

# **FORMER MARINE CORPS AIR STATION EL TORO**

## **RESTORATION ADVISORY BOARD MEETING**

**September 27, 2006**

### ***MEETING MINUTES***

The 83<sup>rd</sup> Restoration Advisory Board (RAB) meeting for Marine Corps Air Station (MCAS) El Toro was held Wednesday, September 27, 2006 at Irvine City Hall. The meeting began at 6:37 p.m. These minutes summarize the RAB meeting discussions and presentations.

### **WELCOME, INTRODUCTIONS, AGENDA REVIEW**

Mr. Darren Newton, Base Realignment and Closure (BRAC) Environmental Coordinator (BEC) for Former MCAS El Toro and Navy RAB Co-Chair, welcomed everyone to the meeting and asked for introductions of all meeting attendees. He asked Ms. Marcia Rudolph, RAB Subcommittee Co-Chair to lead the Pledge of Allegiance. Afterwards, he reviewed the RAB meeting agenda. The key presentations will cover the Groundwater Cleanup at Installation Restoration Program Sites 18 and 24 and an Overview of Data Quality Objectives (DQOs) Process.

### **Announcements**

Mr. Newton said if RAB members cannot attend RAB meetings to call him or Mr. Bob Woodings, RAB Community Co-Chair. It is important for RAB members to inform either of the Co-Chairs if they will be absent.

Mr. Newton reviewed the handouts available on the information table including fact sheets: Navy project contacts, regulatory agency contact information, useful website listings including the BRAC site, and the location information for the Administrative Record file and Information Repository for Former MCAS El Toro. He also reviewed a handout provided by DTSC that is a descriptive progress check of the years 2006 to 2007, and stated that Mr. Dave Murchison, Department of Toxic Substances Control (DTSC), would be going over the handout in further detail. The next El Toro RAB Meeting is scheduled for November 29, 2006, and Mr. Newton suggested an agenda item of a group vote on the decision to change the RAB meetings from bimonthly to quarterly.

Mr. Newton said the Navy recently received some new questions on May 30, 2006 submitted by Ms. Ann Watt, concerned local resident. Ms. Watt originally submitted a series of questions in spring 2006 that focused on groundwater cleanup efforts, and the TCE contamination present in the groundwater plume beneath the community of Woodridge in Irvine. Mr. Newton said her original questions were addressed at the May 31, 2006 RAB meeting. The new questions express concern over Department of Defense (DoD) and U.S. Environmental Protection Agency (U.S. EPA) funding for reimbursable work. Specifically, Ms. Watt's question focused on the 2005 BRAC round and funding for U.S. EPA; and the questions involved whether or not U.S. EPA and the Navy would continue in this relationship. The Navy response detailed that the Navy's relationship with U.S. EPA would continue and no change would occur. Mr. Newton emphasized that the 2005 BRAC round has no impact on the cleanup program at Former MCAS El Toro, which was part of the BRAC 1995 round of DoD base realignment and closures.

In addition, Mr. Newton stated that he had received a phone call from a local group named "The Kids of El Toro." They called regarding their interest in the deconstruction of the housing areas effort at

Former MCAS El Toro. Due to the fact that the Navy is not conducting the redevelopment of the former military base, Mr. Newton forwarded their request for contact information to Lennar, the redeveloper.

### **Review and Approval of the July 26, 2006 RAB Meeting Minutes**

Mr. Woodings asked if anyone had changes to the RAB meeting minutes. No objections were noted, and the minutes were approved. Ms. Rudolph asked that a note be included in the minutes that she abstained from approval of the July 26, 2006 meeting minutes since she did not attend that meeting.

### **RAB Subcommittee Meeting**

Ms. Rudolph stated she met with Mr. Dave Murchison, project geologist from DTSC, and Mr. Rich Muza project manager from U.S. EPA, prior to the RAB Meeting. She had received a phone call from a local reporter regarding perchlorate levels, specifically concentrations of 6 micrograms per liter ( $\mu\text{g/L}$ ). Specifically, the question that was prompted by the phone call was whether the Navy was researching the issue of the perchlorate plume and possible earthquake faults, and the possibility that the fault could disrupt the perchlorate so that it could make its way down through the fault to the principal aquifer. The RAB Subcommittee requested that the Navy provide information in response to this question.

In addition, the RAB Subcommittee had questions regarding the petroleum products located at or offsite of IRP Site 1 and where this fits into the investigation study process. The RAB Subcommittee also requested information on the Anomaly Area 3 landfill site, a progress update on the landfill cap construction at IRP Site 2, and an update on the upcoming landfill cap construction at IRP Site 17.

