



TETRA TECH EM INC.

January 30, 2007

Dear RAB Members,

On behalf of the Navy, enclosed please find the November 1, 2006 final RAB meeting minutes for your information and records.

If there are any questions regarding the enclosed minutes, please contact Carolyn Hunter at (415) 222-8297 or [Carolyn.hunter@ttemi.com](mailto:Carolyn.hunter@ttemi.com).

Sincerely,

Carolyn Hunter  
Community Relations Specialist  
Tetra Tech EMI

**FINAL**  
**MEETING MINUTES**  
**RESTORATION ADVISORY BOARD**  
**NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD**  
**CONCORD, CALIFORNIA**  
**NOVEMBER 1, 2006**

These minutes reflect general issues raised, agreements reached, and action items identified at the Restoration Advisory Board (RAB) meeting for Naval Weapons Station Seal Beach Detachment Concord (NAVWPNSTA Seal Beach Det Concord), California. The meeting was held from 6:30 p.m. to 8:30 p.m. on November 1, 2006, at the Concord Library Meeting Room in Concord, California. Agreements and action items are described by topic under Sections I through V and are summarized in Section VI. A list of participants and their affiliations is included as Attachment A, and the meeting agenda is included as Attachment B.

**I. WELCOME, INTRODUCTIONS, PUBLIC COMMENT, AND AGENDA APPROVAL**

**Welcome and Introductions**

The RAB Community Co-Chair, Mary Lou Williams (Concord resident) called the RAB meeting to order and initiated a round of introductions for attendees.

**Public Comments**

Ms. Williams opened the floor to public comments. No public comments were offered at this time.

**January 2007 RAB Agenda Approval**

Angela Lind (U.S. Navy [Navy] RAB Co-chair) reviewed the proposed agenda for the January 2007 RAB meeting. Ms. Lind stated that currently the RAB meeting is scheduled for January 3, 2007. Since the current RAB meeting date is so close to the holidays, Ms. Lind wanted to see if the RAB would like to reschedule to January 10, 2007. The Navy agreed to send an e-mail to the RAB soliciting feedback on the preferred January 2007 meeting date.

Ms. Lind stated that the Navy is interested in alternating RAB meetings to focus on the Tidal Area one meeting and the Inland Area the following month. Ms. Lind will chair the Tidal Area RAB meetings and Rick Weissenborn (Navy) the Inland Area RAB meetings.

Ray O'Brien (Bay Point resident) asked if the U.S. Army (Army) is going to begin sending a representative to the Tidal Area RAB meetings. Ms. Lind stated that she is currently looking into having an Army representative at the RAB meetings. Ms. Lind added that the Army is looking to hire an environmental lead, which would be the person to attend the RAB meetings. Mr. O'Brien asked if the Navy will still be responsible for the cleanup of the Tidal Area once the land is transferred to the Army. Ms. Lind stated that the Navy and Army cleanup funds come from the same pool. The Army will be responsible for the cleanup the Navy is responsible for. Ms. Lind stated that she will be involved with the Tidal Area cleanup and the RAB until a smooth transition has occurred between the Navy and the Army.

The Navy plans to provide the following presentation for the January 2007 RAB meeting:

- Litigation Area Ecological Risk Assessment/Remedial Goals (Tidal Area)

Ms. Lind asked the RAB to approve the January 2007 agenda. The RAB voted to approve the January 2007 meeting agenda.

### **Action Items**

1. The Navy will send an e-mail to the RAB soliciting feedback on the preferred January 2007 meeting date. Once either January 3, 2007 or January 10, 2007 has been determined, the Navy will send an announcement to the RAB.
2. Ms. Lind will provide information to the RAB on the Army environmental lead once that person has been determined.

### **2007 RAB Presentation Topic Outline**

Ms. Williams asked if the RAB had the opportunity to review the proposed outline for RAB presentation topics in 2007. Ms. Lind stated she would like to add a Military Munitions Response Program (MMRP) presentation to the February 2007 agenda. The MMRP presentation was previously scheduled for the November 1, 2006 RAB meeting. Ms. Lind would like to bring out personnel from Naval Ordnance Safety and Security (NOSSA) to present the MMRP preliminary assessment (PA). NOSSA is responsible for safety onsite under the MMRP. Ms. Lind also plans to have someone from Seal Beach attend to provide the RAB a historical perspective of the MMRP. The RAB agreed to add a MMRP PA presentation to a meeting in early 2007.

