CERCLA required that the source of contamination be removed. Mr. Weissenborn said it did not; encapsulation could be an option but the site would have to undergo regular monitoring, resulting in a written report every five years. Mr. Moss pointed out that it would be no different than the groundwater or landfill monitoring taking place for the next 30 years. Mr. Weissenborn stated that if the encapsulation were to fail, the contamination would be released and would negatively impact the environment.
- An attendee asked for examples where the Navy used funding to rebuild facilities. Mr. Weissenborn stated this has not happened from BRAC funding. There is MILCON (military construction) funding for Navy and Marine bases; however, MILCON funding is not available for Hangar 1 because it is not owned by the military.
- Mr. Weissenborn confirmed an attendee's assessment that reconstruction could not be funded under environmental laws. However, that individual recently became aware of a case in Leadville, Colorado, where that rule did not hold up. The EPA said the tailings at a historic site had to be removed, but the site was maintained and preserved. Mr. Weissenborn commented that the preservation was a privately funded action, not funded by the Department of Defense. The Navy has an environmental restoration appropriation and it cannot reconstruct a property it no longer owns.
- An attendee asked Mr. Weissenborn for the status of the MAPS (Military Aviation Preservation Society) hangar, a historic structure in Akron, Ohio. Mr. Weissenborn said the hangar is owned by Lockheed Martin and the Navy is working closely with them because the MAPS hangar and Hangar 1 are undergoing similar issues. It has not been determined what actions will be taken for the MAPS hangar because those responsible for it are waiting to see what action will be taken for Hangar 1.
- Another attendee asked how long the hangar's frame would last once the siding is removed. Mr. Weissenborn said it was currently being evaluated.
- In response to whether the hangar was presently contaminated, Mr. Weissenborn said that the hangar's interior is contaminated and the exterior was and still has some contamination.

- Mr. Don Chuck of NASA stated that PCBs were starting to resurface in sampling. Ms. Tan said PCBs were showing for the exterior not the interior coatings. She added that lead and PCBs were found after the coating was applied, but not at previous concentrations.
- The attendee asked whether there would be artifacts saved from the building. Mr. Weissenborn said a walk-through DVD of the building would be made.
- Ms. Tan said the goal is to protect human health and the environment. She reiterated that the Navy and regulators will listen to the public's comments and there is a lot of flexibility for selecting a remedy. She identified some issues the Navy and regulators need to address: (1) the exterior versus interior issue; (2) reevaluating removal alternatives and the reasons for elimination; (3) considering nine CERCLA criteria instead of three criteria, including community consent since the selected alternative is a permanent solution; and (4) reexamining costs and the pros/cons of each alternative. Ms. Tan said the community is able to seek outside or additional funding sources; however, the Navy is prohibited from doing so because it is a federal agency.

  Ms. Tan said the BRAC Cleanup Team, Navy, NASA, EPA, and the Regional Board briefed Congresswoman Anna Eshoo's office and suggested concerned community members contact the Congresswoman. Ms. Huang said that RWQCB is not able to recommend an alternative method to the Navy and also cannot seek other funding sources. She too recommended the community contact their local representatives.
- Another attendee stated that mercury is found in the San Francisco Bay and wondered why the mercury contamination could be left in the bay, which is acceptable to the same agencies involved with Hangar 1, while contaminants from the hangar are so environmentally unacceptable as to warrant eradicating the source. He said a fuller explanation of the rationale behind choosing to remove the hangar as a contamination source was needed.
- An attendee asked about the risks of off site disposal and observed the Navy is making it seem that off site disposal is an easy process. Ms. Tan said the waste would be characterized and would go to a certified landfill. Such landfills follow strict rules and regulations. EPA does not necessarily want to dispose the materials in a certified landfill, but it may be the only viable option. There may also be options to recycle the metal. If the hangar is left as is, the paint will eventually chip off and that would be unsafe because it is a source of contamination. The hangar is a source of contamination for wetlands.
- Ms. Huang said it is known that PCBs have migrated to the Site 25 wetlands that are being restored. She said it doesn't make sense to clean up site 25 without cleaning up Hangar 1.
- An attendee asked about the dimensions of the exterior sheeting pieces, the composition of the hangar's interior structural beams and whether the interior was toxic. Mr. Weissenborn said each exterior sheet is 12 feet by 20 feet and the core is steel. The toxic substances were PCBs, lead-based paint and asbestos felt with PCB.
- Another attendee asked if cleaning both sides of the siding was considered as an alternative. Mr. Weissenborn said PCBs were melted into the metal sheets during manufacture. Ms. Tan added that treating both sides and replacing the same panels would not be cost effective. It would be more efficient to replace the siding with new panels.
- Another attendee asked about the possibility of contamination spreading during demolition and if it would cause further damage. Ms. Huang said there is a possibility of spreading contamination, but contractors and the Navy will adhere to best management practices, called "BMPs," to ensure spreading does not occur.

