

**FORMER MARINE CORPS AIR STATION  
TUSTIN RESTORATION ADVISORY BOARD MEETING  
April 20, 2005  
MEETING MINUTES**

The Restoration Advisory Board (RAB) for the Marine Corps Air Station (MCAS) Tustin held its regular meeting on Wednesday, April 20, 2005, at the Tustin Senior Center in Tustin. The meeting started at 7:10 p.m. and was adjourned at 9:45 p.m. This meeting was the 69<sup>th</sup> meeting of the RAB. These minutes summarize the discussions and presentations from the RAB meeting.

**WELCOME/INTRODUCTIONS/AGENDA REVIEW**

Mr. Don Zweifel, RAB Co-Chair, opened the meeting by welcoming everyone and asking for self-introductions. Mr. Zweifel said that this meeting is a great opportunity for the RAB members, agency members, and the Navy to come together to discuss issues pertaining to Former MCAS Tustin. He added that these meetings are a learning experience for the public and the regulators as well. He then reviewed the meeting agenda.

Mr. Dana Ogdon, City of Tustin, announced that Marc Tomich will be the new City of Tustin Representative on reuse issues and the city's new RAB member. He added that Mr. Tomich formerly worked for the County of Orange and he brings a lot of experience to his new job.

**OLD BUSINESS**

**Approval of 10/7/04 and 1/12/05 RAB Meeting Minutes – Don Zweifel (MCAS Tustin RAB Co-Chair)**

Mr. Zweifel asked for any changes or comments prior to approval of the 10/7/04 RAB meeting minutes and the 1/12/05 RAB meeting minutes. Ms. Patricia Hannon, Regional Water Quality Control Board (RWQCB) said in regard to the 1/12/05 meeting minutes, on page 3, 11 lines down, to change the phrase from "they can't lay eggs" to "the eggs don't hatch." There were no other changes suggested and both meeting minutes were approved.

Mr. Dunaway, BRAC Environmental Coordinator (BEC), said that it is time to revisit the topic of choosing a new RAB Community Co-chair. He showed a listing of the RAB Community Co-Chair responsibilities which is included in the RAB's Operating Procedures. A key responsibility is working closely with the BEC in choosing meeting topics. He added that the Community Co-Chair role is not a huge task and the Navy provides much support. He said there is a low attendance of RAB members at tonight's meeting and it would be better to develop a voting mechanism for the next meeting. Mr. Zweifel added that he has been the RAB Community Co-chair for a few years and if anyone is interested in serving in this role to let him or Mr. Dunaway know.

Discussion

Mr. Zweifel said he had an interest in the issues of selenium and has been talking with Ms. Hannon and Mr. Ram Peddada, Department of Toxic Substances Control (DTSC). Ms. Hannon said in regards to the Petroleum Corrective Action at UST-222, MCAS Tustin has been grandfathered in so the old permit is still in effect while the new permit is being drafted. Mr. Zweifel said the U.S. Environmental Protection Agency (U.S. EPA) for selenium in effluent is 4 parts per billion (ppb). Ms. Hannon clarified that the state total maximum daily load (TMDL) results in a selenium effluent limit in San Diego Creek of 5 ppb. She added that the U.S. Fish and Wildlife Service has suggested that the TMDL be 2 ppb or less. Mr. Dunaway stated that selenium is naturally occurring and the levels discussed are not harmful to human health but could have adverse effects on the surrounding wildlife. He added that the Navy relies on the RWQCB to provide proper guidance on this issue, and thus far what the Navy is doing is acceptable to the RWQCB.

## **NEW BUSINESS**

### **Installation Restoration Program Status Update – Jerry Dunaway**

Mr. Dunaway provided the following update of the MCAS Tustin Installation Restoration Program (IRP):

Operable Unit (OU) 1A IRP-13 South - 1,2,3- trichloropropane [TCP] groundwater plume) and OU-1B (IRP-3 and IRP-12 - trichloroethylene [TCE] groundwater plumes) – The soil removal commenced in January 2005 and the site restoration was completed this past week. The groundwater treatment system enhancements are currently in design. The system enhancements are to be operating in 2006.

