

**FORMER MARINE CORPS AIR STATION
TUSTIN RESTORATION ADVISORY BOARD MEETING
May 16, 2007
FINAL MEETING MINUTES**

The Restoration Advisory Board (RAB) for former Marine Corps Air Station (MCAS) Tustin held its 77th regular meeting on Wednesday, May 16, 2007, at the Clifton Miller Community Center in Tustin. The meeting started at 7:04 p.m. and was adjourned at 8:30 p.m. These minutes summarize the discussions and presentations from the RAB meeting.

WELCOME/INTRODUCTIONS/AGENDA REVIEW

Mr. Darren Newton, former Base Realignment and Closure (BRAC) Environmental Coordinator (BEC) and Navy RAB Co-Chair, welcomed everyone to the meeting and said a variety of handout materials pertaining to Former MCAS Tustin are available on the information table. He introduced Mr. Rick Weissenborn, the new BEC for former MCAS Tustin, as of May 2, 2007. Mr. Newton stated that this RAB meeting would conclude his work for former MCAS Tustin. He reviewed the RAB meeting agenda. The key topics for this RAB meeting are the Environmental Program Summary and the presentation "Status Update on the Supplemental Investigations at IRP Site 6 and the Mingled Plumes Area."

Mr. Newton asked for self-introductions of attendees. There were no excused absences for the meeting.

Mr. Newton referred to the MCAS Tustin RAB Mission Statement, emphasizing that the purpose of the RAB is *"to promote effective and efficient cleanup that results in the protection of human health and the environment, and to increase community awareness of the dissemination of information by serving as the conduit between the community and the regulatory agencies."* Mr. Newton clarified that the Navy is not in charge of redeveloping property. For information regarding property reuse issues, contact Mr. Dana Ogdon or Mr. Matt West of the City of Tustin, as well as Lennar.

Mr. Newton said any correspondence sent to the Navy needs to be addressed to the BEC and mailed to the BRAC Office at former MCAS El Toro. The complete address is:

Base Realignment and Closure
Former MCAS El Toro
Attn: Mr. Rick Weissenborn, BRAC Environmental Coordinator
RE: Former MCAS Tustin
7040 Trabuco Road
Irvine, CA 92618

He also reminded meeting attendees that the Administrative Record for former MCAS Tustin is located at the in Building 307 at former MCAS El Toro. The Information Repository is located at the Main Library at University of California, Irvine. A handout on the information table provides specific location information. For additional information, visit the Navy BRAC Project Management Office website at: www.bracpmo.navy.mil

The next RAB meeting is scheduled for August 15, 2007.

OLD BUSINESS

Approval of 2/14/07 RAB Meeting Minutes – Don Zweifel, MCAS Tustin RAB Community Co-Chair

Mr. Zweifel asked for any amendments to the RAB meeting minutes. There were no objections or changes to the minutes, and the minutes were approved without amendment by the RAB.

NEW BUSINESS

Mr. Zweifel said that he was investigating phytoremediation and its effectiveness in addressing selenium. He stated that he had provided Ms. Patricia Hannon, Project Manager, Regional Water Quality Control Board (RWQCB), with a copy of the report addressing this topic. He expressed a desire for RWQCB to explore the topic in depth.

Environmental Program Status and the Installation Restoration Program (IRP) Status Update – Darren Newton

Mr. Newton explained that items that are bolded on the Environmental Program Status handout are new, and items that are not bolded have been listed in the past.

Operable Unit (OU) 1A IRP-13 South -1,2,3-trichloropropane (TCP) Groundwater Plume and OU-1B (IRP-3 and IRP-12 – trichloroethene (TCE) Groundwater Plumes – For OU-1A, the Navy issued a Draft Final Remedial Design on March 14, 2007, and the Draft 2006 Annual Time Critical Removal Action Performance Report in May 2007. The Navy is scheduled to begin pre-remedial construction activities, including treatment slab and sewer connections. Completion of the 100-percent Remedial Design for groundwater is planned for spring/summer 2007, and the groundwater system is anticipated to be operational in fall/winter 2007. The schedule calls for completion of the Final Operating Properly and Successfully (OPS) Report in 2009.

