

MINUTES  
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH  
RESTORATION ADVISORY BOARD (RAB)  
AND COMMUNITY MEETING  
SITE TOUR  
13 July 2004

Participants:

Barton, Barbara  
Barton, Terry  
Blake, Geoffrey  
Bradley, John / United States Fish and Wildlife Service  
David, Lisa / CH2M HILL  
Hohenadl, Eike / NAVWPNSTA Seal Beach  
Hurley, W.G.  
Jordan, Jack  
Le, Si / Southwest Division, Naval Facilities Engineering Command (SWDIV)  
O'Malley, Pamela  
O'Malley, Phillip  
Smith, Gregg / NAVWPNSTA Seal Beach  
Tamashiro, Pei-Fen / NAVWPNSTA Seal Beach and Navy Co-chair  
Wong, Bryant / CH2M HILL

WELCOME

At 6:15 p.m., P. Tamashiro, Navy Co-chair and Base Installation Restoration (IR) Program Coordinator, began the 2004 IR Program Site Tour by welcoming the participants. P. Tamashiro introduced S. Le, the Remedial Project Manager (RPM) for the IR Program from SWDIV and G. Smith, NAVWPNSTA Seal Beach Public Affairs Officer (PAO).

Participants were encouraged to direct any questions regarding the IR Program sites to P. Tamashiro. General questions regarding the NAVWPNSTA could be directed to G. Smith and questions specific to biological resources or the Seal Beach National Wildlife Refuge (NWR) could be directed to J. Bradley.

P. Tamashiro then introduced B. Wong, CH2M HILL Project Manager who would be leading the 2004 IR Program Site Tour. A map illustrating the general locations of IR Program Sites 7, 14, 22, 40, 44/45, 70, and 74 and Solid Waste Management Unit (SWMU) 57 within NAVWPNSTA Seal Beach was provided to the participants of the site tour. B. Wong stated that the tour would provide a discussion of the past, current, and proposed activities for each site and he encouraged participants to ask questions during the site tour. B. Wong indicated Site 7 - Station Landfill, would be the first site visited.

The order of the sites visited are as listed below. Questions and answers discussed during the site tour are summarized below.

SITE TOUR

### Site 7 – Station Landfill

Question: Did you put a clay cap over the former landfill?

Answer: No, the Navy added 5,800 tons of clean soil in Area 1 of Site 7 (where most of the landfilling had taken place) to create a minimum of two feet of separation between the buried wastes and surface receptors (i.e., people and wildlife). Because the landfill itself is inundated by groundwater, a clay cap is not necessary.

Question: What are the mounds seen in the distance at Site 7?

Answer: The mounds are keyports for munitions, such as smaller magazines, used for research testing, not operations.

Question: What is the function of the tower northwest of Site 7?

Answer: In the past, the tower was used as a test drop for munitions packages. Currently, great blue herons use tower platform for nesting. Also, the barn owl also has been known to nest in the space beneath the wooden flooring of the room atop the tower.

Question: How deep is the water in the pond next to Site 7?

Answer: At low mean tide, the pond is at least two feet deep. It is considered a deep water mitigation pond. It was constructed by the Port of Long Beach to mitigate the loss of deep water habitat caused by Port construction. Diving type birds use the pond.

### Site 74 – Old Skeet Range

Question: Are vertebrates considered in the Ecological Risk Assessment (ERA) for Site 74?

Answer: Yes, impacts to plant and animal life are evaluated in the Tier II ERA. Specifically, birds and small mammals were collected as part of the Tier II ERA at Site 74. A senior ecologist from CH2M HILL will make a presentation at the next RAB meeting on the third Tuesday in September (September 21, 2004).

Question: Will the RAB meeting be held at City Hall or at the NAVWPNSTA Seal Beach?

Answer: We have not made the decision yet. You will be notified in the next meeting announcement in August.

Question: Has the number of pounds of lead pellets used over time at Site 74 been calculated?

Answer: No, it would be nearly impossible to accurately quantify the amount of pellets used, mainly because no records were kept, and no standard shooting schedules, gun types, or types of shots were used.

Question: Can the number of pellets used be estimated by the number of pellets found in sample plots?

Answer: Our studies did not include an extrapolation of the amount of pellets used. For the purposes of our studies, it is not a critical piece of information to know. What is critical is to evaluate risk levels to wildlife. Sometimes removal actions can do more harm by disrupting a sensitive ecological environment compared to the benefit of removing the source of contamination. It's a balancing act.

Question: Have you considered phytoremediation and then harvesting the plants?

Answer: An evaluation will be made in the next phase of the IR process for this site to determine what types of remedial technologies make the most sense. In the case of phytoremediation, we must consider the impacts of introducing non-native vegetation on the existing habitat that supports the current wildlife.

Site 44 Former Waste Otto Fuel Drum Storage and Site 45 Building 88 Floor Drain Outlet

Question: Was TCE or any other solvents used for parts cleaning in conjunction with the metal salvaging operations at Building 88?

Answer: No, this building was only used for storing disassembled parts, essentially metal salvaging, not metal parts cleaning.

Question: What type of nickel did you find? Nickel oxide?

Answer: We did not analyze for the specific form of nickel, but, given the environmental conditions, it would not be surprising if nickel oxide was the dominant form of nickel.

Question: Did the contamination come strictly from the salvage operation, or did the chain link fence and/or flumes contribute to the contamination?

