NAVAL WEAPONS STATION(WPNSTA), SEAL BEACH
RESTORATION ADVISORY BOARD (RAB)
AND COMMUNITY MEETING
FEBRUARY 3, 1999

Participants:

Bradley, John/U.S. Fish and Wildlife Service
Chuang, Yueh/CH2M HILL
Dick, Andrew/SWDIV
Embree, Melody/CH2M HILL
Hannon, Patricia/Regional Water Quality Control Board (RWQCB), Santa Ana Region
Iacoboni, Mauro
Kelley, Bob
Mingay, Marsha/Department of Toxic Substances Control (DTSC)
Mitchell, Michael/U.S. Fish and Wildlife Service
Moore, Richard
Nguyen, Dien/Orange County Environmental Health
Peoples, J.P.
Pilichi, Carmine
Robinson, Rob/WPNSTA Seal Beach
Sadeghipour, Jamshid/Foster Wheeler
Sears, Terry/Golden Rain Foundation
Sebring, Fred
Smith, Gregg/WPNSTA Seal Beach Public Affairs Officer
Van Buskirk, Kathy
Vessley, Gene
Voce, Mario
Welz, Ed
Wong, Bryant/CH2M HILL

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 11 – Focused Site Inspection (FSI) Phase II, Various Sites:

Question: Is the FSI for all operable units (OUs)?

Answer: The FSI will be for approximately 13 sites from several OUs.

M. Mingay asked the RAB if the format currently being used by the Navy to update the RAB with highlights of activities being conducted at the base worked for them. She explained that the original intent of the RAB Highlights was to inform members of changes that had occurred between RAB meetings. The current format is a more complete overview of selected activities. A comment was made that it is helpful to have the complete update because some members cannot always attend every RAB meeting. The consensus is to keep the current format.

SITES 1 AND 7 GROUNDWATER MONITORING STUDY

R. Robinson introduced Y. Chuang from CH2M HILL who provided the RAB with an overview of the groundwater monitoring study for Sites 1 and 7. 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 – In-Situ TROLL Logger/Probe:

Question: Does this instrument measure the weight of the water?

Answer: Yes, the probe measures and logs the groundwater data, including the weight.

Slide 9 – Site 7 Looking N-NW (Refuge):

Question: Was this photograph taken from Perimeter Road?

Answer: Yes.

Question: Is the ponding seen in this picture rainwater?

Answer: Yes, it is rainwater.

Slide 11 – Anaheim Bay (Dock) Tides:

Question: What is neap?

Answer: A neap tide is a tide of minimum fluctuations occurring during the first and third quarters of the moon when the sun and the moon are 90 degrees out of phase.

Slide 13 – Site 1 Water Level Monitoring:

Question: Would tidal fluctuation be expected at Site 1?

Answer: No, Site 1 is over a mile away from Anaheim Bay, so you would not expect to see a significant tidal effect at this site.

Slide 14 – Site 1 Water Level Contour Map:

Question: If the gradient is small, then is the groundwater moving slowly across this site?

Answer: Yes, groundwater is flowing slowly at Site 1, but typical of natural flowrates. This slight gradient indicates that the shallow groundwater is probably not impacted by man-made pumping activities.

Slide 17 – Site 7 Water Level Monitoring:

Question: What is the Port of Long Beach (POLB) mitigation pond?

Answer: Starting in the late 1980s and completed in 1990, the POLB constructed four large ponds to mitigate (or offset) the impacts of its port expansion activities in Long Beach.

Question: Are the ponds located in the National Wildlife Refuge (NWR)?

Answer: Yes, the ponds are in the NWR.

Question: Is the pond connected to the NWR in such a way that tidal fluctuation impacts it?

Answer: Yes, that is correct.

Slide 18 - Site 7 Water Level Monitoring:

Question: Are seasonal fluctuations a problem for the NWR because during the times when the flow direction is toward the NWR, aren't contaminants also flowing toward the Refuge?

Answer: I would like to defer that question until later when I discuss the water quality data.

Question: Were the monitoring methods used the same for the previous water level monitoring events?

Answer: Yes, the same types of methods were applied, although shorter monitoring intervals were used, and the results would be comparable.

Slide 20 – Groundwater Sampling:

Question: Are you looking at all data collected, or just the data above the Ambient Water Quality Criteria (AWQC)?

Answer: We looked at all data collected. We screened against background and the AWQC.

Question: What is the significance of comparing groundwater quality data to AWQC?

Answer: The AWQC, although not directly applicable for comparison because they are surface water quality standards, are the best available standards to compare against the groundwater quality data. In this sense, the data is compared to AWQC to screen the data and give us perspective.

Slide 23 – Purging of Monitoring Well (MW) Before Sampling:

Question: Is the well pumped to remove any stagnant water to ensure that the samples being collected are representative groundwater?

Answer: Yes, that is correct.

Slide 27 – Site 1 Groundwater Sampling Results:

Question: Please explain how there is no indication of groundwater contamination when there were a few sporadic detections above AWQC?

Answer: The few metals that were detected in the groundwater exceeding AWQC or background did not show a consistent pattern or trend of exceedances. Therefore, there is no evidence that persistent contamination exists.

Question: Did you also look for ammonia or pH that might indicate the mobility of these metals?

Answer: During the remedial investigation, ammonia, pH, and other parameters were measured and found to be within ambient conditions. During these recent rounds of sampling, we monitored the pH of the groundwater in the field and the measurements were those expected in groundwater.