OU-1B also had the Record of Decision (ROD) signed in December 2004 which includes soil removal as a portion of the remedy. This is a complex issue involving historical buildings and the need to excavate contaminated soil near the small (helium storage) building. The soil removals are scheduled for summer 2005; although there was a delay resulting from the historic building requirements through the State Historic Preservation Office (SHPO). The Navy gave SHPO, City of Tustin, and the Advisory Council the opportunity to review the plans for the additional sampling. The plans of the Navy are to

- Perform soil borings next to the building to determine if the soil needs to be removed, and if so, how much soil would need to be excavated.
- If the soil needs to be removed, determine if the building has to be demolished.

The groundwater treatment system is currently being designed. The Operating Properly and Successfully (OPS) documentation is scheduled for submittal in 2007.

OU-4B (IRP-6, -5S(A), -11 [Areas B and C], 13W, MMS-04 [Area B]) – Mr. Dunaway said the OU-4 sites are a lower risk concern and are various sites. OU-4A sites are in green on the aerial map handout. These sites were evaluated and determined to require no further action (NFA). In January 2005, the regulators and the Navy signed a NFA ROD for these sites.

There will be an emergency removal action at selected sites in 2005. Mr. Dunaway said they are taking this information and applying it to other sites as part of the final remedy. The Draft Feasibility Study will be issued in June 2005; the proposed plan is scheduled for submittal in February 2006, with the Final ROD scheduled for submittal in October 2006. This ROD is one the RAB will get to review, and he suggested having a RAB subcommittee meeting to discuss OU-4B, and he added that the sites may have different cleanup technologies proposed.

The Arsenic Area of Concern (AOC) Removal Action – This removal action was started in August of 2004 and site restoration was completed in February 2005. The Draft Closure Report will be issued in May 2005; subsequently the Final Closure Report will be issued in July 2005.

The arsenic cleanup was a success and all objectives were accomplished. There were two buildings demolished as part of the removal action, and the Navy in partnership with the City of Tustin worked together on the demolition. The demolition provided necessary access to soil with higher levels of arsenic. The fill material that was excavated from the site was originally imported from off the station to serve as a base for constructing the foundation of the two buildings.

MTBE (methyl tert-butyl ether) Groundwater Plume (Underground Storage Tank [UST] Site 222) – The proposed cleanup goal for MTBE was presented to the RAB at the 1/12/05 RAB meeting. There are a series of water bearing zones (WBZ) present above the regional groundwater aquifer that is used as a drinking water source. The Navy proposed cleanup levels for each WBZ that would be protective of drinking water. Computer modeling was done to assist in determining the levels for each WBZ. The proposed levels, per WBZ are as follows:

- 1<sup>st</sup> WBZ – 300 ppb
- 2<sup>nd</sup> WBZ – 40 ppb
- 3<sup>rd</sup> WBZ – 13 ppb

The Navy is working with agency members to formalize levels and Mr. Johnson will expand upon this more in his presentation tonight.

FOST #7 –The Department of Navy intends to sign this FOST in April 2005. The Navy then expects to transfer parcels CO-3, CO-7, and portions of CO-5 later this year.

#### Discussion

Mr. Ogdon asked about OU-1A and the yellow plume with the dashes on the aerial map. Mr. Marc Smits, Navy Remedial Project Manager (RPM), said that typically they have not shown the TCE (trichloroethene) because they were focused on 1,2,3-trichloropropane (1,2,3-TCP) and now they are showing the status of both plumes status on the map. However, they are more concerned with the 1,2,3-TCP, but will treat both at the same time. Mr. Dunaway said it takes more effort to clean up the 1,2,3-TCP because it's more toxic than the TCE. Mr. Ogdon said the MTBE (methyl tert-butyl ether) plume looks longer than it used to be. Mr. Chris Johnson, Shaw Environmental, said it looks longer because we show the 10 ppb range into the 1<sup>st</sup> water bearing zone (WBZ) but it's been the same shape in the 2<sup>nd</sup> and 3<sup>rd</sup> WBZ. Mr. Smits said the high

concentrations that were on the edge are no longer there, and on the edge there are lower concentrations, creating a very long dilute plume.

Mr. Fred Meier, RAB member, said he didn't remember the plume contamination going under the hangar building and he asked if it is endangering the building. Mr. Dunaway said the plume has been there and this was previously reported. Ms. Melanie Kito, Navy RPM, said the demolition of the small building next to the hangar is only going to be a small component of this project and the Navy will keep you posted on any demolition information that develops.

