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NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH  
RESTORATION ADVISORY BOARD (RAB)  
AND COMMUNITY MEETING  
SEPTEMBER 13, 2000

Participants:

Broderick, John/Regional Water Quality Control Board  
Castillon, Richard  
Clarke, Dean/Orange County Health Care Agency  
Coger, Jon/ Southwest Division, Naval Facilities Engineering Command (SWDIV)  
Dick, Andrew/SWDIV  
Embree, Melody/CH2M HILL  
Hamparsumian, Hamlet/Foster Wheeler  
Lamond, Robert  
Leibel, Katherine/ Department of Toxic Substances Control (DTSC)  
Peoples, J.P.  
Schilling, Bob/ Bechtel National, Inc.  
Smith, Gregg/NAVWPNSTA Seal Beach Public Affairs Officer  
Tamashiro, Pei-Fen/NAVWPNSTA Seal Beach Navy Co-Chair  
Vessley, Gene  
Willhite, Lindi/RAB Community Co-Chair  
Wong, Bryant/CH2M HILL

WELCOME

At 7:05 p.m., P. Tamashiro opened the meeting by welcoming the participants to the meeting and introducing herself as the Navy Co-chair for NAVWPNSTA, Seal Beach. She also introduced G. Smith as the Public Affairs Officer for NAVWPNSTA, Seal Beach. P. Tamashiro announced a change in the RAB agenda for the evening's meeting. The Site 5 Engineering Evaluation/Cost Analysis presentation by Bechtel National Inc., will be postponed until a later date.

PROJECT HIGHLIGHTS

P. Tamashiro introduced A. Dick, the Remedial Project Manager (RPM) from SWDIV, who provided the RAB with a Project Briefing that covered the highlights of activities being conducted at NAVWPNSTA Seal Beach under the Installation Restoration (IR) Program. Copies of the slide presentation were made available as a handout at the meeting. Questions and answers made following the presentation are summarized below:

**Question:** There are two water towers on base. Which one are you referring to?

**Answer:** The water tower near Seal Beach Boulevard and the Main Gate is the one that is being investigated as part of the IR Program.

**Question:** Did you test the other tower?

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**Answer:** No, that one doesn't have the same problems.

PILOT STUDY WORK PLAN FOR INSTALLATION RESTORATION PROGRAM SITES 40 AND 70

P. Tamashiro introduced B. Schilling, Project Manager from Bechtel National, Inc., who provided the RAB with a presentation of the Draft Work Plan for Pilot Test Program for IR Sites 40 and 70. Copies of the slide presentation were made available as a handout at the meeting. Questions and answers made during and following the presentation are summarized below:

**Question:** Can you show on the site map (of Site 70) where the dense area of contamination is located?

**Answer:** B. Schilling indicated on the map (see slide 9) the location of the highest concentration of trichloroethene (TCE) near the former tank farm in the Research, Testing, and Evaluation (RT&E) Area.

**Question:** Is *in situ* a new technology or have you used it before?

**Answer:** *In situ* technology has been used before. I'll discuss this later (see Slide 14).

**Question:** When will the bench testing be completed by Idaho National Engineering and Environmental Laboratory (INEEL)?

**Answer:** INEEL's bench testing has been ongoing for about 3 months and we are in the process of evaluating their data. After our evaluation, we will have discussions with the Navy and regulatory agencies prior to the implementation of pilot testing at Site 40.

**Question:** What is the cost of the pilot testing?

**Answer:** The cost to conduct the treatability studies (bench-scale and pilot-scale testing) at both sites (Sites 40 and 70) is approximately \$1.38 million.

**Question:** With this *in situ* process, will you expect to dilute or displace the contamination?

**Answer:** No. We will do a mass balance to check for this and account for dilution.

**Question:** How do you perform this mass balance?

**Answer:** On a chemical compound basis, we take samples around the area to assess the sum of the mass of the chemicals before, during, and after the pilot test.

**Question:** As I understand it, you will be cleaning the soil "in-place" so you will not have to ship the contaminated soil off-site for disposal. Is there a particular type of contamination that this technology works best on?

**Answer:** The types of chemicals, their concentrations, whether the contamination is in the ground water or the soil, and other factors will determine the best of

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course of action for remediation.

**Question:** Do you have a good handle on where the DNAPL (dense nonaqueous-phase liquid) is at Site 70?

**Answer:** Yes, we have a pretty good idea where it is, although we have never actually seen the free-phase product. But the concentrations found are high enough to suggest the presence of DNAPL.

**Question:** How many pounds of the contamination do you suspect is there?

**Answer:** We have not estimated the mass of contaminants in the DNAPL area, but during the feasibility study we estimated that there are approximately 3,200 pounds of dissolved product given the width, depth and length of the plume, and the contaminant concentrations observed during the previous investigations.

**Question:** Has a monitoring well been installed outside the base?

**Answer:** Yes, a monitoring well has been recently installed outside the base near the post office.

**Question:** Does the plume reach that outside monitoring well?

**Answer:** Because it has been installed only recently, it has been sampled once. The analytical data from that sampling event is currently being compiled for inclusion in the Quarterly Groundwater Data Summary that will be issued for agency review later this month. Based on my scanning of the data, I don't recall seeing any detects of chlorinated solvents in that well.

**Question:** It is assumed that the plume becomes deeper in the direction of the groundwater flow. Therefore, the plume near the boundary of the Station is expected to be shallower, right?

**Answer:** Yes, you are correct. Based on samples collected at several depths along its northern extent, the plume tends to be shallower towards the edge near Seal Beach Boulevard. The plume tends to be deeper downgradient in the direction of the flow as evidenced from samples collected at numerous depths over the full length of the plume.

**Question:** There is a sewer line being laid along Seal Beach Boulevard. Has there been any contamination detected there?

**Answer:** We do not monitor that sewer line, so I don't know for sure. But based on our knowledge of the plume, we wouldn't expect contamination from the plume there.

**Question:** Is there any tidal influence at Sites 40 and 70?

**Answer:** There is tidal influence at Site 40. At Site 70, the tidal influence is not discernible.

**Question:** Is the sodium lactate injection study similar to the Stanford University pilot study done at Site 11?

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study done at Site 14?

**Answer:** The Site 40 treatability tests and the Stanford University pilot study both looked at enhancing *in situ* anaerobic degradation. But at Site 40 we are concerned with chlorinated solvents and at Site 14 we were concerned with gasoline products. Also, different nutrients were being tested.

#### COMMUNITY FORUM

P. Tamashiro thanked the attendees for their attendance and active participation. She also asked for suggestions for improving the attendance, in light of the dwindling attendance over the last 6 months. She encouraged the RAB members to talk to their neighbors and co-workers about their interest in participating in the RAB. In the next few weeks, absent RAB members will be asked if they wish to continue to be considered as an active RAB member.

One member asked if any recruiting has been done using newspaper ads. It was stated that newspaper ads have not been used, but that is a good suggestion. Another person asked what the RAB policy is for terminating non-active members. P. Tamashiro stated that they would be looking into the RAB policy.

#### ADJOURNMENT

P. Tamashiro adjourned the meeting at 8:20 p.m. by announcing that the next RAB meeting is scheduled for Wednesday, October 11, 2000, at 7:00 p.m.