Question: Are the metals that have been detected really "spikes" or are just slightly higher than above background levels?

Answer: It depends on the metal and the well. No consistent pattern has been detected.

Question: What is AWQC?

Answer: AWQC or "Ambient Water Quality Criteria" are water quality standards established to protect surface waters.

Question: Have samples been collected from the ponds?

Answer: No, the samples collected to date have been groundwater.

Question: Has the source of the contamination been removed?

Answer: Site 1 soils are planned for excavation and offsite disposal. The Site 1 soils are planned for a removal action not because of an impact to groundwater, but because of the potential long-term threat of the contaminated soils to human health and the environment.

Question: Is the groundwater brackish at Site 1?

Answer: Yes, the groundwater at Site 1 is brackish.

Question: Do AWQC apply to rivers or salt water?

Answer: AWQC is applicable to all surface water bodies, based on its salt content.

Question: If Site 1 is brackish water, then why apply fresh water criteria?

Answer: The Navy and regulators are currently in discussions about this issue. The Navy will brief the RAB, as more information becomes available.

Question: Are there groundwater standards for fresh water?

Answer: Yes, these standards are called Maximum Contaminant Levels (MCLs). However, MCLs are for drinking water and this water is brackish and is not considered a potential drinking water source, so these standards are less applicable than AWQC.

Question: Who is the regulating water agency?

Answer: The regulating water agency is the Regional Water Quality Control Board (RWQCB) Santa Ana Region. Representing the RWQCB tonight is Patricia Hannon.

Slide 28 – Site 1 Groundwater Sampling Results:

Question: Did you say that the radioactivity levels will not or should not pose a health risk to workers?

Answer: Radioactivity levels will not pose a risk to workers.

Question: Will these tests also analyze for beta emitters?

Answer: These tests will analyze for both alpha and beta emitters.

Slide 29 – Site 7 Groundwater Sampling Results:

Question: Why were you able to detect cyanide in the groundwater but were not able to detect it in the most recent sampling?

Answer: We believe the principal reason is natural attenuation. While it is not unexpected to have cyanide produced as a result of landfill disposal operations, cyanide is not very persistent (i.e., does not last long).

Slide 30 – Time Series Plot for 07M01:

Question: Is this large spike for cyanide an anomaly?

Answer: It could be an anomaly. You will notice that if you assume it was an anomaly and take it off the graph, the cyanide detections are about the same.

Question: Where is well 07M01 located?

Answer: Groundwater monitoring well 07M01 is located near the southern portion of Site 7 (north of Perimeter Road and east of the existing road) and it was placed next to a known trench location.

Question: Did you say that for the last two rounds of sampling that cyanide was non-detect?

Answer: Yes, that is correct, cyanide was not detected.

Question: Who collected the samples and who did the analysis?

Answer: The samples were collected by CH2M HILL field staff and were analyzed by two laboratories: EMAX Laboratories (California) and Paragon Analytics (Colorado); both firms are state-certified and approved by the Navy.

Question: Are you saying both Sites 1 and 7 are cleaned up?

Answer: No. Site 1 has soil contamination that will be excavated and disposed offsite via a removal action. The appropriate action for Site 7 is still being evaluated, but to date results indicate that there is no major risk to human health or the environment.

Slide 34 – Site 7 – What Next?:

Question: Do you take into account the different types of soils that make up the site (i.e., sand, gravel, etc.) and their ability to transmit groundwater?

Answer: Yes. The site geology is taken into account. For Site 7, the geology consists of interbedded layers of different types of soils (i.e., silts and clays with sand "stringers").

Question: Is the site more sandy?

Answer: No, Site 7 consists of very fine-grained soils (i.e., silts and clays).

Comment: A comment was made that Site 1 has contaminated soil, but it does not have contaminated groundwater. If the soil is disturbed, this could trigger the contamination to migrate to the groundwater.

Question: How deep are the wells?

Answer: Depth to groundwater is about 4 feet. The total depths of the wells are about 15-20 feet below ground surface.

Question: Were detects close to the AWQC?

Answer: They depend on the metal and the well. AWQC are fairly conservative to be protective of the environment.

Slide 36 – Schedule:

Question: Where do Sites 1 and 7 rank by priority?

Answer: At WPNSTA Seal Beach, Site 70 is probably the highest priority because the highest concentration of contamination was found there. Site 1 is fairly high in priority because of the contaminated soils. Site 7 has no human health risk and minor ecological risks and, therefore, is considered a lower priority by comparison.

Question: What is the general cleanup schedule?

Answer: The word "cleanup" can mean several remediation methods, including excavation, removal, or short and long-term monitoring. With this in mind, for some of the long-term monitoring at some sites, "cleanup" (i.e., long-term monitoring) could go to 2030, depending on funding from Congress and the results of the monitoring.

COMMUNITY FORUM

M. Voce announced that M. Mitchell of the U.S. Fish and Wildlife Service is transferring to the U.S. Fish and Wildlife's Chesapeake office and that a potluck appreciation luncheon in his honor is scheduled for February 20, 1999, at noon.

M. Mitchell introduced J. Bradley of the U.S. Fish and Wildlife Service who is replacing him at the Seal Beach NWR.

M. Voce also announced that volunteers are still needed for the membership committee. J.P. Peoples, F. Sebring, and G. Vessley volunteered for the membership committee.

M. Voce informed the participants that there would be no RAB meeting in March. However, there would be a RAB membership Committee meeting.

R. Robinson adjourned the meeting at 8:50 p.m.