

MINUTES  
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH  
RESTORATION ADVISORY BOARD (RAB)  
AND COMMUNITY MEETING  
January 8, 2003

Participants:

Chauvel, Tim / Department of Toxic Substances Control (DTSC)  
Clarke, Dean / Orange County Health Care Agency  
Garrison, Kirsten / CH2M HILL  
Grinyer, Walter / GeoSyntec  
Hamparsumian, Hamlet / Foster Wheeler Environmental Corporation (FWENC)  
Le, Si / Southwest Division, Naval Facilities Engineering Command (SWDIV)  
Leibel, Katherine / DTSC  
Palakur, Sri / FWENC  
Smith, Gregg / NAVWPSNTA Seal Beach Public Affairs Officer (PAO)  
Tamashiro, Pei-Fen / NAVWPNSTA Seal Beach and RAB Navy Co-chair  
Vesely, Gene / RAB Member  
Wong, Bryant / CH2M HILL

WELCOME

At 7:05 p.m., P. Tamashiro, Navy Co-chair began the meeting by welcoming the participants. She indicated that several additional people had indicated via telephone and e-mail that they would attend, but they had not yet arrived. G. Smith, the Public Affairs Officer (PAO) for NAVWPNSTA Seal Beach was introduced.

Participants were encouraged to direct any questions regarding environmental issues or the Installation Restoration (IR) Program to P. Tamashiro or G. Smith, who are both accessible via telephone or e-mail.

P. Tamashiro introduced T. Chauvel a Public Participation Specialist from DTSC who would be replacing Kim Foreman. S. Le, the Remedial Project Manager (RPM) for the IR Program from SWDIV Engineering Command, who would be presenting a status update on the ongoing IR Program, was also introduced.

PROJECT HIGHLIGHTS

S. Le provided the RAB with an overview of the progress at the NAVWPNSTA Seal Beach's IR Program sites. The following sites were discussed:

- Site 5- Fill Disposal Area, Removal Action
- Site 7 - Station Landfill, Engineering Evaluation and Cost Analysis (EE/CA) and Action Memorandum (AM)
- Site 73 - Water Tower Area, EE/CA and AM
- SWMU 24 - Demilitarization Facility, EE/CA, AM, and Removal Action

- Site 14 - Abandoned Leaking Gasoline Underground Storage Tank (UST), Baseline Groundwater Investigation
- Site 40 - Concrete/Pit Gravel Area and Site 70 - Research, Testing, and Evaluation (RT&E) Area, Groundwater Monitoring Program
- Site 40 and Site 70 Feasibility Study, Proposed Plan, and Record of Decision (ROD)
- Site 40 and Site 70 Pilot Testing
- Site 74 – Skeet Range, Tier II Ecological Risk Assessment
- Site 4 – Perimeter Road; Site 5 – Clean Fill Disposal Area; Site 6 – Explosives Burning Ground; and Site 7 – Station Landfill, Groundwater Monitoring Program

Copies of the Project Highlights slide presentation were made available as handouts at the meeting.

Questions and answers made during and after the Project Highlights presentation are summarized below:

**Slide 3**

**Question:** Is Site 4 the Skeet Range?

**Answer:** No. Site 4 is Perimeter Road. Only two of several areas of potential concern (AOPC) at this site have lead contamination “hot spots.” At the request of DTSC, the Navy has agreed to excavate and remove these lead “hot spots”. This removal action will be conducted at the same time when the adjacent Site 7 removal action is conducted

**General**

**Question:** Are you familiar with the Pelican Hill development site located across from the main gate of the NAVWPNSTA along Seal Beach Boulevard? The Coastal Commission recently issued a cease and desist order to the contractor when a Native American burial site was discovered during the development of 70 homes and the contractor did not adhere to the archeological protocol.

How deep is the planned soil excavation at the Site 73 Water Tower Area? Considering the proximity of the burial site to Site 73, is there justification for concern?

**Answer:** Lead contamination at Site 73 was caused by sandblasting of the paint off of the former water tower and the contamination is surficial. Excavation is planned to extend only 1 to 2 feet below ground surface (bgs) based on the results of previous sampling.

Auger testing will be done ahead of time and during the archaeological data recovery to evaluate the possible presence of archeological artifacts in areas of known archeological sensitivity. Based on auger testing results approximately 5 percent of the total midden volume in the area of

potential concern will be excavated by hand by the archaeologists under the surveillance of a Native American monitor. Approximately 21 cubic meters of soil would be excavated by hand digging. The excavation of the contaminated soil will take place following the completion of the data recovery activities. For the most part, the majority of the contaminated soil requiring removal is located primarily around the highly disturbed area immediately beneath the recently removed water tower. A backhoe or a small excavator will be used for the excavation of the contaminated soils. Excavation of contaminated soils will occur under the surveillance of an archeologist and a Native American monitor.