For OU-1B, the Navy completed a Final Soil Removal Report in November 2006 and a 90-percent Remedial Design for groundwater in February

2007. The groundwater system is scheduled to be operational in fall/winter 2007 and the Final OPS Report is scheduled for 2009. Mr. Newton stated that OU-1A and OU-1B treatment systems site, otherwise known as the "super pad," will be operational at the same time. He thanked Mr. Ogdon for his help on this project.

OU-4B (IRP-6, IRP-5S(a), IRP-11 (Areas B and C), IRP-13W, MMS-04, and Mingled Plumes Area (Area B)) – The Navy conducted two additional rounds of sampling at IRP-6 and Mingled Plumes Area in March 2007, and a third round of sampling will begin shortly. The Draft Annual Groundwater Monitoring Report will be issued May 21, 2007. An aquifer test was conducted at IRP-5S(a) in May 2007, and the revised Draft Feasibility Study (FS) Report is scheduled for summer 2007 following additional sampling. The Final FS Report and Proposed Plan are planned for 2008 and the Final Record of Decision is scheduled for January 2009.

MTBE (methyl tert-butyl ether) Groundwater Plume/Underground Storage Tank (UST) Site 222 – The draft version of the Final Petroleum Corrective Action Program (PCAP) was issued February 14, 2007. The Navy plans to reconfigure the current PCAP in order to relocate the treatment system to the super pad adjacent to Armstrong Avenue. The Navy is currently in preparation to connect additional extraction well 222MW13 to the current PCAP system. Additionally, the Final PCAP documentation is scheduled for issuance in July 2007 and implementation will follow in August 2007. The Final PCAP system is expected to operate for 18 to 24 months.

Regulatory Agency Update - Regulatory Agency Representatives

Ram Peddada, Project Manager, Cal/EPA Department of Toxic Substance Control

Mr. Peddada briefly went over the reports and documents under DTSC review.

DTSC is in the process of reviewing the OU-1A and OU-1B Remedial Design package and regulatory agency comments are due May 29, 2007.

DTSC is currently completing work on the OU-1A and OU-4B Parcel 24 Finding of Suitability for Early Transfer (FOSET). The FOSET includes 4.8 acres of property that will be transferred to Lennar. The FOSET packages are scheduled to be submitted to the governor shortly for signing in order for the transfer to occur. The entire process is expected to take around three to four months.

DTSC is currently involved in developing a cleanup agreement with Tustin Legacy Partners that is expected to be signed in about two weeks. According to the agreement, if contamination is detected, Tustin Legacy Partners would write the cleanup work plan and submit it to DTSC for approval instead of going through the Navy.

Mr. Peddada noted that the Navy issued a letter to the City of Tustin that contamination has been found at the Costco gas station. Construction at the gas station was stopped while DTSC investigated the situation and reviewed all documents pertaining to the safety of the workers onsite. Subsequently, DTSC has granted permission to continue work on the gas station.

Patricia Hannon, Project Manager, Regional Water Quality Control Board

Ms. Hannon, RWQCB, stated that she had reviewed the draft version of the Final PCAP for UST 222, and comments were submitted. The Navy is in the process of discussing the response to comments with DTSC; most were clarification issues.

The Draft Infiltration Pilot Test Technical Memo for UST 222 has been reviewed, and RWQCB concurred with this document. Comments were submitted on the Draft Closure Report for UST 29A, and the Navy is currently deciding how to move forward with contaminated soil that was left there. RWQCB has informed the Navy that if the building is torn down, then the soil would need to be removed as well.

RWQCB has concurred with the Draft Final 90-percent Remedial Design for hydrological containment at OU-1A and OU-1B. Currently, RWQCB is reviewing the monitoring reports for the treatment systems at UST 222 and IRP-13S, the IRP-13S treatment system annual report, and the groundwater report for OU-3.

Mr. Zweifel asked if Building 29A posed any potential harm and if the Navy planned to tear it down. Ms. Hannon replied that Building 29A does not pose a threat. Mr. Newton added that the Navy has no plans at this point to demolish Building 29A because it is a historic structure.