### **Environmental Status Update**

Mr. Newton provided a brief review of the key project activities.

- For IRP Site 1, Explosives Ordnance Disposal Training Range - The Draft Final Remedial Investigation (RI) Report has been issued to the regulatory agencies. The Navy is looking to resolve the Response to Comments (RTCs) in order to proceed to the Final RI Report, and will provide an update at the next RAB meeting.
- For IRP Sites 2 and 17 - Regulatory agency representatives from the U.S. EPA and Regional Water Quality Control Board (RWQCB) visited both sites today (September 27, 2006). Landfill cap construction at IRP Site 2 is proceeding well and is actively moving forward. IRP Site 17 was cleared of debris a couple of years ago, and the Navy will re-clear the area of vegetation prior to construction. The Navy's plan is to finalize the IRP Site 2 cap before initiating the remedy for IRP Site 17.
- For Anomaly Area 3 - The Draft Final (RI) Study has been issued to the regulatory agencies, and the Navy is currently addressing comments received from the agencies.
- For IRP Sites 3 and 5 - The Draft Final Feasibility Study (FS) Addendum has been issued to the regulatory agencies. The Navy plans on resolving issues with IRP Site 2 before proceeding to IRP Sites 3 and 5. Whereas before, site activities were conducted concurrently; now the Navy is focusing on one site at a time.
- For IRP Sites 8 and 12 - The Proposed Plan was issued last spring and the public comment period was held in March 2006. A Draft Record of Decision (ROD) was issued in order to resolve some radiological issues associated with the sites. The Navy plans on having the Final ROD completed during Fiscal Year 2007.
- For IRP Site 11 - The Remedial Action Completion Report (RACR) was finalized, thereby officially closing the site. IRP Site 11 will be addressed as No Further Action (NFA) in the State of the Station presentation at the January 2007 RAB meeting.
- For IRP Site 16 - The Draft Operating Properly and Successfully (OPS) Report was issued.

The site remedy is operating properly and successfully and the property at the site will be suitable for transfer once the Navy has finished working on the petroleum component.

## **NEW BUSINESS**

### **◆ Regulatory Agency Comment Update.**

#### **Mr. Richard Muza, Project Manager, U.S. Environmental Protection Agency Region IX**

Mr. Muza said that a weekly meeting was held today (September 27, 2006) for the project managers at IRP Site 2. The landfill cap at IRP Site 2 is within 6 inches of the final elevation, and this work is progressing very rapidly. The progress has been tremendous, and the site looks considerably different than what RAB members saw at the May 3, 2006 RAB Site Tour. The goal is for the majority of work to be done by the next RAB meeting on November 29, 2006.

The U.S. EPA has received the Draft Final FS Addendum for IRP Sites 3 and 5. The agency provided only one comment to the Navy on the document in regard to the reiteration of a comment that U.S. EPA had submitted from the draft. U.S. EPA restated the comment for clarification and is awaiting a response back. Otherwise, all changes made to the document were fully acceptable to U.S. EPA.

With regard to IRP Site 1, U.S. EPA reviewed the Draft Final RI Report and has expressed concerns regarding the human-health risk assessment and the ecological risk assessment. The agency is planning on scheduling a meeting next month (October 2006) in order to resolve issues. Many of the issues that U.S. EPA has are in relation to what is going to happen with this property, and what type of transfer will occur and eventual reuse. The agency will be able to proceed once clarification is given on the federal agency to federal agency property transfer. Overall, the revision of the report was viewed as excellent due to the fact that all of Mr. Muza's comments were addressed. Mr. Muza noted the risk assessors still have some outstanding issues.

For the Radiological Release Report, a draft was issued for IRP Site 1. U.S. EPA had no comments stating that this report was prepared consistently with previous radiological release documents. A technical review that was performed yielded no problems with the work conducted. He noted that this radiological release report also covered the Former Defense Reutilization and Marketing Office Yard 3, Former Nuclear, Biological and Chemical Complex, including Aerial Photo Anomaly 38 and the Paved Area South of Building 295.

U.S. EPA had no comments regarding the Draft Final Radiological Release Report for IRP Sites 3 and 5. This report also included Aerial Photo Anomaly Site 46, Anomaly Area 3, and Building 244. The agency concurred with the technical findings presented in this report.

The Draft Work Plan for the Demilitarization of Munitions and Explosives of Concern (MEC) at IRP Site 1 detailed the procedures for removing and disposing of items characterized as MEC in previous investigations. Most of the MEC items were minor. U.S. EPA's comments were in regard to future reuse of the range that will ensure the public is provided appropriate protection for activities conducted there and requested some clarifications and technical revisions to the document.