Kent Fickett (Mount Diablo Audubon Society) requested that the Navy provide a presentation on the overall cleanup costs for the Tidal and Inland Areas to help the RAB understand how the funding for cleanup works. Phillip Ramsey (Environmental Protection Agency [EPA]) stated that a similar presentation was provided to the RAB several months ago. Ms. Williams added that the presentation discussed the funding and schedule of the cleanup of NAVWPNSTA Seal Beach Det Concord with a five year projection. The Navy agreed to send out schedule and funding information from past presentation to the RAB via e-mail. Ric Notini (City of Concord) stated that the City of Concord is just beginning the development of the Inland Area reuse plan so the future cleanup schedule is to be determined. Lisa Anich (Friends of Mount Diablo Creek) stated that it seems there is pressure to sell the Inland Area to developers without completing the cleanup first. Mr. Notini stated that no decisions on the cleanup and transfer schedule have been made. Mr. Weissenborn stated that when the Inland Area transferred to the Base Realignment and Closure (BRAC) process, the cleanup schedule changed. The RAB approved the 2007 presentation topic outline as a tentative list subject to change as things come up.

### **Action Item**

3. The Navy agreed to send out schedule and funding information presented earlier in 2006 to the RAB via e-mail.

## **II. OCTOBER 2006 RAB MEETING MINUTES APPROVAL**

Ms. Lind asked the RAB for comments on the minutes from the meetings held on October 4, 2006. Mr. O'Brien provided some changes to the October 4, 2006 RAB meeting minutes. The Navy agreed to make Mr. O'Brien's changes to the October 4, 2006 RAB meeting minutes and send them back to the RAB for

review. Once the RAB approves the revised October 4, 2006 meeting minutes via e-mail, the Navy will finalize them.

**Action Item**

4. The Navy will make Mr. O'Brien's changes to the October 4, 2006 RAB meeting minutes and send them back to the RAB for review.
5. Once approved by the RAB, the Navy will finalize and distribute the October 4, 2006 RAB meeting minutes.

**III. COMMITTEE REPORTS AND ANNOUNCEMENTS**

Ms. Williams announced that the RAB will be having a team building event on December 6, 2006 at 6:30 p.m. in the Concord Library Community Room. More details will be provided to the RAB on the team building event via e-mail.

Mr. Notini announced that the City of Concord had a public meeting on October 10, 2006 at the Concord Senior Center. Presentations from the public meeting are on the City of Concord website for those who were unable to make it. The City of Concord's Phase I report for community outreach for the reuse of the Inland Area will be available to the community on the City of Concord's website in mid November 2006.

Ms. Lind passed out a general fact sheet the Navy prepared for distribution to community groups. The fact sheet contains general information on the Navy's cleanup program at NAVWPNSTA Seal Beach Det Concord. Ms. Williams stated that these fact sheets should also be provided to the Neighborhood Alliance, which is an active community group in Concord. Anna Rikkelman (Concord resident) stated that she will distribute the fact sheets to the Neighborhood Alliance.

Mr. Fickett mentioned that he would like to see a time frame for the cleanup of the NAVWPNSTA Seal Beach Det Concord added to the next fact sheet the Navy prepares. Ms. Lind stated that the Navy has just begun work on a basewide update fact sheet and that timeline for work at the Tidal Area, Inland Area, and MMRP will be included. Ms. Lind stated that the cleanup timeline for sites is determined by a high, medium, and low ranking process. The remediation goals are to cleanup high ranked sites first, followed by the medium and low sites. Mr. O'Brien stated it is unclear how the Navy can make a commitment to cleanup a site that is going to be transferred to the City of Concord. Mr. Weissenborn stated that it is the Department of Defense's (DoD) responsibility to make sure that the NAVWPNSTA Seal Beach Det Concord is cleaned up. Ms. Lind stated that there are some sites that have long term monitoring that will be done by DoD regardless of whether the land is transferred. Mr. O'Brien stated that he is concerned the Army will not take responsibility for the appropriate cleanup needs for the Tidal Area. Cindy Welles (Clyde resident) asked if all of the sites at the NAVWPNSTA Seal Beach Det Concord are designated by the high, medium, and low ranking process. The Navy agreed to send the RAB the NAVWPNSTA Seal Beach Det Concord site ranking priority list.

### Action Items

6. The Navy will add a big picture timeline of the cleanup work at the Tidal Area, Inland Area, and MMRP program to the basewide update fact sheet.
7. The Navy agreed to send the RAB the NAVWPNSTA Seal Beach Det Concord site ranking priority list.

## **IV. REMEDIAL PROJECT MANAGER (RPM) UPDATE**

### **Navy Update**

Ms. Lind reviewed the Navy RPM update (Attachment C).