- Mr. Sprugasci brought up the dispute resolution agreement and said he thought the regulators represented his interests, but now he has learned it is not the case since the Navy is still taking the position they are not responsible for the interior. Ms. Tan said the regulators will need to meet again with the Navy because there is a misunderstanding regarding the interior. Hangar 1 will be addressed as a whole, interior and exterior. Ms. Tan suggested perhaps the resolution letter wasn't clear enough. There may not need to be another dispute, but additional legal interpretation may be needed.

  Mr. Moss said that EPA entered into a procedure and the Navy sent out the dispute resolution letter that said the Navy will address the inside of the hangar. He thought the Navy would do something about the problem and not simply say the interior was not their responsibility.

- An attendee said that in the 1990s there was interest in creating a world-class museum in the Hangar 1 structure, originally referred to as Smithsonian Aerospace West. Around the year 2000, a board was appointed to turn Hangar 1 into a state-of-the-art museum for the public: Space World. Fundraising had just begun when PCBs were discovered. NASA has been attempting to get the board reinvigorated by focusing on exhibit development in NASA's Exploration Center, located on Moffett Field just outside the main gate. The board has started fundraising for exhibit development and has also been focusing on outreach to the public. This nonprofit organization is California Air and Space Foundation. Another organization is Friends of the California Air and Space Center (CASC). The community can get involved if they are interested in preserving the structure and transforming it into a public venue. The last action taken by the CASC was to look at using solar panels for the hangar.
- An attendee commented that he was disappointed that the CASC renamed the proposed museum Space World Hangar 1, thus losing sight of the aviation aspect of NASA's history. He also questioned why the Navy did not want to preserve this part of its history. Another person said the hangar was deemed a historical naval landmark by the Navy in 1966.
- Mr. Willard, RAB member-elect, asked if all parties involved could afford to help fund the preservation of the hangar if the Navy does not have enough funds. Mr. Kran Kilpatrick of NASA said federal agencies could not seek outside funding, but it is possible for third party funds to be used in encapsulating or re-shelling the hangar. Mr. Moss said he knows of techniques with a long lifetime that could be used to seal the hangar, such as sealing by plasma spraying oxide. This would prevent interior and exterior contaminants from reaching the groundwater; however, it is expensive. Ms. Tan indicated that the contaminants were not reaching groundwater.
- Mr. Woodhouse asked if the Navy and regulators were willing to push back the EE/CA's 03 August 2005 release date to incorporate analysis that is needed to satisfy the community. Ms. Tan said she considered the date to be flexible. The EE/CA report's quality should not be sacrificed to meet the scheduled date, and she would prefer to see the EE/CA report incorporate more public input. Mr. Weissenborn confirmed that the new EE/CA release date would be in early September.
- Mr. Weissenborn noted that the Navy and regulators meet on a regular basis and work together in a team effort. The Navy has met and exceeded CERCLA requirements and is willing to continue to do so. The Navy is also working with NASA to find the best mitigation measures for historical preservation if the hangar were to be demolished.

  Mr. Weissenborn repeated that the Navy is not ignoring what the community is saying and that the next opportunity to make comments and provide suggestions is the 18 August 2005

Hangar 1 open house. He noted the EE/CA report provides a step-by-step analysis of all alternatives and the reasons for their elimination from consideration.