Presentation – Status Update on the Supplemental Investigations at IRP Site 6 and the Mingled Plumes Area

Mr. Tim Heironimus, Bechtel Environmental CLEAN contractor, and Mr. Joseph Hunt, Kleinfelder CLEAN subcontractor, provided the presentation on IRP-6 and the Mingled Plumes Area. Mr. Heironimus stated that a Draft FS Report for OU-4B was submitted in 2005. Through the process of reviewing and commenting on the document, the Navy determined the need to collect additional data at IRP-6 and IRP-5Sa. The Navy plans to complete the delineation of the plumes from the additional data collected at the sites. This information will be incorporated into the Draft Final FS Report. He explained that Phases I and II have been conducted and initial field mobilization for Phase III is just getting underway.

OU-4B Site Characteristics and Locations

Mr. Heironimus presented background information to the RAB. IRP-6 is located in the southern portion of former MCAS Tustin and is known as the former paint

locker and drum storage area. It was used from 1972-1981 as a storage area for hazardous materials such as paint thinners, oils, hydraulic fluids, and solvents. These materials were contained in drums stored onsite until they were taken offsite for ultimate disposal.

In 1981, the facility was redeveloped. Building 250, a receiving and distribution center for station supplies, was built over the site. The primary groundwater chemicals of potential concern (COPCs) are 1,1-dichloroethene (1,1-DCE) and TCE. These chemicals exceed the maximum contaminant level (MCL) of 5.0 parts per billion (ppb) in the 1st water bearing zone (WBZ).

The Mingled Plumes Area is located in the central portion of former MCAS Tustin and contains five areas of concern (AOCs). The five AOCs consist of collapsed sewer lines and miscellaneous spill areas. The primary groundwater COPC is TCE. TCE exceeds the MCL in the 1st and 2nd WBZs.

Mr. Heironimus pointed out the locations of IRP-6 and Mingled Plumes Area on a map. IRP-6 is adjacent to the Carve-out Area 2, and the surrounding property that has been transferred is being redeveloped at this time. Pre-construction groundwater sampling was conducted along the Warner Avenue roadway extension. The Navy also conducted additional HydroPunch® sampling. He explained that HydroPunch® sampling enables the project team to obtain data in a matter of hours. This allows for in-field planning and determining the need for collecting additional samples. The Navy was provided data on a daily basis along with accompanying reports that described the next steps planned for collecting samples.

Sampling and analysis determined that TCE present in groundwater is above MCLs in a few areas. Evaluation of this data revealed the need to determine whether the detections could be reproduced and if contaminants were reaching the 2nd WBZ.

Supplemental Investigation

The purpose of the supplemental investigation was to obtain additional data on volatile organic compounds (VOCs) in the groundwater. Discrete groundwater samples were collected through HydroPunch® sampling, and samples were submitted to an onsite mobile laboratory for rapid results. This allowed the Navy to determine whether they needed to sample additional areas and to have the ability to provide the stakeholders with immediate data on a daily basis. The supplemental investigation was conducted in two phases.

For IRP-6, the Navy's objective was to delineate the extent of 1,1-DCE and TCE in the 1st WBZ. The investigation also involved determining the location and number of groundwater monitoring wells that would be installed to track VOC concentrations, potential plume migration, and groundwater flow direction. Representative sampling using these wells provides the needed data. The Navy also collected soil samples at specific locations to evaluate the presence of

VOCs. If VOCs were detected, the Navy conducted modeling on each sample to determine groundwater leachability potential.

For the Mingled Plumes Area, the Navy's objective was to evaluate the extent of TCE in the 2nd WBZ.

IRP-6 Supplemental Investigation Results

Mr. Hunt provided a summary of the investigation results for IRP-6. He showed on a map where Phase I and Phase II of the supplemental investigation were conducted. Environmental investigation work is being performed both inside and outside of the carve-out area.

Phase I (February 27 - March 23, 2007)

- Total of 58 HydroPunch® samples were collected from the 1st WBZ (25 feet below ground surface [bgs]).
- Four HydroPunch® samples were collected from the 2nd WBZ (44 feet bgs).
- Concentrations of 1,1-DCE and TCE were above the MCLs in 14 of the 1st WBZ samples.
- No 1,1-DCE or TCE detections were reported in any 2nd WBZ samples.
- A total of 12 soil samples from four locations were analyzed; no VOCs were detected.

