

MINUTES
NAVAL WEAPONS STATION (NAVWPNSTA) SEAL BEACH
RESTORATION ADVISORY BOARD (RAB)
AND COMMUNITY MEETING
November 14, 2006

Participants:

Anderson, Tim / Friends of Seal Beach National Wildlife Refuge (NWR)
Anton, Linda / CH2M HILL
Arends, Mike / AGVIQ Environmental Services
Blake, Geoffrey
Eslosk, Abram
Jones, Carl / Tetra Tech EC, Inc.
Jordan, Jack
Garrison, Kirsten / CH2M HILL
Gilligan, Kirk / United States Fish and Wildlife Service (USFWS)
Kurtz, J.D. / Captain, Commanding Officer, NAVWPNSTA Seal Beach
Le, Si / Naval Facilities Engineering Command, Southwest (NFEC SW)
Leibel, Katherine / Department of Toxic Substances Control
Monroe, Bruce
Pilichi, Carmine
Smith, Gregg / NAVWPNSTA Seal Beach Public Affairs Officer (PAO)
Stillman, Glenn
Tamashiro, Pei-Fen / NAVWPNSTA Seal Beach and RAB Navy Co-chair
Voce, Mario
Wong, Bryant / CH2M HILL

WELCOME

At 6:03 p.m., P. Tamashiro, Navy Co-chair began the meeting by welcoming the participants. She indicated that the RAB Community Co-chair, J.P. Peoples was not yet in attendance, but had indicated she would attend.

Attendees were asked to introduce themselves.

The NAVWPNSTA Seal Beach Commanding Officer, Captain J.D. Kurtz attended the RAB meeting. He communicated to the meeting attendees that the Navy appreciates their participation in the RAB. He indicated that continued input is valuable to NAVWPNSTA Seal Beach and provides the Navy a great opportunity to show that the Installation Restoration (IR) Program does not simply comply with applicable environmental regulations, but also exhibits a commitment to improving the environment. Captain Kurtz closed by saying that the RAB meeting was a good opportunity for the Navy to share information with the RAB and the community.

P. Tamashiro announced that the RAB meeting would proceed with a status update on the ongoing IR Program, followed by two technical presentations.

PROJECT HIGHLIGHTS

The RAB meeting continued with a status update on the ongoing IR Program presented by S. Le.

The following sites were discussed:

- Site 42 – Auto Shop Sump/Waste Oil Tank; Sites 44/45 – Former Waste Otto Fuel Drum Storage; and Solid Waste Management Unit (SWMU) 57 – Paint Locker Area; Cleanup
- Site 14 - Abandoned Leaking Gasoline Underground Storage Tank (UST), Additional Groundwater Delineation
- Site 70 Revised Feasibility Study (RFS), Proposed Plan (PP), and Record of Decision (ROD)
- Site 40 - Concrete/Pit Gravel Area, Remedial Action
- Site 74 – Old Skeet Range, Net Environmental Benefit Analysis (NEBA) and Engineering Evaluation and Cost Analysis (EE/CA)
- Site 4 – Perimeter Road; Site 5 – Clean Fill Disposal Area; Site 6 – Explosives Burning Ground; and Site 7 – Station Landfill, Long-term Groundwater Monitoring Program

Hard copies of the slide presentation were available as a handout at the meeting.

Questions and answers posed after the Project Highlights presentation are summarized below:

Slide 5

Question: Which hydrogen release compound (HRC) is used at Site 40 (Concrete Pit and Gravel Area)?

Answer: The HRC used at Site 40 is a product manufactured by Regensis. The remediation system optimization plan for Site 40 including HRC was the subject of the September 2006 RAB presentation. A sample of the Regensis HRC product was made available to the RAB during the meeting.

P. Tamashiro continued the RAB meeting by indicating that a technical presentation on IR Program Site 42 – Auto Shop Sump/Waste Oil Tank; Sites 44/45 – Former Waste Otto Fuel Drum Storage; and Solid Waste Management Unit (SWMU) 57 – Paint Locker Area; Cleanup would be presented by C. Jones, Tetra Tech EC, Inc.

PRESENTATION – NON-TIME CRITICAL REMOVAL ACTION AT INSTALLATION RESTORATION SITES 42, 44/45, AND SOLID WASTE MANAGEMENT UNIT (SWMU) 57

Copies of the slide presentation were made available as a handout at the meeting.