- Ms. Guerrieri said there are many issues to be addressed before the next RAB meeting in September and asked how the RAB will serve as an advisory group if there is no other meeting scheduled before the EE/CA is released. Mr. Weissenborn asked the RAB and attendees if they would prefer an informational exchange on the 18 August 2005 date instead of only an open house. Mr. Strauss said that such a venue should be used to discuss adding additional options to the list of retained alternatives. Another attendee noted that an open house format draws a different crowd and perhaps an additional meeting should be held in addition to the open house. Mr. Woodhouse said he would like to see an alternative analysis exchange meeting rather than a poster session. He felt the Navy needed to provide justification for the alternatives, and that there should be an interim alternative that would allow for sufficient and proper time with proper public input. Mr. Weissenborn confirmed that this could be done for the 18 August 2005 date.
- Mr. James McClure, RAB member, said there are a variety of options and items to discuss, such as funding, technical understanding, and historical education. He said the RAB is not limited to formal meetings and that small groups could also meet. Mr. Weissenborn said it would not be a problem for the Navy and regulators to meet with the RAB more often if necessary.
  Mr. Woodhouse said that the RAB charter allows for the establishment of RAB subcommittees.
- Mr. Chuck offered that community members interested in receiving information about Hangar 1 should fill out a card to get on the NASA and Hangar 1 mailing lists.

Mr. Weissenborn concluded the Hangar 1 portion of the meeting.

SITE 25 FEASIBILITY STUDY REPORT ADDENDUM

The Site 25 presentation was tabled and will be given at the next RAB meeting due to time constraints. In the interim, Mr. Weissenborn provided the following brief status summary of Site 25. Site 25 will be treated using tidal marsh cleanup standards. The "do not exceed" numbers are as follows:

- Lead - 93.8 milligrams per kilogram (mg/kg)
- Zinc - 314 mg/kg
- DDT (dichlorodiphenyltrichloroethane) - 109 micrograms per kilogram (µg/kg)
- PCBs - 210 µg/kg

Based on the current data, the weighted average remaining is as follows:

- Lead - 28.4 mg/kg
- Zinc - 99 mg/kg
- DDT - 15.5 µg/kg
- PCBs - 9 µg/kg

Mr. Weissenborn said that, as is shown, after-cleanup concentrations are safe. He noted that the first Site 25 Feasibility Study Report Addendum comment period ends on 22 August 2005.

Mr. Weissenborn thanked Save the Bay for the 189 letters he received commending the Navy on the Site 25 cleanup.

OTHER BUSINESS

Mr. Weissenborn announced that the Site 27 ROD was signed on 7 July 2005. He said that the Navy is currently working on the remedial design for the site and that fieldwork is expected to begin after the rainy season.

RAB BUSINESS

RAB Schedule – The next meeting is scheduled for **Thursday, 15 September 2005**, from 7 to 9 p.m. at the Mountain View City Hall, fourth floor gallery. The final RAB meeting 2005 will be held on 17 November 2005

Future RAB Topics – The following topics were identified as potential agenda items for the next RAB meeting:

- Site 25 Feasibility Study Report Addendum
- Regulatory Update
- Hangar 1 (Site 29)
- Orion Park Housing

Adjourn – Mr. Moss adjourned the meeting at 9:45 p.m.; he thanked everyone for attending.

Mr. Weissenborn can be contacted with any comments or questions:

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GLOSSARY OF TERMS USED IN THESE MINUTES

BMPs – Best Management Practices
BRAC – Base Realignment and Closure
CASC – Friends of the California Air and Space Center
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
DDT – dichlorodiphenyltrichloroethane
EATS – East-Side Aquifer Treatment System
EE/CA – Engineering Evaluation/Cost Analysis
EPA – U.S. Environmental Protection Agency
MAPS – Military Aviation Preservation Society
MILCON – Military Construction
NAS – Naval Air Station
NASA – National Aeronautics and Space Administration
O&M – Operation and Maintenance
PCBs – polychlorinated biphenyls
RAB – Restoration Advisory Board
RI/FS – Remedial Investigation/Feasibility Study
ROD – Record of Decision
RWQCB – California Regional Water Quality Control Board, San Francisco Region

RAB meeting minutes are located on the Navy's Environmental Web Page at:
www.navybracpmo.org/bracbases/california/moffett/