#### **Mr. Dave Murchison, Department of Toxic Substances Control (DTSC)**

Mr. Murchison said that he had no announcements but would be happy to answer any questions at this time. Mr. Newton stated that if anyone was interested in what DTSC had accomplished, to please refer to the handout provided. Items of importance that were addressed were DTSC comments on items 5, 7 and 11. Mr. Newton discussed item 5, and said that DTSC had submitted comments on the Revised Draft ROD for IRP Sites 8 and 12. The revised ROD was completed by the Navy following the public meeting that was held in March 2006. Mr. Newton detailed item 7, and said that DTSC had submitted comments on the IRP Site 1 RI Report. The Navy is looking to finalize the report and reconcile DTSC comments in order to complete the document and proceed to the FS stage. Mr. Newton explained item 11, and stated that DTSC has submitted comments on the Draft Final FS Addendum for IRP Sites 3 and 5. The Navy is looking to resolve these comments that were received September 12, 2006.

## Presentations

### **◆ Groundwater Cleanup at Installation Restoration Program Sites 18 and 24, presented by Mr. Marc P. Smits, Navy Remedial Project Manager**

Mr. Smits addressed the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and non-CERCLA components of the Irvine Desalter Project. He explained that the blue sections on the overhead were part of the potable water treatment system that Irvine Ranch Water District (IRWD) and Orange County Water District (OCWD) were working on will be operated in conjunction with their drinking water purification plant. The treatment system start-up is expected to occur 1 to 2 months from now.

Specifically for the CERCLA components, the Principal Aquifer portion is composed of three production wells: ET-1, Well-78, and ET- 2. Extracted groundwater will be treated by the principal aquifer treatment plant. The second portion of the system pertains to the Shallow Groundwater Unit (SGU) plume at IRP Site 24: consisting of several extraction wells and the treatment facility.

In May 2006, the Navy reviewed the construction status of IRP Sites 18 and 24. Mr. Smits stated that the purpose of tonight's presentation is to provide an update of current events. The start-up of the on-site portion (IRP Site 24) groundwater extraction and treatment system is scheduled for the first week in October 2006. In the last month, the Navy has conducted "shakedown" activities to test the IRP Site 24 system. He defined shakedown activities as all the tests that have to be done to ensure that the system is fully operational once start-up occurs. The IRP Site 18 off-site portion began treating groundwater in mid-August 2006, and the Navy has been able to show that the system removes trichloroethene (TCE) to below 0.5 µg/L. Mr. Smits congratulated the personnel from the IRWD and the OCWD for all of their hard work and successful coordination with the Navy.

The groundwater treatment system for IRP Site 18 is currently treating 1,000 to 1,200 gallons per minute from ET-1. Mr. Smits added that the Performance Monitoring Plan is scheduled to be issued September 29, 2006.

Mr. Smits went on in further detail regarding shakedown activities for the IRP Site 24. There are two components to the IRP Site 24 system: the Navy's portion, which consists of the extraction wells leading to equalization tanks at the compound; and the IRWD portion, which is the treatment aspect. The Navy and IRWD have been conducting weekly coordination meetings for the past 6 months to ensure that the two portions will work once start-up has begun. Any issues that have arisen have been worked out, and the Navy and IRWD contractors have worked in the fullest collaboration with each other. Shakedown activities that have been conducted include:

- pump/analytical testing of extraction wells,
- hydrostatic testing of the point of connection,
- clean water pump tests to the groundwater treatment system,
- programming functional tests,
- baseline groundwater monitoring, and
- inspections of electrical connections and switchgear equipment.

The shakedown test activities were all conducted with clean water to identify potential leaks.

Mr. Smits showed a map with all of the extraction wells including the 39 extraction wells that are located in the center of the higher concentrations of the TCE plume. These wells are intended to capture contamination from the plume within this area, and not allow it to migrate outward or downgradient. The extraction well tests were initially started in December 2005 and the Navy ran pump tests to determine flow rates of each extraction well. In August 2005, the Navy checked the flow rates to determine whether the rates had changed from the last test. The results of the tests in August showed equivalent flow rates to those obtained from the December test.

When the Navy conducted recent extraction well tests, samples were collected to test for: volatile organic compounds (VOCs), metals, general chemistry, radionuclides and other constituents in order to provide an accurate baseline for each extraction well. Mr. Smits stated that during the week of September 25, the Navy will perform tests on groups of wells, and pump groundwater to the compound in order to evaluate effectiveness. Then all the wells will be run simultaneously to simulate actual operations. All of the groundwater currently shed is placed into Baker tanks to be tested and stored.