Answer: The primary source of contamination was the salvage operation. The chain link fence and flumes would have contributed a much smaller amount of nickel and zinc by comparison.

Question: What is the status of the Engineering Evaluation/Cost Analysis (EE/CA)?

Answer: The EE/CA takes into consideration the concentrations of contaminant, site conditions, risks to receptors, and evaluates what remedial technologies are feasible. It has just been awarded by the Navy to its consultant.

Question: What does the red flag signify?

Answer: The red flag is a "bravo" flag, which signifies that munitions or related ordnance work is being conducted, when it is raised.

Question: Where does the ditch drain flow?

Answer: The ditch flows to the wildlife refuge, which is connected to the Pacific Ocean.

Question: Isn't the wildlife refuge critical to diatoms that are important to the ocean ecology?

Answer: Yes. The refuge serves as a "nursery" for not only diatoms but also many species of zooplankton that are critical to aquatic and marine life.

Question: So if the refuge was to disappear, the fish population in the ocean would significantly decrease and affect the fishing industry?

Answer: If the Seal Beach NWR were to disappear, it would probably result in a significant impact on fish populations local to the refuge.

#### Site 22 - Oil Island (discussed at previous site and not visited due to time and access constraints)

Question: When does the lease and oil rights expire at Site 22?

Answer: Breitburn Energy lease the mineral right from the mineral right owner. The lease has no termination date and will continue until operations cease or until the lease is sold to someone else.

Question: Does Breitburn Energy plan to sell the lease?

Answer: Breiburn may be seeking to sell the lease. Breitburn Energy's operations at Oil Island should last 20 to 30 years based on present economy. When the time comes to abandon the operation, Breitburn will work closely with the Navy and U.S. Fish and Wildlife Service to restore the island at Breitburn's expense without harming the environment.

Question: What heavy metals are present in the soils at Site 22?

Answer: Arsenic, beryllium, and cadmium were detected at levels that pose a concern at Site 22.

Question: The drilling muds would have contained heavy metals. Was there any environmental cleanup after the oil wells were installed?

Answer: Yes, most of the drilling muds stored in the "ponds" were removed but there were some residual metals detected.

#### Site 14 - Abandoned Underground Storage Tank (UST)

Question: Has the threat to human health and the environment been minimized because of the political ramifications of Methyl tertiary-butyl ether (MtBE), including shutting down public drinking water wells?

Answer: The health effects of MtBE is controversial and still not completely resolved, but the allowable drinking water levels set for MtBE is based primarily on taste and odor thresholds. There is currently no threat to human health at this site because the underlying water is too saline to be potable. The MtBE in groundwater at Site 14 is still being monitored.

#### Site 40 - Concrete Pit/Gravel Area

Question: In which direction is the plume moving at Site 40?

Answer: The groundwater plume at Site 40 is slowly moving in the southeast direction, in the general direction of the wildlife refuge.

Comment: I understand that the Navy is conducting groundbreaking remediation such as bioremediation.

Answer: Yes, in-situ bioremediation, such as bioaugmentation, has been studied for Site 40. A Record of Decision (ROD) was signed in June 2004 and the remediation is scheduled to begin February 2005.

#### Site 70 – Research, Testing, and Evaluation Area

Question: What is the difference in time saved and money spent using biobarrier/biostimulation instead of a pump-and-treat system for cleanup at Site 70?

Answer: In today's dollars, the pump-and-treat technology would cost approximately \$12.5 million dollars and take approximately 42 years to clean up groundwater at Site 70 to acceptable levels. No groundwater modeling has been conducted on the biobarrier and biostimulation alternatives at Site 70. However, it is estimated to cost \$3.5 million dollars more than the pump-and-treat technology, and take a total of approximately 10 years to clean groundwater up to acceptable levels. Please keep in mind that the Navy is still evaluating alternative technologies to clean up the groundwater at Site 70.

Question: Can you use a pump-and-treat technology in addition to bioremediation to speed up the cleanup process?

Answer: The most feasible approach is to omit the pump-and-treat technology and simply use bioremediation. A pump-and-treat technology does 90percent of the clean up in the first ten years.

#### Site 57 – Paint Locker Area (discussed at Site 70, drove by in the interest of time)

Question: How did you identify the source area at Site 57?

Answer: No contamination exists in the area immediately adjacent to the paint locker. However, the location where the background soil samples were collected had high concentrations of arsenic.

Question: Are you sure there is no ongoing source?

Answer: Yes. Workers are trained to properly dispose of paints.

Question: Is it true that "removal actions" do not necessarily involve removal?

Answer: The term "removal action" has a specific definition used by the U.S. Environmental Protection Agency and the Navy's IR Program. Generally, they refer to simple cleanup or protective measures that can be applied relatively quickly to simple sites (i.e., simple site conditions, few chemical

contaminants, and easy to clean up or protect). Therefore, removal actions do not necessarily include physical removal (e.g., excavation) of contamination but can also include providing bottled water to people depending on a drinking water well that had to be shutdown due to contamination.

#### COMMUNITY FORUM

P. Tamashiro thanked the participants for attending the 2004 IR Program Site Tour. It was announced that the next RAB meeting would be held Tuesday, September 21, 2004 (the third Tuesday of September).

#### ADJOURNMENT

The 2004 IR Program Site Tour concluded at 8:00 p.m.

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