**Comment by G. Vesely:** The alarming thing about the situation at the Pelican Hill site is that an archeologist conducted an initial assessment of the site and made recommendations for a work plan. But excavation activities at the site proceeded without a complete plan for actions that would be conducted if archaeological resources were discovered.

**Response by P. Tamashiro:** Yes, that is a valid concern for sites with the potential for presence of archaeological resources. The Navy has consulted with the State Historic Preservation Officer (SHPO) with regard to Site 73. A Memorandum of Agreement (MOA) has been drafted and signed to address contingencies in the event of an archeological find and the proper handling, collection, and storage of the artifacts so work would not have to be halted. Also, Site 73 is a much smaller site than the Pelican Hill development site.

**Question:** Which site is Site 73?

**Answer:** Site 73 is the Water Tower.

## PRESENTATION – IR PROGRAM SCHEDULE AND BUDGET PRESENTATION

P. Tamashiro introduced S. Le to present the annual update to the IR Program schedule and budget.

Copies of the slide presentation were made available as a handout at the meeting. The questions and answers posed after the presentation are summarized below:

**Question:** What is the cleanup approach for the Skeet Range (Site 74)?

**Answer:** The site-specific Tier II Ecological Risk Assessment will determine the appropriate cleanup levels that should be used and further define the extent of lead contamination at Site 74.

**Question:** So the cleanup approach remains to be determined?

**Answer:** Yes, it is the most recent site to be added to the IR Program and the specific response action for this site remains to be determined.

**Question:** Does the estimated total cost of the IR Program of \$79 million include Department of Defense State Memorandum of Agreement (DSMOA)

costs or just contractor costs?

**Answer:** The estimated total cost of the IR Program only includes contractor costs. Navy and regulatory salary and support costs for the IR Program are not included.

BREAK

P. Tamashiro announced that there would be a 10-minute break.

PRESENTATION – 2002 ANNUAL GROUNDWATER MONITORING FOR SITE 14

P. Tamashiro introduced S. Palakur a Senior Hydrogeologist/Engineer from FWENC. S. Palakur holds a master's degree in civil engineering specializing in geotechnology and has 9 years of experience.

Copies of the slide presentation were made available as a handout at the meeting. An additional graphic was provided that illustrated Site 14 and showed hydropunch and groundwater monitoring well locations. The questions and answers posed after the presentation are summarized below:

**Question:** Once the oxygen-evolving substrate is injected into the groundwater would the groundwater then be monitored?

**Answer:** Yes, the oxygen-evolving substrate would be injected into the groundwater and then groundwater would be monitored. It should be noted that groundwater monitoring and sampling would be conducted whether or not, for example, enhanced bioremediation through oxygen delivery is implemented.

**Comment by G. Vesely:** In the early 1980s I worked for Supply here at the NAVWPNSTA and we were in charge of gasoline delivery and storage at Site 14. One of my co-workers used to measure the gasoline tank levels during that time and when levels began to drop without explanation, it was thought that the gasoline was being stolen. No one ever imagined that the tanks could be leaking.

**Question:** Is there any risk associated with implementing the enhanced bioremediation through oxygen delivery?

**Answer:** Yes, that is why no definite decision has been made regarding a remediation method at Site 14. Fate-and-transport modeling will be conducted to verify the groundwater plume stability and groundwater monitoring and sampling will continue. If modeling and/or monitoring results indicate unstable plume conditions, enhanced bioremediation through oxygen delivery will be evaluated to determine if it is a viable remediation method.

**Question:** Is there a risk associated with the pressure that is required to inject the oxygen-evolving substrate?

oxygen-evolving substrate?

**Answer:** Yes. In that area, there are a lot of underground utilities so damaging underground utility lines and fiber optic cables are of concern.

**Question:** How much pressure would be used for the injection?

**Answer:** A one-time injection of approximately 100 pounds per square inch (psi) would occur at each injection location.

**Question:** You must have to ensure a tight seal around the oxygen injection point to achieve a pressure of 100 psi?

**Answer:** Oxygen is not injected. The substance is an oxygen-evolving substrate such as Oxygen Release Compound (ORC) marketed by Regenesys, Inc., which slowly releases oxygen after a chemical reaction occurs.