Phase II (April 4 - April 10, 2007)

- Total of 26 HydroPunch® samples were collected from the 1st WBZ (25 feet bgs).
- Concentrations of 1,1-DCE and TCE were reported above MCLs in 16 samples.
- Additional fieldwork is necessary outside of Carve-Out Area 2.

Mr. Hunt explained that on the map, the yellow highlighted points represented DCE above the MCL at IRP-6. Green highlighted points represented DCE and TCE detections above their respective MCLs. The majority of DCE and TCE concentrations detected were very low.

Mingled Plumes Area Supplemental Investigation Results

Mr. Hunt also showed a map of the Mingled Plumes Area located in the central portion of former MCAS Tustin and pointed out the current location of five AOCs. He then reviewed data gathered and findings from Phases I and II.

Phase I (February 27 - March 23, 2007)

- Three HydroPunch® samples were collected from 2nd WBZ (44 feet bgs)
- TCE was reported at 38 micrograms per liter (µg/L)

Phase II (April 4 - April 10, 2007)

- Three HydroPunch® samples collected from 2nd WBZ at step-out locations around well GW047
- TCE was reported at concentrations ranging from 18 to 36 µg/L and this exceeds the MCL in the 1st and 2nd WBZs.

For the benefit of the RAB, Mr. Ogdon asked the presenters to clearly distinguish the carve-out area and the area outside of the carve-out at IRP-6. Both areas were pointed out using the aerial map and the maps in the presentation handout. Mr. Ogdon also asked that the Costco gas station, which is outside of the carve-out area, be pointed out. This previously transferred property is being redeveloped and is within the area of the supplemental investigation. Mr. Hunt noted that Costco will be installing gasoline storage tanks in the recently excavated site. Mr. Ogdon noted that DTSC and RWQCB were concerned with worker safety due to excavation activities for the new gas tanks. It was explained that the workers have undergone proper health and safety training. Ms. Arnold confirmed that the health and safety plan was reviewed and approved by the regulatory agencies, and the Navy has been fully communicative with the City of Tustin regarding investigation procedures in the area outside of the carve-out area.

Ms. Arnold explained that the RAB has been kept abreast of the contamination outside of the carve-out area. The investigation outside of the carve-out area was prompted by preliminary environmental data obtained by the developer. Mr. Ogdon noted that the purpose of the investigation is to determine the boundaries of contamination that was previously not known to have existed.

Ms. Mary Lynn Norby, RAB member, asked what direction the groundwater flows. Mr. Hunt replied that it is estimated that groundwater flows to the south; however, the Navy plans to conduct a further investigation because of the changes (due to redevelopment) that have taken place onsite. Ms. Norby asked if there were chances for migration of contaminants outside of the Tustin city boundary. Mr. Hunt responded that the Phase III investigation would allow the Navy to gather more data points to better assess migration. However, at this point, concentrations are very low. He explained there is not a lot of contaminant mass present to drive significant migration into any zone.

Phase III Supplemental Investigation

Mr. Hunt explained that the purpose of the Phase III investigation is to complete the delineation of the VOC plume in groundwater at IRP-6. For the Mingled Plumes Area, Phase III will focus on delineating the presence of VOCs in the 2nd WBZ. Mobilization efforts for the Phase III investigation are underway and sampling will follow.

The upcoming field work at IRP-6 will focus on delineation of the VOC plume in the southeast corner of the former Marine Corp Air Station and delineation of VOCs in groundwater at two pre-development locations. Data will be evaluated to determine if installation of monitoring wells would be necessary. Monitoring

wells are important because sampling data collected from these wells validates the HydroPunch® data. The Navy plans to install a minimum of three wells to have a solid understanding of the groundwater flow direction and the gradient.

The purpose of the Phase III HydroPunch® investigation at the Mingled Plumes Area is to delineate the presence of VOCs in the 2nd WBZ. The upcoming field work will be conducted to delineate VOC plume in the 2nd WBZ. HydroPunch® sampling is being planned to a depth of 44 feet bgs.

