

MINUTES
NAVAL WEAPONS STATION (WPNSTA), SEAL BEACH
RESTORATION ADVISORY BOARD (RAB)
AND COMMUNITY MEETING
JANUARY 13, 1999

Participants:

Casados, Ellen/Southwest Division, Naval Facilities
Engineering Command (SWDIV)
Castillion, Rick
Coffey, Michael
Dick, Andrew/SWDIV
Embree, Melody/CH2M HILL
Hannon, Patricia/Regional Water Quality Control Board
(RWQCB), Santa Ana Region
Iacoboni, Mauro
Lamond, Robert
Lee, Larry
Menzel, Barry
Mingay, Marsha/Department of Toxic Substances Control (DTSC)
Monroe, Bruce
Moore, Richard
Nguyen, Dien/Orange County Environmental Health
Pound, Michael/SWDIV
Robinson, Rob/WPNSTA Seal Beach
Schilling, Bob/Bechtel National, Inc. (BNI)
Sebring, Fred
Smith, Gregg/WPNSTA Seal Beach Public Affairs Officer
Spencer, Jim
Strong, Warren
Voce, Mario
Willhite, Lindi
Wong, Bryant/CH2M HILL
Woodside, Greg/Orange County Water District

WELCOME

At 7:00 p.m., R. Robinson welcomed the participants to the Restoration Advisory Board (RAB) meeting. R. Robinson provided the RAB with an overview of the agenda.

PROJECT HIGHLIGHTS

R. Robinson introduced A. Dick who provided the RAB with highlights of the WPNSTA Seal Beach's Installation Restoration (IR) Program project status. Copies of the slide presentation were made available as a handout at the meeting. Questions and answers made during the presentation are summarized below:

Slide 6 - Sites 1 & 7 Groundwater Monitoring Study:

Question: What did the study indicate?

Answer: The study is still currently being reviewed by the Navy. Preliminary findings indicate that during the wet season, the groundwater direction at Site 7 appears to be towards the National Wildlife Refuge, but, during the dry season, the groundwater direction at Site 7 is away from the Refuge. Sporadic detections of selected metals occasionally exceed the Ambient Water Quality Criteria which is not directly applicable as a groundwater quality criteria. Finally, the radioactivity detected in some of the groundwater monitoring wells in the Remedial Investigation were determined to be from naturally occurring sources. A presentation summarizing the results of the groundwater monitoring study is scheduled for the February 1999 RAB meeting.

Question: Has cyanide been detected at Site 7?

Answer: Cyanide results could not be recalled. At the next RAB meeting in February, CH2M HILL will provide a presentation on the groundwater study results. *(A review of the 1998 groundwater study results indicate that the laboratory did not detect cyanide in the groundwater samples analyzed.)*

Slide 9 - Site 7 Engineering Evaluation and Cost Analysis (EE/CA) and Action Memorandum/Remedial Action Plan (RAP):

Question: What type of geophysical surveys were conducted for Site 7?

Answer: The Navy will provide this in the RAB meeting minutes. *(Electromagnetic induction, electromagnetic*

induction-pulse, magnetic gradiometer, and ground penetrating radar were the geophysical survey techniques used.)

SITES 40 AND 70 EXTENDED REMOVAL SITE EVALUATION (ERSE)

R. Robinson introduced B. Schilling from BNI, who provided the RAB with an overview of the ERSE for Site 40 and 70. Copies of the slide presentation were made available as a handout at the meeting. Questions and answers made during the presentation are summarized below:

Slide 5 - ERSE Objectives and Field Investigation:

Question: Were the mobile laboratories certified?

Answer: Yes, both the mobile and fixed laboratories used were state certified.

Question: During a site visit, you were actively drilling at Site 70. What were the results?

Answer: During this presentation tonight, I will provide an overview of the results of that investigation.

Question: Are field investigations conducted using standard methods?

Answer: Not necessarily. The investigations are site-specific based on a work plan developed in conjunction with and with the approval of the state agencies. Components of investigation (e.g., geophysical utility clearance) use standard methodologies as applicable.

Slide 6 - Findings, Conclusions, and Recommendations (Site 40 Soils):

Question: Is the incremental cancer risk a threshold?

Answer: No, these values are not threshold limits. In this particular example, the incremental risk of cancer of 5×10^{-7} means that, in a residential population of 10,000,000 people exposed to the contaminant concentrations reported in the soil, it is likely that five will contract cancer. The residential scenario assumes certain exposure conditions that presumes a residential land use at the site, which is more conservative than the actual, current use of the site.

The U.S. Environmental Protection Agency defines the point of departure as 10^{-6} , so 5×10^{-7} is lower and, therefore, safer.

Slide 7 - Findings, Conclusions, and Recommendations (Site 40 Groundwater):

Question: Is there any tidal influence at Site 40?

Answer: Yes, approximately 2 to 2-½ inches of tidal fluctuation was observed at Site 40.

Question: Was any free phase detected at Site 40?

Answer: No, all detections have been in the dissolved phase.

Question: What is in the future for Site 40?