Mr. Fickett asked if the Navy is going to need to do a Site 1 Tidal Area Landfill redesign document. Ms. Lind stated the Navy's consultants will be working on the redesign document with the agencies and NOSSA. Mr. Fickett asked why the Navy cannot just agree with EPA's recommendations for a landfill design since they are the lead agency for the cleanup at the Tidal Area. Mr. Weissenborn stated that there are different opinions on the cleanup goals for the Site 1 Tidal Area Landfill. Ms. Lind stated that the Navy has to take into consideration various agencies that are involved in making the cleanup decisions at the Site 1 Tidal Area Landfill. Ms. Lind stated that the Navy wants to conduct a cleanup that does more good than harm to the site and the area surrounding it.

Mr. Ramsey stated that EPA works with other agencies to come together and reach cleanup decisions on all sites regardless of their priority. Currently EPA's highest priority site in the Tidal Area is the Litigation Area. A proposed plan for the Litigation Area is going to be submitted to the public in Fiscal Year 2007, and a record of decision is scheduled to be signed in 2008. The Navy and EPA are the signatory parties on the Federal Facility Agreement (FFA) which determines the cleanup schedule. When the Army takes over the Tidal Area, the FFA will be renegotiated between EPA, the Army, and the Navy.

Mr. Weissenborn stated that the BRAC team is working on awarding contracts for cleanup activities in the Inland Area.

The Navy is preparing the work plan for Site 29 that will go out for agency review on November 8, 2006.

Mr. Weissenborn stated that the Navy has requested an extension from EPA on the Remedial Investigation for Site 22. EPA granted a 30 day extension to the Navy. Jessica Hamburger (Contra Costa Conservation District) stated that she heard that the Navy is not planning on cleaning up the arsenic at Site 22. Mr. Weissenborn stated that the Navy is addressing the arsenic contamination at Site 22 under the CERCLA program.

Mr. Weissenborn stated that the Navy is preparing a work plan for Site 22 A.

The Navy is currently working on the site inspections for the MMRP PA.

The Navy awarded a contract to begin work at Site 27 to address chlordane contamination.

### **EPA Update**

Mr. Ramsey reviewed the EPA RPM update (Attachment C).

Mr. Ramsey stated that EPA attended a RPM meeting on October 26, 2006 to discuss the Litigation Area Feasibility Study. EPA was pleased with the information exchange that occurred at the meeting between the agencies and the Navy. Another meeting was scheduled to agree on the remedial goals for the Litigation Area for December 12, 2006.

Mr. Ramsey stated that the Site Management Plan (SMP) has taken longer to agree on this year. The Navy and EPA are working on getting the SMP finalized.

EPA approved a schedule extension for Site 31 once the Navy provided the agencies some data to review.

EPA prepared comments on the Draft Work Plan for Treatability Study at Solid Waste Management Units (SWMUs) 2, 5, 7, and 18. EPA's general concerns include scope, location of monitoring wells, duration of the study, data quality objectives, number of monitoring wells, and how this study fits into the big picture for the base cleanup.

### **Water Board Update**

Alan Friedman (Water Board) stated that the Water Board attended a RPM meeting on October 26, 2006 to discuss the Litigation Area Feasibility Study. Mr. Friedman was pleased with the information exchange that occurred at the meeting between the agencies and the Navy.

The Water Board is currently reviewing the Draft Work Plan for Treatability Study at SWMUs 2, 5, 7, and 18.

The Water Board is currently reviewing closure reports for underground storage tanks.

## **V. SITE 1 TIDAL AREA LANDFILL UPDATE**

John Bosche (Tetra Tech EM Inc. [TtEMI]) provided a presentation on a Site 1 Tidal Area Landfill Update. The presentation is included as Attachment D.

Mr. Fickett asked if the Navy was surprised to find large munitions in the landfill. Mr. Bosche stated that the Navy not expecting to find live munitions in the landfill.

Ms. Williams asked if the Navy is concerned with the possibility that earthquake could cause munitions to explode in the landfill. Mr. Bosche stated that the Navy is concerned that construction equipment might strike the munitions in the landfill and cause an explosion. Earthquakes are unlikely to trigger any live munitions buried in the landfill.

Mr. O'Brien stated that he is concerned with the location of the landfill directly next to the bay because of the possibility that water will come in contact with the waste and Mr. Fickett asked if the water underneath the landfill has been impacted by the waste. Mr. Bosche stated that the landfill cover is intended to isolate the waste and minimize the flow of water from landfill waste. Bay Mud is relatively impermeable and will assist in minimization of groundwater flow. The waste is currently in contact with groundwater and is expected to be so in the future. Mr. Friedman stated that the agencies will make sure that the landfill is monitored until all parties agree that monitoring does not need to be continued.