Next Steps

Mr. Heironimus summed up the next steps to be taken for the IRP-6 and the Mingled Plumes Area.

- Complete Phase III fieldwork
- Evaluate supplemental investigation data
- Update the groundwater model
- Update the human health risk assessment (HHRA)
- Incorporate new information into the Draft Final FS Report to allow for multiple alternatives to be evaluated.

Open Discussion

Ms. Norby asked if there was an updated aerial photograph of the former base that could be used instead of the outdated one from 1994. Mr. Newton replied that no recent aerial photographs have been taken of former MCAS Tustin. Ms. Norby questioned if IRP-6 was identified in the original program. Ms. Arnold replied that IRP-6 has been part of OU-4 for a long period of time. The Navy has been thoroughly investigating IRP-6 for many years; the expansion of the study outside of the carve-out area is new information.

Mr. Zweifel made a formal request that a toxicologist be involved in the HHRA. Ms. Arnold replied that toxicologists are usually only involved in residential HHRA, and the HHRA for IRP-6 is for a commercial site. However, she stated that the Navy is more than willing to consider the RAB request.

Future Topics/Schedule Next RAB and Subcommittee Meetings/Meeting Evaluation and Closing

The RAB requested that the following topics be covered at upcoming RAB meetings:

- Toxicologist involvement in the IRP-6 HHRA
- Phytoremediation for absorption of selenium at former MCAS Tustin
- Annual Groundwater Monitoring Report for OU-3B

The RAB meeting was adjourned at 8:30 p.m. The next RAB meeting is scheduled for August 15, 2007.

List of Handouts Provided at the Meeting

RAB Meeting Agenda/Public Notice – May 16, 2007 (77th) RAB Meeting.
Meeting minutes from the February 14, 2006 (76th) RAB Meeting.
Presentation:” Supplemental Investigation for IRP Site 6 and Mingled Plumes Area, Former MCAS Tustin.”
Former MCAS Tustin Environmental Program Status.
Map – MCAS Tustin Operable Units, Major AOCs, and MTBE Plume - Third Quarter 2006.
Restoration Advisory Board Fact Sheet/Membership Application.
Former MCAS Tustin - Where to Get More Information.
Former MCAS Tustin Marine Corps/Navy Team Contact Information.
Darren Newton, Navy BEC for Former MCAS Tustin and Former MCAS El Toro, Contact Information.
DTSC Public Participation Specialist Tim Chauvel, Contact Information.
For More Information: Administrative Record and Information Repository Locations.
Former MCAS Tustin Installation Restoration Program - Mailing List Coupon.
Former MCAS Tustin Installation Restoration Program Advisory Board Mission Statement.
Department of the Navy, “Policy for Conducting Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Statutory Five-Year Reviews,” November 2001.
Department of the Navy, “Policy for Conducting Five-Year Reviews Under the Installation Restoration Program,” May 2004.
The Under Secretary of Defense, “DoD Policy On Responsibility for Additional Environmental Cleanup after Transfer of Real Property.”
Department of Defense, “A Guide to Establishing Institutional Controls at Closing Military Installations,” February 1998.
Department of Defense, “Institutional Controls: What Are They and How are They Used,” Spring 1997.
U.S. EPA, “Checking Up On Superfund Sites: The Five-Year Review,” June 2001.
U.S. EPA, “Five-Year Review Process in the Superfund Program,” April 2003.

Copies of the meeting minutes and handouts provided at the February 14, 2007 RAB meeting are available at the MCAS Tustin Information Repository located at the University of California, Irvine, Main Library, and Government Publications Section. Library hours are 8:00 a.m. to 7:00 p.m. Monday through Thursday; 8:00 a.m. to 5:00 p.m. Friday and Saturday; and 1:00 p.m. to 5:00 p.m. on Sunday. It is recommended, however, that people call the library for confirmation of these hours as they may be modified during final exam and holiday periods. The Government Publications Section may be reached at (949) 824-7362.

Minutes from previous RAB meetings can be found on the internet on the Navy BRAC website: www.bracpmo.navy.mil