### **Regulatory Agency Comment Update - Regulatory Agency Representatives:**

#### **Patricia Hannon, Project Manager, Regional Water Quality Control Board (RWQCB)**

Ms. Hannon said she observed the soil excavation at UST-222. Also, she just completed reviewing the work plan for the soil gas and groundwater investigation at IRP Site 5Sa and will be reviewing a small work plan for the hydraulic lifts at Building 251, near the Arsenic AOC. She is also reviewing the groundwater monitoring report for Moffett Trenches, part of OU-3.

Mr. Zweifel asked her about his concerns with selenium and the permits the Navy needs. Ms. Hannon said that currently MCAS Tustin has been operating their systems under a discharge permit which she is in the process of renewing. The new permit will have new discharge limits for benzene, TCE, TPH, and it will now have discharge limits for 1,2,3-TCP, selenium, total dissolved solids, and total nitrogen which includes nitrites, nitrates, ammonia, and organic and inorganic nitrogen. RWQCB staff expects to have the permit presented before the Board in June 2005 which will make the determination to approve or disapprove the permit. Ms. Hannon suggested going to the RWQCB website for more information on the new permit's discharge limits, the website address is: <http://www.waterboards.ca.gov/santaana/>

Ms. Mary Lynn Norby, RAB member, asked how this will affect the current treatment systems. Ms. Hannon said the two current treatment systems do not meet the new proposed standard for treating selenium. She said treatment systems will have to discharge at a concentration less than 5 ppb. She also noted that selenium is very difficult to treat and can be very expensive. The Board members will give MCAS Tustin time to come up with the technology needed to meet the requirements. Once the new levels have been agreed upon, a document will be available for public comment. Ms. Norby asked if the RAB would be informed of this change. Ms. Susan Reynolds, RAB member, asked if the addition of new contaminants is site-wide or site-specific. Ms. Hannon said the RAB will be informed and the issues are site-specific for MCAS Tustin.

#### **Ram Peddada, Project Manager, Cal/EPA Dept. of Toxic Substances Control (DTSC)**

Mr. Peddada said DTSC signed the FOST #7. However, he noted that they cannot transfer IRP Site 5S(B) yet because it is not part of FOST #7. Mr. Dunaway said it is a NFA site but they are withholding it from transfer as a safeguard because the groundwater plume touches its boundaries. Mr. Peddada said some monitoring will be conducted next week and DTSC will make comments on IRP Site 5S(A) after reviewing

the results. He said he has received the IRP 3, Building 29A soil sampling work plan and will review it next week.

**Presentations:**

**Moving Forward—Considerable Progress Made on Key Groundwater and Soil Cleanup Projects, Chris Johnson (Shaw Environmental) and Marc Smits (Navy Remedial Project Manager)**

**Soil Removal Actions, OU-1A and UST-222**

Mr. Johnson said there are two soil removal actions occurring, one at OU-1A and another at UST-222 (the source area of MTBE).

At OU-1A, the Feasibility Study indicated that if the soil was left in place with the TCE concentrations above 400 ppb, it would result in a continuing source of contamination to groundwater. The ROD describes the removal of the TCE-contaminated soil. OU-1A activities were completed during April 2005. About 4,400 tons of TCE soil was removed and transported off-site to a landfill facility beginning in January 2005. All excavation confirmation sampling results were below 400 ug/kg. About 228,000 gallons of TCE-impacted groundwater within the excavation area was transported to the Petroleum Corrective Action Program (PCAP) treatment system. The field activities conducted followed the BCT-approved Final Work Plan for OU-1A. Currently, the soil removal report that documents all field activities is being prepared.

Mr. Johnson said the contaminated soil was excavated and loaded directly onto trucks that were hauled off-site at the end of each excavation day. The truck loads were taken to an approved hazardous waste facility in Buttonwillow, California. The total depth of the excavation was 17 feet. In the photos shown at the RAB meeting groundwater is visible along with exposed, wet clay at the site. He clarified that the water seen in the slides is not from precipitation, it is groundwater. Mr. Johnson said they took samples of the water and detected TCE. The original plan was to pump out the water and discharge it after the rains. But after testing the water, it had a reading of 19 ppb so it was all transported to the treatment system after a temporary pipeline was constructed.

For the UST-22 soil removal activities, Buildings 189 and 199 were demolished. After demolition, backfill for the site was brought in from a commercial quarry (El Toro Materials) and tested. Results showed it was not contaminated and it was similar to the soil that was there previously, which had similar clay soil composites.