Mr. Bosche stated that the area around the landfill currently does not undergo large tidal fluctuations. Mr. O'Brien asked why the landfill is not considered a wetland area. Mr. Bosche stated that the Site 1 Tidal Area Landfill is not a wetland because it is a waste disposal area that does not support wetland habitat. The surrounding area is a wetland. Mr. Bosche stated that the cap design considers tidal influence. Mr. O'Brien stated that the area is a former marsh area and it should be returned to its original state. Mr. Bosche stated that EPA presumptive remedy guidance does not consider removal of the landfill mass to be practical. In addition due to possible presence of live munitions, excavation the landfill mass has become even less practical. Ramsey stated that the Site 1 is a landfill, not a wetland, and that the California Department of Fish and Game reviewed special status species in the area and the proposed design does not present concerns for special status species.

Ms. Lind stated that without approval from NOSSA, excavation will not be permitted at the Site 1 Tidal Area Landfill due to risk posed by explosion to construction workers.

Ms. Anich asked why there was a breach in the aqua dam that surrounded the landfill and the failed dam's influence on the restoration process. Mr. Bosche stated that the aqua dam was a temporary construction improvement which failed only because workmen were prevented from accessing the site due to the discovery of munitions. The aqua dam has no bearing on the long-term solution but was used only for temporary dewatering. Next spring, after redesign of the landfill cap, dewatering will be used again to allow construction of the landfill cap.

## **VI. NEXT MEETING AND ACTION ITEMS**

The next RAB meeting is scheduled for 6:30 to 8:30 p.m. on either Wednesday, January 3, 2007 or January 10, 2007 at the Concord Police Station Community Room.

The following action items were generated during the RAB meeting on November 1, 2006:

<b>No.</b>	<b>Action Item</b>	<b>Target Date for Completion</b>	<b>Completion Date (or Status)</b>
1	The Navy will send an e-mail to the RAB soliciting feedback on the preferred January 2007 meeting date. Once either January 3, 2007 or January 10, 2007 has been determined, the Navy will send an announcement to the RAB.	11/3/06	This action item was completed
2	Ms. Lind will provide information to the RAB on the Army environmental lead once that person has been determined.	1/10/07	This action item was completed
3.	The Navy agreed to send out schedule and funding information presented earlier in 2006 to the RAB via e-mail.	11/16/06	This action item was completed
4.	The Navy will make Mr. O'Brien's changes to the October 4, 2006 RAB meeting minutes and send them back to the RAB for review.	11/3/06	This action item was completed
5.	Once approved by the RAB, the Navy will finalize and distribute the October 4, 2006 RAB meeting minutes.	11/17/06	This action item was completed
6.	The Navy will add a big picture timeline of the cleanup work at the Tidal Area, Inland Area, and MMRP program to the basewide update fact sheet.	11/3/06	This action item was completed
7.	The Navy agreed to send the RAB the NAVWPNSTA Seal Beach Det Concord site ranking priority list.	1/10/07	This action item was completed

**ATTACHMENT A**  
**ATTENDEES AND AFFILIATIONS**  
**RESTORATION ADVISORY BOARD MEETING**  
**NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

**NOVEMBER 1, 2006**

(One Page)

**ATTENDEES AND AFFILIATIONS  
RESTORATION ADVISORY BOARD MEETING  
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

**NOVEMBER 1, 2006**

<u>Name</u>	<u>Affiliation</u>	<u>Telephone</u>
Wayne Akiyama	Shaw Group	(925) 288-2003
Lisa Anich*	Friends of Mount Diablo Creek	(925) 689-2642
Luis Garcia-Bakarich	EPA	(415) 972-3237
Doug Bielskis	ERRG	(925) 726-4119
John Bosche	TtEMI	(415) 222-8295
Beth Byrne	Concord Resident	(925) 686-4815
Harry Byrne	Concord Resident	(925) 686-4815
Diana Davis	EMS	(925) 939-0120
Kent Fickett *	Mount Diablo Audubon Society	(925) 254-5156
Alan Friedman	Water Board	(510) 622-2347
Greg Glaser*	Danville Resident	(925) 363-5570
Jessica Hamburger*	CCRCD	(925) 672-6522 X118
Pat Howlett	Concord Resident	(925) 689-8313
Carolyn Hunter	TtEMI	(415) 222-8297
John Kaiser	Water Board	(510) 622-2368
Sylwester Kosowski	U.S. Navy, NAVFAC Southwest	(619) 532-1027
Angie Lind	U.S. Navy, NAVFAC Southwest	(619) 532-4228
Scott McConnell*	Clyde Resident	(925) 676-7093
Rick Notini	City of Concord	(925) 671-3024
Ray O'Brien	Bay Point Resident	(415) 385-9220
Phillip Ramsey	EPA	(415) 972-3006
Anna Rikkelman	Concord Resident	(925) 689-2662
Eric Rixen	TN and Associates	(415) 378-2273
Cindi Rose	TtEMI	(415) 222-8286
Bill Schaal	TN and Associates	(415) 760-6624
Rick Weissenborn	U.S. Navy BRAC PMO West	(619) 532-0952
Cindy Welles*	Clyde Resident	(925) 685-2698
Mary Lou Williams*	Concord Resident	(925) 685-1415