Mr. Smits showed a photo of an extraction well box, and said that the Navy has to collect 16 sample containers of groundwater from each well in order for the variety of analyses conducted by the laboratory. A photo of the Baker tanks was shown, and Mr. Smits elaborated that the Navy currently has 11 tanks on site, each with a holding capacity of 21,000 gallons. That adds up to 230,000 gallons of water that can be contained at one time, equaling 9½ hours of flow at a rate of 400 gallons per minute.

On September 11, 2006, the Navy connected their compound to the IRWD treatment system in order to execute a test. As part of the test, the Navy inserted clean water into the equalization tanks and pumped it to the IRWD treatment system. The point of connection was kept open in order to determine if any leaks or deformations were present in the pipe. A hydrostatic test was also conducted to evaluate potential leaks and deformations. The Navy found one minor leak at the point of connection and one minor leak from the equalization tank; however, both were successfully repaired. Various flow rates were collected during the clean water test that ranged from 125 to 550 gallons per minute. The Navy is aiming for flow rates of 400 to 550 gallons per minute during actual operations.

Mr. Smits showed a photo of the hydrostatic test being performed. Hydrostatic tests have been conducted with clean water through all lines, and that the Navy has been very thorough in its preparation. For programming tests, the Navy wanted to ensure that there is effective communication between the control box, extraction wells, compound components, as well as the groundwater treatment system. The Navy has installed a “PC Anywhere” program that allows remote viewing in order to look at signals, alarms, flow rates, and water levels. In addition, there is an alarm trigger that sends off a phone call to the Operations and Maintenance (O&M) personnel (located within 3 miles of the site), which notifies them that they need to go to the site. Mr. Smits said that the “PC Anywhere” program will be available for use by the Navy’s Resident Officer in Charge of Construction (ROICC) located at Former MCAS El Toro and Navy RPMs in San Diego.

A photo of IRP Sites 18 and 24 was shown, and Mr. Smits stated the Navy had conducted sampling in September and March 2006 in order to provide baselines of plume conditions prior to system start-up. The baselines were helpful in determining changes at the various pumping sites and what effects were occurring overtime. Approximately, 147 groundwater samples will be collected with up to 6 to 7 different vertical depths from monitoring wells at IRP sites 18 and 24. During the first year of operation, the Navy will conduct quarterly sampling in order to determine the frequency of sampling evaluation required. The evaluation will be done on a well by well basis.

Mr. Smits presented a photograph of the electrical connections, and said that the Navy took an existing high voltage Southern California Edison (SCE) line and connected it into the Navy’s system. Then, SCE connected the existing line to the switchgear box in order to allow for operational use. All electrical wiring and connections have been completed. IRP Site 24 start-up procedures include:

- verifying the treatment system is able to accept water to be pumped from the equalization tanks,
- verifying all valves between equalization tanks to the treatment system are open,
- verifying that communication between the compound and treatment system is occurring,
- energizing of the compound components and the treatment system,
- pumping groundwater from the extraction wells to the equalization tanks, and
- turning the transfer pump to “auto” once the equalization tanks are full.

The Performance Monitoring Plan for IRP Sites 18 and 24 includes:

- identifying the criteria and analysis methods to evaluate the performance for the remedy at IRP Sites 18 and 24,
- a sampling and analysis plan for the monitoring wells, extraction wells, and discharge from the compound to the treatment system,
- providing methods for optimizing the remedy in accordance with Department of Navy and U.S. EPA guidance documents, and
- submittal of a draft version of the plan on September 29, 2006.

Mr. Smits stated that after the system operates for 3 to 4 months then the Navy will incorporate relevant operating information into the Operations and Maintenance Plan before finalizing this document.

The schedule for these two sites includes:

- a Draft Performance Monitoring Plan in September 2006,
- system start-up for IRP Site 24 treatment system in October 2006,
- a Draft Operation and Maintenance plan in January 2007, and
- a Draft Project Closure Report in March 2007 that documents completed construction of the remedy according to the plan and any changes.

Ms. Rudolph asked that if something goes wrong during system operation, who would the Navy call, and who is in charge of the system. Mr. Smits answered that the alert goes to IRWD and the Navy's contractor. The Navy is ultimately responsible for the problem outside IRWD. If a problem arises, the computer will shut the system down. Mr. Smits clarified that the Operating Properly and Successfully Report is different than the Operations and Management Plan and the Project Closeout Report. The Operating Properly and Successfully Report is an examination over a long period of time that the remedy is working effectively, whereas the Operations and Management Plan determines whether any changes have occurred in the formulated design.