Mr. Meier said he had reservations on the price they were paying for the backfill soil. Mr. Johnson said California Department of Health Services (DHS) has certain requirements for soil to be used as backfill. He said it was easier to pick an area to obtain offsite backfill; that is a better safeguard. Ms. Kristin Stout, RAB member, said city and county development departments are more concerned with testing and getting soil that is guaranteed to be clean than the price. Mr. Ogdon said the City of Tustin is taking the same measures to ensure they are replacing contaminated soil with clean soil on their redevelopment projects. Overall, obtaining clean soil from a quarry source avoids future problems and liability.

Mr. Johnson said UST-222 soil removal activities included gasoline-impacted soil present downgradient from the former tank location within the day care center parking lot

and beneath Building 189 (flower shop) and Building 199 (day care center). The impacted soil is considered a source to further groundwater contamination. As previously stated, both buildings were demolished in preparation for the soil removal activities. Over 10,000 tons of gasoline-impacted soil is currently being removed and transported to an off-site thermal treatment system in Irwindale, California. The soil is placed into a thermal desorption unit that functions like a giant clothes dryer. Soil tumbles around in the flame-heated chamber. It is very effective for removing certain contaminants. The impacted groundwater within the excavation area will be transported to the PCAP treatment system. The field activities are guided by the final work plan for various sites which was approved by the BCT in January 2004. Excavations are expected to be completed at the end of May 2005. A soil closure report that documents all field activities will be prepared.

Mr. Mack Reed, RAB member, asked if the thermal treated soil will be reused. Mr. Johnson said it will not be reused at Former MCAS Tustin. Mr. Reed asked if the treated soil could be sold. Mr. Johnson said they are not allowed to resell it. Mr. Adrian Morton, RAB member, asked how much has been spent so far on the cleanup at UST-222. Mr. Johnson said it was in the millions of dollars. Mr. Dunaway added that this has been an expensive site for the Navy.

Mr. Johnson showed demolition photos of Buildings 189 and 199 and said they crush the buildings and then separate the debris for recycling. During the soil excavation, Mr. Johnson said you can see the extraction wells with the conveyance piping; they cut out an area that starts from the previous excavation site to where the existing buildings are. The soil in this area has tested clean and stockpiled for reuse. In the last slide of the handout, you can see residual groundwater within the excavated area. Ms. Norby asked how deep the excavation is and Mr. Johnson said it was about 17 feet. Mr. Dunaway asked how much this was compared to last year, and Mr. Johnson said last year they did not hit groundwater until about 19 feet.

### **Time-Critical Removal Action (TRCA) at OU-1A, IRP Site 13S**

Mr. Smits said the Navy installed the TCRA system in order to prevent horizontal and vertical migration of 1,2,3-TCP. They will continue to operate the TCRA system until the final remedy is in place or the plume is stabilized. The system is only intended to be used as an interim measure. Operation of the system began in January 2002 with seven extraction wells. It has been operating at greater than 90 percent efficiency for over 3 years, and at 94 percent efficiency during the last year. Over 22 million gallons of groundwater has been treated and discharged by the system. Although the objective is to contain the plume, about 4 pounds of 1,2,3-TCP has been removed from the groundwater.

Over time, concentrations of 1,2,3-TCP at the leading edge of the plume have been stable. The results indicate the TCRA system has been effective in containing the plume. It also shows decreases in concentrations in the upgradient portions of the plume. The new extraction wells to be installed at OU-1A during the remedial action are intended to enhance the existing system. The Navy will add two more wells to enhance the current system and add a couple of components to meet the long-term needs. The system will continue to operate until the new system is completed, which should be in spring or summer 2006. The wells that are within the TCRA system will be integrated into the new system.

In the handout, the graph of the 1<sup>st</sup> WBZ shows water levels at one well from 1997 to the present and a drop from 5 to 7 feet in groundwater elevation over time is indicated. This could be from drought conditions or because of pumping at the extraction wells. The trend in concentrations at the wells over time appears to be going down. Concentrations at one well have decreased from 50 to 10 µg/L for 1,2,3-TCP. There has been an increase in the water levels as measured in the wells in the beginning of 2005 due to the significant rainfall this year.

Mr. Smits showed another well in the 1<sup>st</sup> WBZ with concentrations of 1,2,3-TCP decreasing from 70 µg/L to 20 µg/L. Mr. Zweifel asked when the latest results from March 2005 would be available, and Mr. Smits said at the next RAB meeting.

