MINUTES
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH
RESTORATION ADVISORY BOARD (RAB)
AND COMMUNITY MEETING
SITE TOUR
July 14, 2009

Participants:

Bloom, Dave / Tetra Tech
Li, Li / Orange County Water District
Gomez, Eloy / Leisure World
Gordon, Grady / Naval Facilities Engineering Command, Southwest (NAVFAC SW)
Hannon, Patricia / Regional Water Quality Control Board (RWQCB), Santa Ana Region
Jordan, Jack / RAB Community Co-chair
Lee, Karen / Community Member
Lee, Larry / Community Member
Niou, Stephen / Department of Toxic Substance Control
Salazar, Cindy / CH2M HILL
Senga, Robert / Department of Toxic Substance Control
Smith, Gregg / NAVWPSNTA Seal Beach, Public Affairs Office (PAO)
Tamashiro, Pei-Fen / NAVWPNSTA Seal Beach, RAB Navy Co-chair
Wong, Bryant / CH2M HILL

WELCOME

At 6:00 p.m., P. Tamashiro, Installation Restoration (IR) Program coordinator and Navy Co-chair, began the site tour by welcoming the participants. She introduced G. Smith, NAVWPSNTA Seal Beach PAO and G. Gordon, NAVFAC SW. P. Tamashiro introduced B. Wong, Navy contractor with CH2M HILL and site tour leader. Attendees were asked to introduce themselves.

B. Wong distributed a site map showing the locations of the sites that would be visited and/or discussed during the tour. B. Wong indicated that the tour would last approximately two hours and that that participants should bring along a jacket or sweater for warmth, as it tends to get chilly by the end of the tour.

P. Tamashiro stated that while the participants would not be exposed to hazardous or toxic materials during the tour, they were requested to stay together for safety reasons. She encouraged participants to ask questions during the site tour.

Questions and answers discussed during the site tour are summarized below.

Note: The following contains only questions and answers discussed at formal stops along the tour. Informal discussions were not recorded, including those held while viewing sites from within the vehicle and during travel between sites.

SITE 70 RESEARCH, TESTING, AND EVALUATION AREA

Representatives from Battelle and Insight ECC, Inc. were on site to give an overview.

Question: What layer are you currently injecting into?

Answer: We are currently injecting into the shell horizon, which is comprised of clay and silts. This formation is relatively less permeable and so the extraction and injection rate is slower.

Question: Will you be injecting in between the bio-barriers?

Answer: No.

Question: What is the rate of groundwater flow in this area?

Answer: The rate of groundwater flow varies and is slower than in the sand intervals.

Answer by Navy: The average rate of groundwater flow is approximately 70 feet per year, although flow rate will vary depending on local subsurface conditions.

Question: Will you treat each biobarrier only once?

Answer: We will treat each biobarrier again. The life span of the biobarrier may vary. The effectiveness life span of the emulsified vegetable oil (EVO) is approximately 3 to 5 years. We will continue to monitor and re-inject EVO as needed. The bacteria culture, KB-1, will not need to be re-injected.

Question: How long will the injections take place?

Answer: We will be injecting as needed for approximately 15 years. After 15 years, natural degradation will take place for approximately another 35 years. Therefore, the total estimated remediation time is 50 years.

Question: When will the current biobarrier injections be completed?

Answer: The current biobarrier injections should be completed by the end of the year. The source area treatment injections will begin January 2010.

Question: What is the injection/extraction rate?

Answer: The injection/extraction rate can range from approximately 3 gallons per minute (gpm) to approximately 18 gpm. The injection/extraction rate depends on how tight the formation is.

SITE 7 **STATION LANDFILL**

Question: Where did the lead (that was removed along Perimeter Road south of Site 7) come from?

Answer: Waste oil, which contained lead, was previously applied to the unpaved Perimeter Road for dust and weed control.

Question: Where are the drainage pipes located?

Answer: The drainage piles are located along the small dirt road that is parallel to and just north of the Perimeter Road. The drainage pipes allow for flood

control and diverts ponded water into the wetland area.

SITE AOC 2 **EXPLOSIVES DROP TEST TOWER**

Question: What is the tower used for now?

Answer: It is used by herons as a nesting area. No work is done during the breeding season. The tower will remain in place.

P. Tamashiro discussed Site UXO1 Site 1: Primer Salvage Yard/Port of Long Beach (POLB) Mitigation Pond.

SITE 74 **FORMER SKEET RANGE**

Question: What is the white powder on the lead shots?

Answer: The whitish coating on the lead shots indicates oxidation.

Question: How soluble are the lead shots?

Answer: Lead is not soluble. The oxidation is a chemical reaction and the whitish coating is not soluble.

Navy Response: Lead, as most metals, is not particularly mobile. This is especially true in the fine-grained soils that are found at Site 74. This was demonstrated by the fact that only one location where the concentration of lead exceeded background concentrations at a depth of 2 feet below ground surface (bgs).

Question: How much lead oxide was found?

Navy Response: Total lead was analyzed. The analysis for lead speciation was not done. The highest contamination of lead was only found in the top 3 inches of soil.

Question: Is there always a potential for degradation?

Answer: The lead shots will be subjected to weathering. But a sophisticated Tier II ecological risk assessment was conducted that looked at effects to various ecological receptors, including birds, rodents, invertebrates, and vegetation.

SITE AOC 1 **BUILDING 94 EVAPORATION POND**

Question: Was the area previously occupied by the evaporation pond ever farmed?

Answer: Yes. The evaporation pond area was most likely farmed as recently as last year.

Navy Response: Information about the evaporation pond was discovered in 2008 and we do not know the extent of impact, if any yet. The constituents of concern are primarily metals and nitrogen compounds.

Question:	Are there traces of perchlorate?
Answer:	No explosives that would contain perchlorate were used at this location.
Question:	If you find something, what would be the remediation?
Answer:	We can't speculate on the findings. After the investigation, we will need to make recommendations on the next steps based on the findings.
Question:	Are there records dating back when this site was used?
Navy Response:	During a preliminary site assessment, through the review of old titles, records, aerials, and interviews, there were indications that showed an evaporation pond.
Question:	Will Building 94 be demolished?
Navy Response:	Yes, Building 94 will be demolished in the next fiscal year. Demolition of the building will include demolishing the top portion first, then removing any pipes that may contain explosives, and lastly removing the foundation.

SITE UXO 2 AND UXO 6 — **BUILDING 101-102 EVAPORATION PONDS AND WESTMINSTER/PORT OF LONG BEACH FILL AREA**

Question:	What device will be used to detect munitions?
Answer:	We will be using a Schonstedt magnetic locator.
Question:	Was it just a rumor that potential munitions and explosives of concern are located in the fill area?
Answer:	They are not solely rumors but evidence from construction drawings and interviews. However, we do not have specific information for the exact locations where munitions items or fill material was dumped.
Question:	What will be done with the findings of this investigation?
Navy Response:	The information will be kept in the records for future reference. In the future, if this area is ever developed or transferred, this information will need to be reviewed and taken under considered and a more detailed investigation may need to be done.

P. Tamashiro encouraged the site tour attendees to contact her via telephone or e-mail with any additional questions. The next RAB meeting would be held in November 2009.

ADJOURNMENT

P. Tamashiro adjourned the meeting at approximately 8:00 p.m.

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