Mr. Glenn Worthington, RAB meeting attendee, asked if U.S. EPA changed the standards on TCE, would the Navy have to change the entire system accordingly. Mr. Steve Malloy, RAB member and IRWD Senior Engineer, stated that the IRWD system treats groundwater so that TCE levels in the treated water are less than 0.5 µg/L, which is a non-detectable level meaning that the laboratory instrumentation cannot detect such small amounts of TCE. The U.S. EPA and California EPA standard for drinking water is 5.0 µg/L; whereby water providers are allowed to distribute water containing TCE at this concentration or lower, since such water complies with drinking water safety standards. Mr. Murchison stated that if the standard changes, then DTSC and U.S. EPA will enforce those changes. Mr. Muza also replied that the IRWD system covers any possible treatment levels for TCE.

Mr. Smits stated that the Navy generally operates the system for one year before evaluations are determined. Mr. Muza added that the Navy is working towards combining the Interim Removal Action Closeout Report (RACR) and Operating Properly and Successfully (OPS) Report. Mr. Smits noted that there are approximately 100 to 150 wells that require closure and abandonment prior to such wells at IRP Site 24 that are no longer needed for monitoring the site. After the Navy develops the Final Performance Monitoring Plan, efforts to close out the wells will proceed.

#### ◆ **Overview of the Data Quality Objective Process, presented by Mr. Chris Barr, Earth Tech Senior Chemist**

Mr. Newton said that the Data Quality Objective (DQO) Process has been instilled at all environmental investigations conducted by the Navy. Its use is prevalent at all bases. Mr. Chris Barr stated that the origin of the DQO Process consists of:

- systematic planning processes
- the classical scientific method (hypothesis and testing)
- guidance out of the Federal Superfund Program in the late 1980s
- the original 3-stage approach
- modification of the 3-stage approach into a 7-step process in the early 1990s.

The purpose of the DQO Process is to serve as a vehicle to document and record:

- What is needed?
- How it will be used (and how it will not be used)?
- What kind of errors might we make?
  - How will we control them?
  - What can we tolerate?
- Output (the most efficient data collection design possible).

Mr. Barr showed an illustration of the DQO process, and stated that the diagram represented the balancing act, the very essence of the DQO process. It demonstrates how much uncertainty can be tolerated. Mr. Barr then stated that U.S. EPA reissued Guidance on Systematic Planning using the Data Quality Objectives Process in February 2006. He provided a U.S. EPA website - [http://www.epa.gov/quality1/qa\\_docs.html](http://www.epa.gov/quality1/qa_docs.html) - as a reference in the case that someone wanted more information regarding the matter. U.S. EPA guidance documents for DQOs have supporting tools and documents that include:

- Decision Error Feasibility Trial (DEFT) Software
- Data Quality Objectives Process for Hazardous Waste Site Investigations (QA/G-4HW).

Mr. Barr stated that the DQO Process is iterative and leads to mutual understanding. The DQO Process represents an outlet for everyone involved to voice their issues and concerns. Other agencies were mentioned as having guidance for executing the DQO Process. The Army Corps of Engineers created the EM 200-1-2 Technical Project Planning (TPP) Process, and their website was given <http://www.usace.army.mil/inet/usace-docs/eng-manuals/em200-1-2/toc.htm>. The Department of Energy has also created such guidance and that information can be found at <http://dgo.pnl.gov/>.

The seven steps of project planning in action were described in detail:

1. State the Problem
  - what is the source of the problem, what are we trying to solve, what are the risks, identification and understanding of the release mechanisms
  - develop a Site Conceptual Model
2. Identify the Goals of the Study
  - what goals do we intend to reach, identify extent of contamination, assessment of risk, identify principle study questions and project decisions
  - Has the impact to groundwater, surface water, and sediments been adequately characterized, or are additional data required?

3. Identify the Information Inputs
  - identify historical uses of the site, site-related data, contaminants, future data needs, regulatory thresholds, and expected regulations
4. Define the Boundaries (or constraints)
  - physical boundaries of the site, period of time to which the investigation will apply, financial/legal/regulatory or time constraints
5. Develop the Analytic Approach (Decision Rules)
  - “if then” statements; clearly stating the alternative actions and outcomes or conclusions for all data collected
6. Specify the Performance of Acceptance Criteria
  - statistical tests used to define the confidence in the conclusion, analysis of what activities may result in an incorrect decision and steps to address that possibility
7. Develop a Plan
  - select and document the data collection design that will yield results that meet performance and acceptance criteria,
  - involves determining samples types and locations, judgmental versus statistical sampling approaches, sample collection techniques
  - implementation of quality assurance and quality control measurements.