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Notes:

<p>* CCRCD EMS EPA ERRG PMO West TtEMI Water Board</p>	<p>Community Restoration Advisory Board (RAB) Member Contra Costa Resource Conservation District Environmental Management Services U.S. Environmental Protection Agency Engineering/Remediation Resources Group U.S. Navy Project Manager Office West Tetra Tech EM Inc. San Francisco Bay Regional Water Quality Control Board</p>
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**ATTACHMENT B**

**AGENDA**

**RESTORATION ADVISORY BOARD MEETING  
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

**NOVEMBER 1, 2006**

(One Page)

## AGENDA

### NAVAL WEAPONS STATION SEAL BEACH (NWSSB) DETACHMENT CONCORD RESTORATION ADVISORY BOARD (RAB) MEETING

Wednesday, November 1, 2006  
6:30 p.m. – 8:30 p.m.

Location: Concord Library Meeting Room  
2900 Salvio Street, Concord, CA 94519

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- 6:30 – 6:45 Call to Order
- Welcome
  - Introductions
  - Public Comments
  - January 2007 Agenda Approval
  - 2007 RAB Presentation Topic Outline
- Lead: Community Co-chair
- 6:45 – 6:50 Approval of October 2006 Meeting Minutes  
Review Unresolved Business  
Lead: Navy Co-chair
- 6:50 – 7:30 Committee Reports/Announcements
- RAB Announcements, Reports or other business
  - Remedial Project Managers' Update (Navy/EPA/DTSC/RWQCB)
- 7:30 – 7:40 Break
- 7:40 – 8:15 Presentation: Site 1 Landfill Update  
Presenter: John Bosche (Tetra Tech EM Inc.)
- 8:15 – 8:30 Presentation: Outcome of Litigation Area Informal Dispute  
Presenter: Angie Lind
- 8:30 Adjourn

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*NWSSB DETACHMENT CONCORD RAB Meetings are held the first Wednesday of every month, unless changed. Information regarding the Environmental Restoration program at NWSSB Detachment Concord can be found at:*

*- NWSSB DETACHMENT CONCORD program prior to December 2005 -*

*<http://www.sbeach.navy.mil/Programs/Environmental/IR/IR.htm>*

*- NWSSB DETACHMENT CONCORD program after December 2005 -*

*<http://www.navybracpmo.org/brac2005/bracbases/ca/concord/default.aspx>;*

*In addition, a public voicemail is available for questions at (925) 246-4020*

*NAVFAC Public Affairs Officer: Mr. Lee Saunders, (619) 532-3100, [lee.saunders@navy.mil](mailto:lee.saunders@navy.mil)*

*Lead RPM Tidal Area and Navy RAB Co-Chair: Mrs. Angie Lind, (619) 532-4228, [angela.lind@navy.mil](mailto:angela.lind@navy.mil)*

*BRAC Environmental Coordinator: Mr. Rick Weissenborn (619) 532-0952, [richard.weissenborn@navy.mil](mailto:richard.weissenborn@navy.mil)*

*Community RAB Co-Chair: Mary Lou Williams, [Mlou1015@aol.com](mailto:Mlou1015@aol.com)*

**ATTACHMENT C**

**NAVY AND ENVIRONMENTAL PROTECTION AGENCY  
REMEDIAL PROJECT MANAGER'S UPDATE  
RESTORATION ADVISORY BOARD MEETING  
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

**NOVEMBER 1, 2006**

(3 Pages)



***Navy RPM Update for 1 November 2006 Meeting of Naval Weapons Station,  
Detachment Concord Restoration Advisory Board (RAB)***

Summary of Navy Remedial Project Manager (RPM) Activities since the last RAB Meeting held on Wednesday, 4 October 2006