**Question:** Is the substrate liquid or granular?

**Answer:** It is a type of liquid slurry.

**Question:** Is there heat generation involved?

**Answer:** I am not sure. I can provide an answer to that question in the meeting minutes.

The substrate is injected into the groundwater within the upper 10 feet of the saturation zone. Direct-push techniques using pressure would inject the semi-solid substrate into the groundwater. The oxygen-releasing component of the substrate would increase microbial activity and enhance the bioremediation process.

*The following response is intended to provide a more complete response to the question concerning heat generation and temperature increase:*

Following the injection of the oxygen-release compound, oxygen would be released very slowly in the saturated zone within a six- to nine-month period. Moreover, since the reaction is not exothermic, it does not generate heat.

**Question:** What is the zone of influence at Site 14?

**Answer:** The affected area where the wells with highest concentrations of benzene and MTBE are located is approximately 80 feet by 100 feet. Injection spacing points would occur at 10-foot intervals with a total of approximately 50-55 injections.

**Question:** With respect to the graph presented in Slide 22, is the peak in methyl tertiary-butyl ether (MTBE) at BSW-14-4 in July 2002 a concern?

**Answer:** The MTBE peak is most likely a random increase. If you compare the levels of MTBE detected in July 2002 to the levels detected during the baseline investigation (October 1999), concentrations of the substance in

July 2002 are clearly less.

**Question:** That may be true with respect to BSW-14-4, but with respect to BSW-14-3 a concentration of approximately 1,250 mg/L was detected during the baseline investigation (October 1999) and this level increases to 2,500 mg/L in July 2002. Why does this increase occur?

**Answer:** The graph is somewhat misleading in that there was no data collected between the baseline investigation in October 1999 and October 2001. However because the sampling events are connected in the line graph, a downward trend in concentrations is inadvertently shown.

**Comment:** Maybe a line should not be drawn to connect these two sampling events. It is misleading.

**Answer:** Yes, the line between the October 1999 and October 2001 sampling events should be dashed or otherwise marked to indicate that no data was collected during this time.

#### COMMUNITY FORUM

P. Tamashiro opened the Community Forum. She noted the low turnout and requested that the meeting minutes reflect a need for higher RAB member attendance. It was announced that no RAB meeting would be held in February and that the next RAB meeting would be held on Wednesday, March 12, 2003. P. Tamashiro indicated that Lindi Willhite's term as Community Co-chair term was ending and that elections would be held for the position. Nominations for inclusion on the election ballot were requested and should be submitted prior to the March 12, 2003 RAB meeting.

The following comments, questions, and responses were posed during the Community Forum:

**Question:** Is it accurate to say that past recruiting efforts for new RAB members has not been a success?

**P. Tamashiro:** RAB member recruitment has been low recently. We should make a note in the meeting minutes that current RAB members who do not wish to regularly participate should submit their letters of resignation so that new RAB members can be actively recruited.

**Question:** Do you advertise for recruitment of new RAB members in the *Golden Rain* (the newspaper serving the Leisure World community)?

**Response by G. Smith:** No, we have not done that in the past. We do need to more actively recruit RAB members. We haven't made a concerted recruiting effort in over a year.

**Response by P. Tamashiro:** We did receive one new RAB member in March 2002 – Jack Carmody. He has been a regularly attending RAB member. In addition, we always include a request for RAB participation in our mailers to the

surrounding community. The IR Program mailing list contains over 300 entities.

**Question:** Do you recruit from communities outside Seal Beach? Do you recruit in Sunset Beach?

**Response:** Yes, we recruit from the all the “surrounding communities.” This includes Seal Beach, Sunset Beach, Westminster, Los Alamitos, etc. One of the RAB members lives as far away as Newport Beach.

**Question:** Didn't the 2001 Community Relations Plan (CRP) Update identify some potential RAB participants?

**Response:** Yes. CH2M HILL will review the community interview notes taken in support of the 2001 CRP Update and provide the Navy with the names and contact information (if available from the community interview notes) for any persons that expressed an interest in participating in the RAB.

**Comment:** You might also recruit from the local Universities – California State University Long Beach or Long Beach City College.

**Response:** Yes, these are all good ideas. In addition, we have requested John Bradley, the National Wildlife Refuge (NWR) Manager, to advertise the request for RAB participation during the NWR tours, which are open to the public.

#### ADJOURNMENT

P. Tamashiro concluded the meeting by thanking everyone for attending and reminding the attendees to please return their badges and sign-in before leaving. The meeting was adjourned at 8:31 p.m.

Note: This is a meeting summary, not an actual transcript.