Mr. Barr concluded that the underlying objective of the DQO Process involves using the best available information that is based on collecting sufficient data of known quality with defined confidence within the resources available. This is an iterative process that is necessary in order to make decisions to confidently implement and complete the investigation and to accurately report the results. He also reviewed the typical implementation sequence of the DQO Process. The key steps are listed below for a typical remedial investigation conducted at Former MCAS El Toro and other BRAC bases.

- The BRAC Cleanup Team identifies the data needs.
- The Project Team develops a Work Plan/Sampling and Analysis Plan (SAP) that lays out all assumptions of the project as well as how the BCT is going to resolve the questions.
- The Technical Project Manager and the Navy Quality Assurance Officer review the documents for compliance with the Navy, Department of Defense, U.S. EPA, DTSC, and RWQCB guidelines.
- A Draft Work Plan/SAP is then issued for regulatory agency review, in which the agencies provide comments.
- Responses to Comments are provided by the Navy, and appropriate changes to the document are made.
- A Draft Final or Final Work Plan/SAP is submitted and the regulatory agencies will review the document again to determine if further changes are needed. In addition, the RAB and the public have an opportunity to review the document.
- Once concurrence and understanding has been reached, then a field investigation will follow. Once the field investigation has been initiated and samples are collected for analysis, then laboratory data quality will be validated to determine which data are accepted or rejected.
- Data evaluation and interpretation begins.

- Findings and data gaps (if appropriate) are identified.
- The report on investigation findings is prepared and submitted for regulatory agency review and concurrence.

Mr. Barr stated that recent policy and guidance documents have been issued. First, the Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP), Version 1 has been incorporated into planning documents for the Navy, Army, Air Force, Department of Energy, and U.S. EPA projects. Second, the Department of Defense Quality Systems Manual, Version 3 was issued in January 2006. The DoD document governs implementation of chemical analysis and data assessment. Finally, the Triad Approach emphasizes the use of a lot of field measurements and interactive decision-making in the field during the environmental investigation. This enables adjustment of sampling plan and design, and often times speeds up the investigation process and cuts down on the overall time spent on the investigation.

Mr. Woodings asked Mr. Barr to reiterate the three parts of the Triad Approach. Mr. Barr stated that systematic planning, dynamic strategies (using real-time measurements allows for fast mobilization in the field, and yields faster, reliable results that allows for decision-making in the field). This approach also provides the opportunity to conduct on-the-spot step-out sampling that can determine if more confirmation sampling is needed. Mr. Murchison elaborated, that from a regulatory agency perspective, the Triad Approach allows the regulators to see the data the day it is collected, in addition to creating a faster turnaround process.

Ms. Mary Aileen Matheis, RAB member representing IRWD, asked whether this process is conducted subconsciously or is it written out. Mr. Newton replied that it is all written out, and that the DQO process allows for a comprehensive conceptual framework.

#### ◆ Open Q & A -- Environmental Topics

Mr. Newton asked if there were any other environmental questions. No questions were raised.

### MEETING EVALUATION AND FUTURE TOPICS

#### Upcoming RAB Meeting and Subcommittee Meeting

The next RAB meeting will be held from 6:30 to 8:30 p.m., Wednesday, November 29, 2006, at Irvine City Hall, One Civic Center Plaza, Irvine in the Conference and Training Center. The next RAB Subcommittee meeting will also be held on November 29, 2006, from 5:00 to 6:00, in Room L-104, at Irvine City Hall.

Mr. Newton suggested that future topics include:

- The discussion and motion to vote for quarterly El Toro RAB meetings
- Perchlorate update
- Petroleum issues at IRP Site 1
- Progress update at IRP Sites 2 and 17.

#### Recent RAB Subcommittee Meetings

The most recent RAB Subcommittee meeting was held September 27, 2006, in Room L-104, Irvine City Hall, before the RAB meeting. The RAB Subcommittee Meeting report presented in these meeting minutes provides an update on the latest concerns expressed.

#### RAB Meeting Adjournment – September 27, 2006 Meeting

The 83<sup>rd</sup> meeting of the MCAS El Toro Restoration Advisory Board was adjourned at 8:37 p.m.

**9/27/06 RAB Meeting Attendance:**

<u>TOTAL</u> PEOPLE IN ATTENDANCE	<u>TOTAL</u> PEOPLE ON SIGN-IN SHEET	<u>TOTAL</u> RAB MEMBERS PRESENT	<u>TOTAL</u> RAB AGENCY MEMBERS PRESENT	<u>TOTAL</u> RAB COMMUNITY MEMBERS PRESENT	<u>TOTAL</u> EXCUSED ABSENCES RAB MEMBERS	EXCUSED ABSENCES – AGENCY RAB/ COMMUNITY RAB
32	21	9	7	4	0	0

**RAB and Subcommittee Meeting and Public Meeting Dates (November 2006-July 2007)**

RAB Members - The list below indicates which dates are currently reserved for RAB and RAB Subcommittee meetings at Irvine City Hall, Conference and Training Center, Room L-102, and Room L-104, respectively. Please note that dates on this list may also serve as combined RAB/public meetings.