**Tidal Area**

- **5 thru 25 October 2006** – Navy contractor(s) finished winterization of Site 1 Landfill. All went well. Navy UXO contractor conducted a surface sweep of Site 1 and a potentially live PD fuze was found as well as one expended PD fuze. Travis EOD responded and blew up the potentially live PD fuze in place. Contractor noted a lot of munitions debris on the northern shore probably from the Port Chicago disaster.
- **18 October 2006** – Navy cancelled MRP PA presentation. Navy needed more time to put this presentation together, since NWS Seal Beach wanted to attend and have some input. Navy will reschedule presentation in the near future. Malcolm Pirnie is incorporating some new information into the Draft Final PA and therefore this will delay the PA until November 30, 2006.
- **19 October 2006** – Navy received comments/changes to proposed Fact sheet from the City of Concord. Fact sheet was revised.
- **19 October 2006** – Navy had a teleconference with Naval Ordnance Explosive Safety Submission Activity (NOSSA) with regard to Site 1 Landfill. NOSSA stated that blast protection on excavation equipment is insufficient protection from explosions from hedge hogs and therefore we would not be able to excavate within the footprint of the land fill unless we did anomaly avoidance. However, it was determined that anomaly avoidance is not practical at a landfill due to buried metal debris found at landfills. Therefore, NOSSA recommends installing the cap without excavation (no digging). This would require redesign of the cap and additional land use controls. However, the overall remedy is deemed appropriate and protective.
- **24 October 2006** – Navy sent out revised SMP to EPA that corresponds to FY 07 budget expectations. The SMP is pending finalization. Once the Navy receives concurrence on Litigation Area RGs the Navy will finalize the SMP with EPA.

- **25 October 2006** – Navy along with Tetra Tech and U.S. EPA met to discuss revised Remedial Goals for the Litigation Area to resolve the informal dispute. At this meeting the Navy and U.S. EPA have not come to a consensus on appropriate RGs for this site. EPA requested some additional information in order to evaluate the technical merits of the proposed RGs. We rescheduled another meeting for the 2<sup>nd</sup> week in December.

#### **Inland Area**

- **26 October 2006** – Navy submitted electronic version of final SMP for EPA review

#### **Tidal and Inland Areas**

- **1 November 2006** – Navy met with the project managers from USEPA, DTSC, DFG, and the SFBRWQCB. This was our regular monthly meeting.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105

U.S. Environmental Protection Agency  
Restoration Advisory Board Update  
for  
Concord Naval Weapons Station  
November 1, 2006

Meetings:

- October 4, 2006: RPM Meeting:  
Major Topic: Site 1 Landfill Winterization Efforts
- October 4, 2006: RAB Meeting:  
Major Topic: Arsenic overview
- **October 26, 2006: Litigation Area Feasibility Study (FS) Meeting**
- November 1, 2006: RPM Meeting:  
Major Topic: Litigation Area FS, **Site Management Plan (SMP)**
- November 1, 2006: RAB Meeting:  
Major Topics: Site 1 and Litigation Area FS Updates

Documents Under Review:

- Preliminary Site 31 Remedial Investigation Data
- **Solid Waste Management Units (SWMUs -Maintenance Shops) Pilot Test Draft Sampling Plan**, dated September 29, 2006
- Preliminary Revised SMP

Prepared by:

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(415) 972-3006

**ATTACHMENT D**

**SITE 1 TIDAL AREA LANDFILL UPDATE PRESENTATION  
RESTORATION ADVISORY BOARD MEETING  
NAVAL WEAPONS STATION SEAL BEACH DETACHMENT CONCORD, CALIFORNIA**

**NOVEMBER 1, 2006**

(8 Pages)



## **Tidal Area, Site 1 Protectiveness of Landfill Cap Remedy**

Naval Weapons Station Seal Beach  
Detachment Concord

presented by  
John Bosche, P.E.  
Project Manager  
Tetra Tech EM Inc.