Questions and answers posed after the presentation are summarized below:

General

Question: What is Otto fuel?

Response by Otto fuel is the type of fuel used to power torpedoes. Otto fuel was stored at Site 44/45 (Former Waste Otto Fuel Drum Storage Area) from the 1940s

P. Tamashiro: to the late 1970s. Now, Otto fuel present at the site is associated with torpedoes that are serviced at the site.

Otto fuel is associated with initial symptoms such as nausea, but long-term health risks are also of concern.

Response by Captain J.D. Kurtz: Otto fuel is handled carefully as it could emit fumes, etc. However, the health risks are not conclusive. NAVWPNSTA Seal Beach treats Otto fuel very seriously, implementing precautionary measures during handling.

In addition, the Navy conducts periodic “spill drills” to train for proper emergency response activities.

Question: What type of roll off bins are being used at Site 44/45 to store water and sediment from the drainage channel?

Answer: These are dewatering bins. Solids are contained in the upper portion of the bin above a grid that allows water to percolate down to the lower portion of the bin. The dewatering mechanism allows the water and sediments to be characterized separately and disposed of accordingly.

BREAK

P. Tamashiro announced a 10 minute break.

PRESENTATION - DRAFT ENGINEERING EVALUATION/COST ANALYSIS (EE/CA) AND NET ENVIRONMENTAL BENEFIT ANALYSIS (NEBA) FOR SITE 74, OLD SKEET RANGE

M. Arends, AGVIQ Environmental Services, presented the EE/CA portion of the presentation and L. Anton, CH2M HILL, presented the NEBA portion of the presentation. Copies of the slide presentation were made available as a handout at the meeting.

Questions and answers posed after the presentation are summarized below:

General

Question: How many acres are being considered for the removal action at Site 74 (Old Skeet Range)?

Answer: The total area being considered for the removal action at Site 74 is 13.5 acres. Five acres are considered wetland habitat and 8.5 acres are considered upland habitat.

Question: Given this acreage, is the contamination at Site 74 that critical to ecological receptors?

Answer: Risk to ecological receptors is a concern at Site 74. The risk of contaminant exposure to ecological receptors was determined as part of a Tier II Ecological Risk Assessment previously conducted for Site 74.

Question: Why is it so difficult to excavate the contaminated sediment from the wetlands?

Answer: Removal of contaminated sediment cannot be addressed simply by dredging. A temporary levee would need to be constructed to isolate the

area in preparation for excavation. The sediment would need to be dewatered before excavation could begin. If the water table is too high, the sediment may not dry sufficiently for excavation to take place.

Dredging would not be an acceptable means of removal because it would not result in 100 percent removal of the contaminated sediment.

Question: How deep below ground surface (bgs) does the contamination at Site 74 occur?

Answer: Contamination occurs in the top 2 feet bgs in the wetland area and the top 1 foot bgs in the upland area.

Question: There was a study done by U.C. Davis in 2000 to examine the effects of contamination on benthic invertebrates, including crabs, which are the primary diet for the California clapper rail. Has the biological transfer of contamination through the food chain been examined at Site 74?

Response by B. Wong: The results of this study were considered as part of the Tier II Ecological Risk Assessment conducted for Site 74. Bioaccumulation, bioaccessibility, and bioavailability were all specifically tested for as part of the Tier II Ecological Risk Assessment.

Question: Is the Navy considering costs associated with establishing wetland habitat as mitigation? Are the costs of land purchase for the wetland restoration considered?

Answer: The cost estimate currently assumes sufficient land for wetland restoration would be available at NAVWPNSTA Seal Beach at no cost to the Navy, but whether such a site exists is uncertain. If this removal action was chosen, the specific site for wetland restoration would need to be identified.

Question: What is the time basis for the discounted service acre year (dSAY) calculations?

Answer: The dSAY is based on ecological services provided into perpetuity. This is assumed to be 200 years, after which no additional ecological value is assumed to be added.

It is important to remember that the dSAY is calculated differently than the costs calculated as part of the EE/CA. The dSAY considers the time required for the action to be implemented, time for the habitat to recover, and the value of the habitat for the remaining 200-year period.

Comment: I think the estimate of vegetative recruitment for the wetland function is too high.