<b>RAB and Subcommittee Meeting Dates (meeting space confirmed)</b>	<b>RAB Meeting Conference and Training Center (CTC) or Room L-102 6:30 – 9:00 p.m.</b>	<b>Subcommittee Meeting Room L-104 5:00 – 6:00 p.m.</b>
Wed - Nov. 29, 2006	CTC	Room L-104
Wed - Jan. 31, 2007	CTC	Room L-104
Wed - March 28, 2007	CTC	Room L-104
Wed - May 30, 2007	CTC	Room L-104
Wed - July 25, 2007	CTC	Room L-104

**Materials/Handouts Available at the 9/27/06 RAB Meeting Include:**

- \*RAB Meeting Agenda/Public Notice – 9/27/06 RAB Meeting – 83rd Meeting.
- \*Meeting Minutes from the 7/26/06 RAB Meeting – 82nd Meeting.
- MCAS El Toro RAB Mission Statement and Operating Procedures.
- MCAS El Toro – Navy Team contact information.
- MCAS El Toro – BRAC Cleanup Team Members and Key Project Representatives and Administrative Record File and Information Repository Locations and Contacts.
- MCAS El Toro RAB – Membership Application.
- MCAS El Toro RAB – Membership Roster
- MCAS El Toro RAB – Mailing List Coupon.
- MCAS El Toro RAB – Meeting Schedule
- MCAS El Toro RAB – Environmental Websites
- Reuse – Redevelopment Information.
- One-Page Glossary of Technical Terms.
- Department of Defense Fact Sheet – Sites 18 and 24 Groundwater Cleanup Update Installation Restoration Program Former Marine Corps Air Station, El Toro, February 2006.
- Former MCAS El Toro – IRP Sites 18 and 24 (Timelines 1985-1999 and 2000-2006), Activities Pertaining to Soil and Groundwater Investigations and Cleanup.
- Department of Defense – Responsibility for Additional Environmental Cleanup after Transfer of Real Property, July 1997.
- Department of Defense – A Guide to Establishing Institutional Controls at Closing Military Installations, February 1998.
- 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 Optimizing Remedial and Removal Actions under the Environmental Restoration Programs, April 2004.
- Department of Defense – Perchlorate Work Group Packet.
- Department of Defense – Institutional Controls, spring 1997.

- U.S. EPA Fact Sheet – A Citizen’s Guide to Natural Attenuation, October 1996.
- U.S. EPA Fact Sheet – Perchlorate Update, March 2002.
- U.S. EPA Fact Sheet – Superfund Sites: Five-year Review, June 2001.
- MCAS El Toro RAB Inquiry – Environmental Data Quality, September 2003.
- Commonly Asked Questions Regarding The Use of Natural Attenuation for Chlorinated Solvent Spills at Federal Facilities.
- Navy Responses to Questions for Navy BRAC, State & Federal EPA and Associated Regulatory Agencies Overseeing the Clean Up of Superfund Site MCAS El Toro and Pollution Offsite Originating there from – Including but not Limited to Woodbridge, City of Irvine, CA, May 30, 2006.
- U.S. EPA and DTSC Joint Responses to “Questions for Residents to Ask at MCAS El Toro Meeting,” May 2006.
- *Presentation* – Groundwater Cleanup Installation Restoration Program Sites 18 and 24.
- *Presentation* – Overview of the Data Quality Objective Process.

\* Mailed to all RAB meeting mailer recipients on 10/10/06.