In another well in the 2<sup>nd</sup> WBZ near an extraction well, Mr. Smits said that the extraction wells could be pulling the plume, thus resulting in increasing concentrations toward this well. Even if downward trends are recorded, the goal is to have concentrations below 0.5 µg/L for 1,2,3-TCP. There is more variability in the 2<sup>nd</sup> WBZ, but the trends are for decreasing concentrations. In the 3<sup>rd</sup> WBZ, some operational problems were experienced, but when the system was operating successfully it was performing as intended. Mr. Morton asked how many 3<sup>rd</sup> WBZ wells there are and Mr. Smits said about 10 wells total.

### **Petroleum Corrective Action Program at UST-222, MTBE Treatment System**

Mr. Johnson said the cleanup objectives were to remove the MTBE contaminant mass and control the migration of impacted groundwater from the source area at UST-222. The focus is source removal. The Navy also wants to continue operation of the interim PCAP system until the Final PCAP system is in place, or until the plume is stabilized. The system was originally intended as an interim measure, but has remained in-place based on the performance and reduction of the MTBE concentrations in the groundwater.

Mr. Johnson said the system began operating in August 2001 and since that time has operated at an average of 90 percent efficiency for the entire life of the system. There has been over 81 million gallons of contaminated groundwater treated and discharged. About 4,100 pounds of MTBE has been removed from the groundwater.

From the source area in the 1<sup>st</sup> WBZ, MTBE concentrations have decreased from 148,000 ppb to 44,300 ppb. This decrease coincides with the soil removal activities. In the 2<sup>nd</sup> WBZ, MTBE concentrations have decreased from 2,040 ppb to 26 ppb (which controls the vertical migration at the source area).

Downgradient in the 1<sup>st</sup> WBZ, MTBE concentrations have decreased from 57,000 ppb to 46 ppb. In the 2<sup>nd</sup> WBZ, MTBE concentrations have decreased from 62,000 ppb to 208 ppb.

In the 1<sup>st</sup> WBZ the overall length of the plume has remained the same while the overall width of the MTBE plume has decreased by approximately 40 percent. The 10,000 ppb contour has been reduced in both length and width by over 80 percent. This is a dramatic decrease because the 10,000 ppb contour used to be a 100,000 ppb contour. Downgradient in the 2<sup>nd</sup> WBZ, the overall length of the MTBE plume has decreased

slightly; overall the width of the plume has remained the same. The 10,000 ppb contour has been reduced in both length and width by over 80 percent. Mr. Dunaway said by the next RAB meeting, we should know if the RWQCB has approved the Navy's proposals.

Mr. Johnson said there have been several rainy periods from December 2004 to February 2005 that caused increases in groundwater elevations and increases in both MTBE and benzene groundwater concentrations in the source area. This indicates that infiltration of groundwater is successful in washing and leaching out residual contamination from the soil and groundwater in the source area. Extensive modeling was performed to determine the quantity of treated groundwater that could be applied. This infiltration rate could be maintained by using a sprinkler system to apply treated groundwater throughout the entire source area at a flow rate not to exceed 25 gallons per minute. Removal of the residual contamination created through infiltration could be managed with one additional extraction well installed within the source area. Duration of the infiltration activities should not extend beyond 12 months.

Mr. Morton asked if the source area of the MTBE plume has anymore MTBE coming into it. Mr. Johnson said once the soil is removed, this source for MTBE would be reduced and decreasing the potential for MTBE-contaminated soil to impact the groundwater.

Mr. Peddada asked if they could use trenches for infiltration of treated groundwater. Mr. Johnson said he doesn't think it would be as effective a method as the overlapping that is achieved with a sprinkler system.

Mr. Johnson said during the preparation of the annual performance report, current and new groundwater cleanup technologies are evaluated. Naval Facilities Engineering Command (NAVFAC) has participated in the demonstration of over 15 innovative MTBE cleanup technologies. NAVFAC's Alternative Restoration Technology Team (ARTT) used this knowledge to develop an MTBE decision tool to evaluate innovative technologies. The decision tool uses site-specific conditions and evaluates them against a list of proven technologies to determine which are incompatible with the conditions of a particular site.

**Soil Matrix**

Bioventing  
Chemical Oxidation  
Natural Attenuation  
Soil Vapor Extraction (SVE)

**Groundwater Matrix**

Air Sparging  
Bioaugmentation  
Biobarrier  
Biostimulation  
Chemical Oxidation  
Natural Attenuation  
Phytoremediation  
*In Situ* Thermal  
Pump and Treat (Various Technologies)

According to the evaluation results for the soil matrix, SVE and *in situ* chemical oxidation are both viable treatment technologies. Bioventing and natural attenuation are not viable treatment technologies due to high source concentrations and soil type (clay).