Answer: At this stage of investigation, it is too premature to know. However, we are observing not much movement of the plume and indications of natural attenuation, so simply monitoring Site 40 appears to be reasonable.

Slide 12 - Findings, Conclusions, and Recommendations (Site 70 Groundwater):

Question: Are the contaminant reduction with depth at Site 70 a result of degradation?

Answer: It is probably partially due to degradation, but the underlying geology may also be impeding the contaminant migration.

Question: Was groundwater monitoring done during the El Nino storms?

Answer: Yes.

Question: Where is Navy Well No. 2?

Answer: Navy Well No. 2 is about 500 feet from the leading edge of the plume. It is screened at a depth of about 650 feet below ground surface. It does not currently draw water from this plume. There is about a 30- to 40-foot thick

aquitard or barrier, which separates the groundwater that Navy Well No. 2 draws from and the overlying groundwater above it.

Question: What is this well used for?

Answer: This well is not used for drinking water, it may be an emergency well.

Question: Have any monitoring wells been installed at Site 70, below this clay layer?

Answer: No. At the top of this clay layer, trichloroethene concentrations were non-detectable or very low.

Question: Has any testing been done for perchlorate at Site 70?

Answer: No, perchlorate was not identified as a chemical of potential concern by the Preliminary Assessment report.

SITE 70 GROUNDWATER PUMPING AND PILOT TESTS

R. Robinson introduced, once again, B. Schilling who provided the RAB with a presentation on the groundwater pumping and pilot tests for Site 70. Copies of the slide presentation were made available as a handout at the meeting. Questions and answers made during the presentation are summarized below:

Slide 1 - Groundwater Pumping and Pilot Tests at Site 70 - Project Update:

Question: Has any free phase been detected at Site 70?

Answer: No.

Slide 3 - Test Objectives:

Question: What is done with the water that is removed during the groundwater pumping?

Answer: The water is processed through a granular activated carbon unit and discharged.

Slide 4 - Overview of Filed Investigation:

Question: In what volume of the report can we find this figure?

Answer: The site physical conceptual model is located in Volume II of the report.

Question: On this figure, can you point out where Navy Well No. 2 is located?

Answer: Navy Well No. 2 is screened deeper, so it is not depicted on this particular cross-sectional figure.

Question: How long do the granular activated carbon units last?

Answer: The activated carbon unit is designed for a flowrate of 20 gallons per minute (gpm) and concentrations an order of magnitude higher than what we are seeing. We regularly test for breakthrough between carbon units to give us advance warning on the life of the carbon.

Slide 5 - Pump Test Findings, Conclusions, and Analytical Results:

Question: Considering these high concentrations, do you expect to see free phase?

Answer: We have not yet seen free phase, however, you are right that with these concentrations you might expect free phase to exist. But, we just have not seen free phase contamination yet.

Question: Can you define free phase?

Answer: Free phase means saturated with the chemical and not dissolved in the water.

Question: What was the flow-rate of the pumping?

Answer: The flow-rate was 2-½ gpm.

Slide 6 - Groundwater Flow Model:

Question: If continued high concentrations are detected

after the three months of the pilot test, will the pilot test be continued?

Answer: That is a possibility and will be considered if concentrations continue to be high.

Question: Was the deeper pump test run?

Answer: We did not pump the deeper extraction well to avoid the possibility of drawing the trichloroethene to a lower aquifer and contaminating that aquifer.

Question: If the contaminant plume reaches the Navy Well No. 2, which is a single-cased well, will Navy Well No. 2 serve as a conduit that would cause the contamination of the lower aquifer?

Answer: The Navy will not allow this to happen. Based on the groundwater flow model, it will take about 10 years for the plume to reach the well, so we have time to do further investigations and a Feasibility Study (FS). In the meantime, the Navy will be monitoring the plume.

COMMUNITY FORUM

M. Voce, Community Co-Chair, explained that the community forum was a chance for RAB members to ask questions or make comments.

Comment: A comment was made that the Navy and its contractors continue to provide good reports and RAB presentations, and would like to thank them for their continued good efforts.

Comment: A former RAB member agreed that the Navy and its contractors, and the RAB have done good work at WPNSTA Seal Beach. He appreciated the forthright communication and good dialogue between the Navy and the RAB.

M. Voce announced that due to scheduling conflicts, that the next RAB meeting would be moved up one week, to Wednesday, February 3, 1999.

M. Voce also announced that volunteers are needed for the membership committee. The membership committee will meet at 6:00 p.m., before the next RAB meeting on February 3. B. Menzel volunteered. Any others, who would like to volunteer, please contact R. Robinson.

M. Voce asked the RAB if there were any suggestions for future RAB agenda topics.

A suggestion was made, in light of the recent Bolsa Chica spill incident, to have information on the Navy's spill prevention and cleanup program as a topic for a RAB meeting in the future.

R. Robinson is the spill prevention coordinator for WPNSTA Seal Beach and agreed to pull some spill prevention information together for the RAB.

The meeting was adjourned at 8:55 p.m.