

MINUTES
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH
RESTORATION ADVISORY BOARD (RAB)
AND COMMUNITY MEETING
City of Seal Beach Council Chambers
January 12, 2010

Participants:

Craycraft, James/Executive Officer, Naval Weapons Station Seal Beach
Colt, Ann/Naval Facilities Engineering Command Southwest (NAVFAC SW)
Duffy, Marlene/Geosyntec
Ford, Tony/Insight EEC, Inc.
Fu, Christina/California Department of Toxic Substances Control (DTSC)
Gandara, Jose/Community Member
Grinyer, Walter/Geosyntec
Jordan, Jack/Community Co-Chair, RAB Community Member
Kerfoot, Henry/Geosyntec
Lee, Larry/RAB Community Member
Li Li/Orange County Water District
Olivera, Jerry/Community Member
Persico, Mark/RAB Community Member
Reese, Brenda/Remedial Project Manager (RPM), NAVFAC SW
Rosensky, Stephen/Battelle
Si Le/NAVFAC SW
Smith, Gregg/Public Affairs Officer, NAVWPNSTA Seal Beach
Tamashiro, Pei-Fen/RAB Navy Co-Chair, NAVWPNSTA Seal Beach
Wymore, Ryan/CDM

WELCOME

P. Tamashiro commenced the meeting at 6:00 pm at the City of Seal Beach Council Chambers by welcoming all participants. Attendees were asked to introduce themselves and to sign in and collect handouts at the front table.

P. Tamashiro announced that three presentations will be given tonight: Project Highlights, Budget Status, and a research project on comparing two different approaches to conduct *in situ* bioremediation at a trichloroethylene (TCE) contaminated groundwater site presented by R. Wymore of CDM.

P. Tamashiro introduced Brenda Reese as the Remedial Project Manager for NAVWPNSTA Seal Beach.

B. Reese presented the Project Highlights for NAVWPNSTA Seal Beach.

Questions and answers discussed during the Project Highlights Presentation are summarized below.

Question: Site 75: This is a new site with ground water contamination issues and has been under review by Navy Legal for a long time. When will somebody get back to you with an answer?

Answer: There are many issues we need to address before we can figure out whether a legal action will be taken, including obtaining funding for a site investigation, conducting a site investigation, then identifying the potentially responsible parties (PRPs). Until all of these can be accomplished, we won't have an answer to your question. The Navy has planned to fund the first site investigation in Fiscal Year 2010.

B. Reese then provided the Budget Status presentation.

No Questions were asked.

P. Tamashiro announced a short break.

Upon return, P. Tamashiro introduced R. Wymore to deliver his research on comparing two different approaches in conducting in situ bioremediation at a TCE contaminated groundwater site at NAVWPNSTA Seal Beach, IRP Site 70.

R. Wymore presented the findings from his research at the source area at IRP Site 70.

Questions and answers discussed during R. Wymore's presentation are summarized below.

Question: (In reference to the slide showing how far each of the three strains of bacteria can carry on the biodegradation process:) Can you introduce the other two enzymes if they are missing from the aquifer?

Answer: This question is relevant to where this presentation is headed. The quick answer is yes. The purpose of this study is to compare two different approaches in introducing bacteria and oxygen donors into the aquifer.

Question: Why is TCE being reduced on the site before it was seeded with the bacteria? (In reference to a slide showing the introduction of bacteria on a site versus the levels of contaminants. The figure showed the level of contaminants dropping before the bacteria were added to the site. The day the bacteria were added was marked on the graph. That moment in time was between two data points showing the level of contaminants.)

Answer: The drop before the bacteria were added is due to excel programming. Because TCE concentration was not measured on the day the bacteria were introduced, we don't know what the contamination levels were between the last data point and the day the bacteria was introduced. When the line was drawn between the last data point before the introduction to the first point after the introduction it gave the illusion that the drop started the day of the last groundwater sample was taken, before the bacteria were added. In reality the drop probably started after the bacteria were introduced but since data were not collected that day we cannot show this.

Question: What was the time period between those two points?

Answer: 4 months.

Question: Were there any background bacteria?

Answer: A little bit. DHC is not the only bacteria that can degrade TCE.

Question: Are these naturally occurring bacteria, not man made?

Answer: Yes.

Question: Will this be presented in the Installation Restoration (IR) Conference?

Answer: No.

Question: Did you run GC mass spectrometer analysis on soil samples?

Answer: No soil samples were taken and analyzed.

Question: How did you analyze the site?

Answer: We looked at ground water samples. This site had been well studied before we started this research.

Question: If there is an inhibitor, can you guess what is happening? (In regards to the slide showing a well where the bacteria are present, but no degradation of TCE took place.)

Answer: We are still looking into this. There is not enough information to answer that question.

Question: So this shouldn't have much of an effect on a bio-barrier plume?

Answer: No. Let's say if its chloroform, other bacteria can handle it.

Question: Is it done in parallel?

Answer: Yes.

P. Tamashiro informed of the next RAB Meeting scheduled for April 13, 2010. It will cover the 2009 groundwater monitoring results at Site 70 and the site inspection results at the Munitions Response Program sites.

ADJOURNMENT

P. Tamashiro adjourned the meeting at approximately 7:40 p.m.

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