### **Agency Comments and Letters - U.S. Environmental Protection Agency (U.S. EPA)**

- U.S. Environmental Protection Agency (U.S. EPA) – Draft Work Plan, Demilitarization of Munitions and Explosives of Concern (MEC), Installation Restoration Program (IRP) Site 1, Explosives Ordnance Disposal (EOD) Training Range, Former Marine Corps Air Station (MCAS) El Toro, California – To: Mr. Darren Newton, BEC, MCAS El Toro; From: Rich Muza, Remedial Project Manager, U.S. EPA (letter dated August 21, 2006).
- U.S. Environmental Protection Agency (U.S. EPA) – Draft Radiological Release Report for Former Explosive Ordnance Disposal Training Range—IRP Site 1; Former Defense Reutilization and Marketing Office Yard 3; and Former Nuclear, Biological, and Chemical Complex, including Aerial Photograph Anomaly 38 and Paved Area Located South of Building 295, Former Marine Corps Air Station (MCAS) El Toro, California – To : Mr. Darren Newton, BEC, MCAS El Toro; From: Rich Muza, Remedial Project Manager, U.S. EPA (letter dated August 24, 2006).
- U.S. Environmental Protection Agency (U.S. EPA) – Draft Final Radiological Release Report for IRP Sites 3 and 5, Aerial Photograph Anomaly Site 46, Anomaly Area 3, and Building 244, Former Marine Corps Air Station (MCAS) El Toro, California – To: Mr. Darren Newton, BEC, MCAS El Toro; From: Rich Muza, Remedial Project Manager, U.S. EPA (letter dated August 24, 2006).
- U.S. Environmental Protection Agency (U.S. EPA) – Draft Final Feasibility Study Addendum (FSA), Operable Unit 2C, Installation Restoration Program (IRP) Sites 3 and 5, Former Marine Corps Air Station (MCAS) El Toro, California- To: Mr. Darren Newton, BEC, MCAS El Toro; From: Rich Muza, Remedial Project Manager, U.S. EPA (letter dated August 25, 2006).
- U.S. Environmental Protection Agency (U.S. EPA) – Comments on the Draft Final Phase II Remedial Investigation (RI) Report, Installation Restoration Program (IRP) Site 1, Former Explosive Ordnance Disposal (EOD) Range, Former Marine Corps Air Station (MCAS) El Toro, California – To: Mr. Darren Newton, BEC, MCAS El Toro; From: Rich Muza, Remedial Project Manager, U.S. EPA (letter dated August 31, 2006).
- U.S. Environmental Protection Agency (U.S. EPA) – Comments on the Draft Final II Remedial Investigation (RI) Report, Installation Restoration Program (IRP) Site 1, Former Explosive Ordnance Disposal (EOD) Range, Former Marine Corps Air Station (MCAS) El Toro, California- To: Mr. Darren Newton, BEC, MCAS El Toro; From: Rich Muza, Remedial Project Manager, U.S. EPA (letter dated August 31, 2006).

### **Agency Comments and Letters – California Environmental Protection Agency (Cal-EPA)**

- No Items Submitted

### **Department of Toxic Substances Control (DTSC)**

- MCAS El Toro Schedule of Work Completed July - September 2006

### **California Regional Water Quality Control Board (RWQCB), Santa Ana Region**

- No Items Submitted

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*Copies of all past RAB meeting minutes and handouts are available at the MCAS El Toro Information Repository, located at the Heritage Park Regional Library in Irvine. The address is 14361 Yale Avenue, Irvine; the telephone number is (949) 936-4040. Library hours are Monday through Thursday, 10 a.m. to 9 p.m.; Friday and Saturday, 10 a.m. to 5 p.m.; Sunday 12 p.m. to 5 p.m.*

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## **Internet Sites**

### **Navy and Marine Corps Internet Access**

***BRAC PMO Web Site (includes RAB meeting minutes):***

Navy web site: <http://www.bracpmo.navy.mil/>

For El Toro RAB information: [http://www.bracpmo.navy.mil/bracbases/california/eltoro/rab\\_information.aspx](http://www.bracpmo.navy.mil/bracbases/california/eltoro/rab_information.aspx)

### **Department of Defense – Environmental Cleanup Home Page Web Site:**

<http://www.dtic.mil/envirodod/>

### **U.S. EPA:**

[www.epa.gov](http://www.epa.gov) (this is the homepage)

[www.epa.gov/superfund](http://www.epa.gov/superfund) (site for Superfund)

[www.epa.gov/ncea](http://www.epa.gov/ncea) (site for National Center for Environmental Assessment)

[www.epa.gov/federalregister](http://www.epa.gov/federalregister) (site for Federal Register Environmental Documents)

[www.epa.gov/fedrgstr/EPA-IMPACT/2004/April/Day-27/i9203.htm](http://www.epa.gov/fedrgstr/EPA-IMPACT/2004/April/Day-27/i9203.htm) (site for Endangered and Threatened Wildlife and Plants; Proposed Designation of Critical Habitat for the Riverside fairy shrimp)

### **Cal/EPA:**

[www.calepa.ca.gov](http://www.calepa.ca.gov) (this is the homepage)

[www.dtsc.ca.gov](http://www.dtsc.ca.gov) (site for Department of Toxic Substances Control)

[www.swrcb.ca.gov/](http://www.swrcb.ca.gov/) (site for Santa Ana Regional Water Quality Control Board)