The groundwater matrix showed that *in situ* chemical oxidation and pump/treat are viable treatment technologies. Air sparging, bioaugmentation, biobarrier, biostimulation, natural attenuation, phytoremediation, and *in situ* thermal are not viable treatment technologies due to the high source concentrations and depths of the contamination.

Mr. Johnson said information obtained will be expanded upon for UST-222 at MCAS Tustin to look at additional viable technologies.

Mr. Johnson said simulated MTBE concentrations after 30 years were factored into the cleanup goal of 13 µg/L and that factor was applied to the simulated values in the 1<sup>st</sup> and 2<sup>nd</sup> WBZ to obtain maximum allowable MTBE concentrations within these WBZ. Below are the model results:

<b>WBZ</b>	<b>MTBE Concentration – Model Results (µg/L)</b>	<b>Preliminary MTBE Cleanup Goal (µg/L)</b>
1	307	300
2	44	40
3	13	13

Mr. Ogdon asked if the state has agreed to a level of 13 µg/L or ppb and has the RWQCB agreed to the Navy’s approach to get to the WBZ cleanup goals. Ms. Hannon said 13 ppb is the MCL for MTBE and she had no problem with the Navy using this modeling technique to get the desired results.

Mr. Reed asked about the levels and why they picked 13 ppb. Ms. Hannon said the water treatment plants don’t treat for MTBE and 13 ppb is the drinking water standard.

Mr. Morton asked if the RAB can receive the response to comments from the Navy answering the agency member’s questions. Mr. Dunaway said if there was a specific response you would like to see, to let him know.

**Future Topics and Meetings- Don Zweifel**

- MTBE continuation
- City of Tustin update

**Meeting Evaluation- Jerry Dunaway**

RAB members mentioned the following about the meeting:

- Would like to see a more recent aerial photo
- Send RAB members a meeting reminder one month prior
- Mail absent RAB members handouts from meeting
- Make minutes of other meetings available to RAB members

**Closing – Don Zweifel**

The meeting was adjourned at 9:45 p.m.

**List of Handouts Provided at the Meeting**

- RAB Meeting Agenda/Public Notice - April 20, 2005 RAB meeting.
- Meeting minutes from the October 7, 2004 (67<sup>th</sup>) RAB Meeting and January 12, 2005 (68<sup>th</sup>) RAB Meeting.
- MCAS Tustin Environmental Program Status
- Color Map - MCAS Tustin, Operable Units, Major AOCs, and MTBE Plume (with legend), 4/20/05.
- Department of the Navy, “Policy for Conduction Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Statutory Five-Year Reviews, November 2001.”

The Under Secretary of Defense, "Responsibility for Additional Environmental Cleanup after Transfer of Real Property."  
MCAS Tustin Fact Sheet OU-1A and OU-1B, Remedial Design/Remedial Action; December 2004.  
MCAS Tustin Environmental Data Quality.  
MCAS Tustin - Where To Get More Information.  
MCAS Tustin Marine Corps/Navy Team Contact Information (phone, e-mail).  
Internet Access - Environmental Web Sites list.  
For More Information (Administrative Record and Information Repository Locations).  
MCAS Tustin Installation Restoration Program - Mailing List Coupon.  
Restoration Advisory Board Fact Sheet/Membership Application.  
MCAS Tustin Fact Sheet PCAP Groundwater Extraction/Treatment System Preliminary MTBE Groundwater Cleanup Goals.  
*Presentation* - Soil Removal Actions, OU-1A and UST-222 MCAS Tustin; presented by Chris Johnson, Shaw Environmental.  
*Presentation* - Performance of TCRA Treatment System 2002-2005 at OU-1A; presented by Marc Smits, Navy RPM.  
*Presentation* - Performance of PCAP MTBE Treatments System 2001-2005 at UST-222; presented by Chris Johnson, Shaw Environmental.

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Copies of the meeting minutes and handouts provided at the RAB meeting on April 20, 2005 are available at the MCAS Tustin Information Repository located at the University of California, Irvine, Main Library, 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 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 at a new Navy BRAC website: [www.navybracpmo.org](http://www.navybracpmo.org)