Answer: The estimation of ecological service is based on a fully functioning wetland, which considers more components than just vegetation.

Comment by USFWS: Another alternative for the Navy to consider is a combination of excavation and offsite disposal of the upland area combined with creation of additional wetland habitat to replace the functionality lost in the

contaminated wetland habitat.

Response by the Navy: The Navy welcomes this kind of input and encourages those who review the Draft EE/CA and NEBA reports to submit their written comments.

Question: Is the lead and antimony contamination present at Site 74 in a state where it dissolves?

Answer: No, the contamination at Site 74 is somewhat inert. There are two types of potential mobility for the contamination:

1) Physical - where the contaminant is physically separated into pieces that can be carried by water movement

2) Chemical - where the contaminant is dissolved into water

The condition of the site does not support significant chemical dissolution of the contaminants. The means of exposure to ecological receptors is through consumption of the contamination and magnification of toxicity through the food chain.

Question: Do the saline conditions at Site 74 increase the potential for the lead and antimony to be chemically dissolved?

Answer: The majority of the lead and antimony contamination at the site are adsorbed into the sediment, resulting in a low potential for the contamination to be dissolved in water.

Question: Do flood or tidal conditions at Site 74 increase the potential for the contamination to be physically mobilized?

Answer: When the extent of contamination was investigated, the contaminants had been in-place for over 10 years and subject to tidal conditions during that period. So we believe the extent of contamination has not substantially changed. The area proposed for the removal action represents the extent of contamination at levels considered to be an ecological risk.

Question: How much additional area beyond the 13.5 acres is contaminated?

Answer: The Tier II Ecological Risk Assessment characterized the site and identified the extent of contamination that presented a risk to ecological receptors. This is represented by the 13.5 acres subject to the removal action - 5 acres of wetland habitat and 8.5 acres of upland habitat.

Question: Is the removal action proposed for areas beyond the contamination contour for Belding's savannah sparrow? How was the 13.5 acre area subject to the removal action identified?

Answer: The 13.5-acre area identified for removal action was based on the evaluation conducted in the Tier II Ecological Risk Assessment. Prior to the Tier II Ecological Risk Assessment, approximately 25 acres of the site was delineated to have contained lead and antimony at levels of potential concern. The Tier II Ecological Risk Assessment refined the study by using site-specific data to evaluate the risk to ecological receptors and determined that only the 13.5-acre area posed concern to ecological

receptors and was subjected to consideration for the removal action. This document is available on the NAVWPNSTA Seal Beach IR Program website and in hard copy at the Seal Beach Library.

G. Smith indicated he would confirm that the document was available on the IR Program website.

Note: After the RAB, meeting it was determined that the Site 74 Tier II Ecological Risk Assessment had not been posted to the NAVWPNSTA Seal Beach IR Program website. The document has since been posted and is now available for download.

Question: Did the Tier II Ecological Risk Assessment analyze lead and antimony levels in organisms such as horn snails, fiddler crab, and striped shore crab?

Answer: The Tier II Ecological Risk Assessment collected site-specific evidence to analyze the risk to ecological receptors. Bioaccumulation, bioaccessibility, and bioavailability assessments were conducted for organisms such as plants, insects, birds, and invertebrates. The results of this analysis are presented in the Tier II Ecological Risk Assessment.

Question: Will the lead contamination naturally attenuate over time?

Answer: Inorganic lead under the existing conditions is very stable. It would take some time for this to occur.

COMMUNITY FORUM

P. Tamashiro began the announcements by indicating that the Site 74 EE/CA and NEBA document would be distributed for review, and she encouraged comments. She indicated that all input is helpful to the Navy and community acceptance is one of the selection criteria the Navy considers before implementing on the removal action.

P. Tamashiro also indicated that the RAB would receive the Post-Construction Closeout Report for Sites 42, 44/45 and SWMU 57 in December 2006. She indicated the report would likely recommend that no further action (NFA) is required.

The RAB will receive notification of the availability of these reports for review. The reports will be available electronically on the NAVWPNSTA Seal Beach IR Program website and in hard copy by request, for those who do not have internet access.

The next RAB meeting will be held the second Tuesday in January (1/9/2007) at 6:00 p.m. The meeting attendees were thanked for their attendance and wished a happy holiday season.

ADJOURNMENT

P. Tamashiro adjourned the meeting at approximately 7:47 p.m.

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