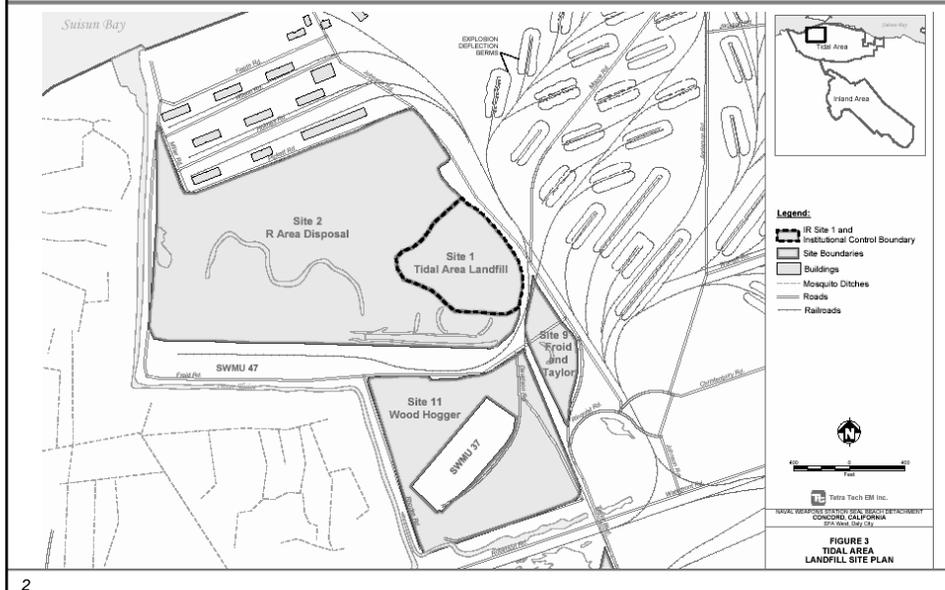
November 1, 2006

## **PRESENTATION OVERVIEW**



- 1. GENERAL SITE REVIEW AND DECISION HISTORY**
- 2. WHAT CONTENTS OF THE LANDFILL WERE PRESUMED PRESENT?**
- 3. WHAT CONTENTS OF THE LANDFILL WERE FOUND?**
- 4. IS THE PRESUMPTIVE REMEDY STILL PROTECTIVE TO HUMAN HEALTH AND THE ENVIRONMENT?**
- 5. IS THERE JUSTIFICATION TO CONSIDER OTHER ALTERNATIVES?**
- 6. SUMMARY**

## 1. GENERAL SITE REVIEW



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## 1. GENERAL SITE REVIEW



- **Presumptive Remedy guidance for military landfills**
- **Landfill contents were not characterized. EPA does not recommend characterization.**
- **Landfill cap (containment) is the selected remedy. ROD was signed by Navy, EPA, and DTSC (final signature 6/04).**

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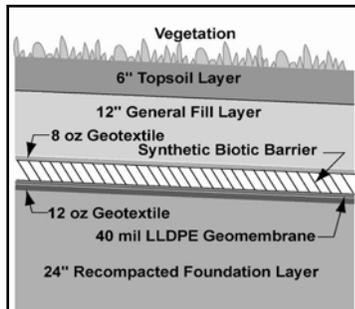
# 1. GENERAL SITE REVIEW



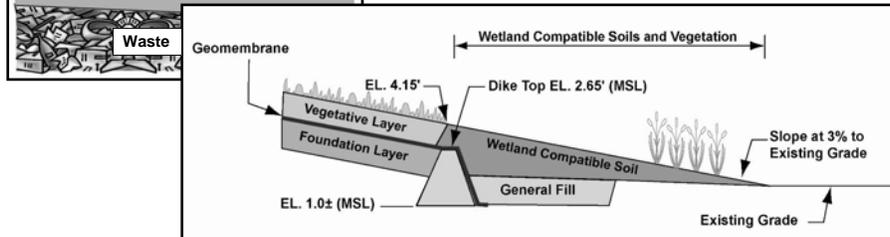
## RECORD OF DECISION SELECTS PRESUMPTIVE REMEDY

- Remedy provides a landfill cap for 125,000 to 135,000 cubic yards of waste thus removing a pathway to ecological and human receptors.
- The ROD and selected remedy address direct contact, erosion, and stormwater infiltration of water into waste. Land use controls are a component of the remedy to ensure long-term protection.

# 1. GENERAL SITE REVIEW



Cap Detail



Perimeter Dike Detail

## 2. PRESUMED LANDFILL CONTENTS



**From historical information, between 1944 and 1979 the landfill was the principal repository for municipal and construction waste from Detachment Concord and surrounding civilian communities. Waste generated during that time was presumed to include:**

- Household garbage
- Construction waste
- Shipboard waste
- Hazardous or potentially hazardous waste including solvents, acids, paint cans, asbestos, and creosote-treated timbers
- Military waste (ordnance materials)

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## 3. ACTUAL CONTENTS OF THE LANDFILL

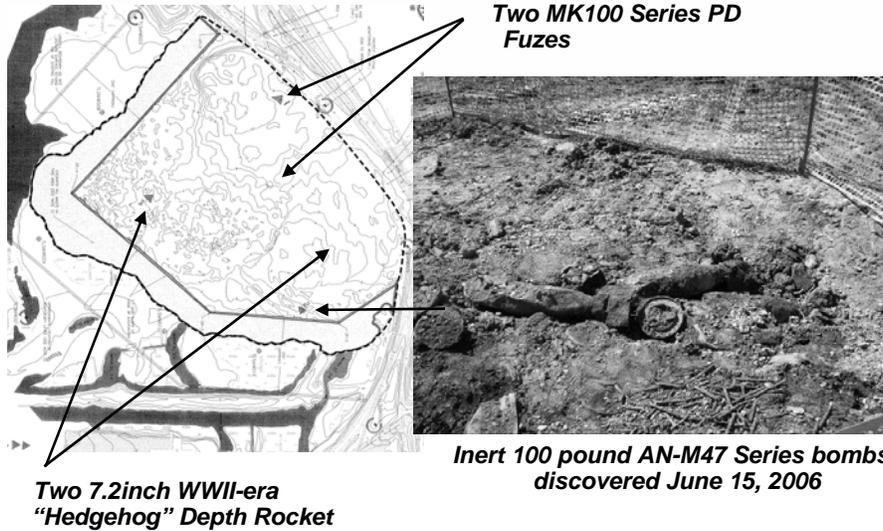


### LANDFILL CONTENTS DISCOVERED

- Clearing, grubbing, and grading of landfill detects most landfill contents similar to those presumed during signature of the ROD
- Live munitions discovered including two antisubmarine weapons (hedgehog anti-submarine rockets) each containing a 30 pound explosive charge and two live MK 29 projectile fuzes.

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### 3. ACTUAL CONTENTS OF LANDFILL



*Two MK100 Series PD Fuzes*

*Two 7.2inch WWII-era "Hedgehog" Depth Rocket*

*Inert 100 pound AN-M47 Series bombs discovered June 15, 2006*

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### 4. IS THE PRESUMPTIVE REMEDY PROTECTIVE?



#### **MUNITION RISKS**

- The principal threat is explosion if munitions are disturbed during excavation
- Buried and undisturbed munitions do not pose a risk
- Explosion risk decreases with time.
- Chemical risks

#### **DO MUNITIONS POSE A RISK UNDERNEATH THE CAP?**

- If covered with a foot of clean fill (assessment depth = 1 foot), the Department of Defense allows limited public access activities that include livestock grazing and wildlife preserve (DoD Instruction 6055.9-STD)

**THE PRESUMPTIVE REMEDY IS STILL PROTECTIVE OF HUMAN HEALTH AND THE ENVIRONMENT**

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## 5. CONSIDER OTHER ALTERNATIVES?



### **EXISTING ROD AND PRESUMPTIVE REMEDY STILL APPLICABLE?**

- EPA presumptive remedy indicates that landfills of 100,000 cubic yards or greater are rarely practical for excavation
- EPA considers potential risks of high hazard military wastes in their presumptive remedy guidance for military landfills and suggests that high hazard wastes could potentially be treated as hot spots.

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## 5. CONSIDER OTHER ALTERNATIVES?



### **THE EPA RARELY RECOMMENDS MUNITIONS FOR REMOVAL AS HOT SPOTS**

#### **ONLY IF ALL OF THE FOLLOWING ARE TRUE WILL THE EPA TYPICALLY RECOMMEND REMOVAL OF MUNITIONS (these questions are considered in the treatment of hot spots)**

1. Does evidence exist to indicate the presence and approximate location of waste?
2. Is the hot spot known to be principal threat waste (high hazard, liquid, mobile, highly toxic)?
3. Is the waste in a discrete, accessible part of the landfill?
4. Is the hot spot known to be large enough that its remediation will reduce the threat posed by the overall site but small enough that it is reasonable to consider removal (e.g., 100,000 cubic yards or less)?

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## 5. CONSIDER OTHER ALTERNATIVES?



“...the majority of sites are expected to be suitable for containment only, based on the heterogeneity of the waste, the lack of reliable information concerning disposal history, and the problems associated with excavating through refuse.”

Source: US EPA. 1993. “Quick Reference Fact Sheet, Presumptive Remedy for CERCLA Municipal Landfill Sites.” EPA 540-F-93-035. September.

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## 5. CONSIDER OTHER ALTERNATIVES?



### **MUNITIONS BURIED UNDER A COMPLETED CAP**

- Explosion risk is low.
- Chemical risks are similar to other wastes of like toxicity.

### **MANAGING EXPLOSION RISK DURING CONSTRUCTION**

- Naval Ordnance Safety and Security Activity (NOSSA) now prohibits the relocation of waste by excavation.
- Landfill cap requires redesign to eliminate waste excavation.
- Construction procedures will be revised and reviewed by NOSSA to assure worker safety during construction of the cap.

**PRESUMPTIVE REMEDY IS PROTECTIVE, APPLICABLE, APPROPRIATE, AND REMAINS THE PREFERRED ALTERNATIVE**

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## 6. SUMMARY



- There are no known conditions at the site that have altered the protectiveness of the selected remedy documented in the ROD.
- The explosion hazard associated with the excavation and transport of live ordinance provides a compelling argument for containment in place.
- The Navy is in the process of reviewing construction methods to assure worker safety.
- EPA guidance does not support relocation of the landfill waste due to cost, excavation hazards, and the protectiveness of the selected remedy. Other alternatives are deemed impractical.

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***Questions?***

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