

**DEFENSE FUEL SUPPORT POINT, SAN PEDRO
RESTORATION ADVISORY BOARD
FINAL MEETING MINUTES FROM THE OCTOBER 1, 2003 MEETING**

The Defense Fuel Support Point, San Pedro, Restoration Advisory Board (RAB) meeting convened on October 1, at 7:00 p.m., at the Defense Fuel Support Point (DFSP) San Pedro, 3171 North Gaffey Street, Building 100, San Pedro, California.

RAB ATTENDANCE:

Theresa Trost (Navy Co-Chair) – Present
Gilbert Alberio (Community Co-Chair) – Present
Lt Col Renita D. Alexander, (Defense Energy Support Center [DESC] Region Co-Chair)–Present
Victor Christensen – Absent
Bonnie Christensen – Absent
Allen Franz – Present
Daniel Jones – Present
John Lang – Absent
Stephen Piatek – Absent

OTHERS PRESENT:

Joseph Trani, DESC Facilities Engineer
Kola Olowu, DESC Headquarters
Jennifer Valenzia, SWDIV
Thomas Macchiarella, SWDIV
Lee H. Saunders, SWDIV
Martin Hausladen, U.S. Environmental Protection Agency
Sue Hakim, Department of Toxic Substances Control
Frank Wright, DESC-Americas West Deputy Commander
Jeffery Hu, Regional Water Quality Control Board
John Kornuc, Naval Facilities Engineering Service Center (NFESC)
Dorothy Cannon, NFESC
Dan Ryan, Palos Verdes Peninsula Land Conservancy
Barbara Dye, Palos Verdes Peninsula Land Conservancy
Chuck Hart, Resident
Kit Fox, City of Rancho Palos Verdes
Cecily Vetrano, Tetra Tech EM Inc.

The meeting began at 7:00 p.m., with Mr. Gilbert Alberio, Community Co-Chair, presiding.

Administrative Issues

Welcome and Introductions

Mr. Alberio welcomed RAB members and members of the audience, and requested that attendees introduce themselves. He mentioned that during the previous year, RAB members participated in a tour of the San Pedro Facility.

Status of Activities at the San Pedro Facility

Presentation by Mr. Joseph Trani, DESC

Mr. Trani updated the group on DESC San Pedro's underground storage tank (UST) operation. The facility has 26 concrete USTs - each 135 feet in diameter, 24 feet in depth, and with capacity to hold 2 million gallons of jet propellant (JP)-5 and JP-8 fuel. Currently, 6 USTs are out of service.

The State of California mandates DESC to tracer-test the single-walled tanks once a year. A tracer test inoculates the tank's fuel with an isotope. To detect potential leaks, probes then are extended 24 and 10 feet down to the full and half depths of the tank. This test is either pass or fail, and Mr. Trani believes that in some failed tests the probes are detecting vapors. Referring to a diagram of the tank, he identified various pathways by which the probes can detect vapors. Attempting to remedy test failures, DESC is investigating the benefit of lining a tank with an epoxy novalac lining. Mr. Trani described the steps of the lining process that include sandblasting the interior and applying sequentially a sealant, a prime coat, and finally the epoxy novalac lining. Three tanks had been lined at the time of the meeting. Mr. Trani anticipated that by November 2004, five tanks will be lined.

Questions

Mr. Daniel Jones asked about the estimated life of the tank liner. Mr. Trani answered that the liner is guaranteed for a year, but DESC hopes the liner will endure 15 to 30 years.

Mr. Gilbert Alberio asked where the fuel is distributed following storage at the San Pedro Facility. Mr. Frank Wright replied that the fuel lines distribute fuel to military installations as far north as Las Vegas, as far east as Phoenix, and as far south as San Diego.

Mr. Allen Franz asked if the tracer test can detect the magnitude of a leak. Mr. Trani answered that test results are merely pass or fail.

Mr. Alberio asked if the San Pedro Facility is addressing security concerns. Mr. Wright said that completion of a new entry guard facility and a modified entry and exit gate are foreseen by the end of the year. Ideally, DESC also wants to upgrade the perimeter fence and install lighting and cameras; but the expected cost of the project is 1 million dollars, which comes up against budget constraints.

Phytoremediation at Pump House Area Using Poplar Trees

Presentation by Dr. John Kornuc, NFESC

Dr. Kornuc of NFESC updated the group on the phytoremediation system installed to remediate

fuel-contaminated groundwater in the northern Pump House Area. Contamination in the northern Pump House Area consists primarily of diesel-range hydrocarbons and some amounts of volatile organic compounds (VOC). The groundwater is shallow, and flow is to the northeast.

Dr. Kornuc described the following recent work: examining root depth, sampling soil, planting poplars in an excavated trench below ground surface, modifying the irrigation system, and measuring sap flow.

Dr. Kornuc then summarized the site history. Previous remedial actions included total fluid and free-phase recovery; air injection and extraction; and bioventing.

Dr. Kornuc gave an explanation of the phytoremediation process. Phytoremediation is the use of plants to treat contamination in various types of media. It has remediated soil and groundwater successfully. The plants and their associated microbial systems on the roots work together symbiotically to metabolize soil and groundwater contamination. Plants transport oxygen to the subsurface, where anaerobic (oxygen poor) conditions typically exist. Plants can degrade contaminants within their tissues and release contaminants through their leaves.

Poplar trees send their tap roots through the soil in search of water in a saturated zone. When they reach the water table, they can take up large amounts of contaminated groundwater and metabolizing hydrocarbons as a food source. The Pump House Area was planted with 104 Lombardy Poplar trees in 1998.

Dr. Kornuc reported that the root excavation revealed poplar roots as much as 14 feet below ground surface. A clay/silt lense is suspected to inhibit downward growth of the roots.

Soil samples were collected beneath a tree where the soil has elevated hydrocarbon levels. Total gasoline and diesel hydrocarbons were detected at concentrations of 2.12 and 510 micrograms per kilogram, respectively, in the sample from 21 feet below ground surface. At this single sampling point, the concentrations had decreased by about 90 percent. All other samples were non detect.

To determine how much water the trees are taking up, the sap flow was measured. Dr. Kornuc explained that sap flow is related to transpiration and water uptake by trees, and he provided details of the measurements. The sap flow measurements indicated that a tree may be transpiring up to 200 gallons of water per day.

Questions

Mr. Alberio asked if the plume in the Pump House Area is commingling with the plume from Phillips RM&T oil refinery facility across the street. Dr. Kornuc acknowledged this possibility, but he said that analytical data would show evidence of gasoline-range hydrocarbons if the plumes were commingling.

Mr. Marvin Hausladen questioned if the poplars planted in excavated trenches will root from the limbs. Dr. Kornuc answered yes, that they can root from the limbs successfully.

Mr. Alberio asked about tree productivity once the winter season arrives. Dr. Kornuc explained that transpiration ceases when poplar trees lose their leaves.

Mr. Jeffery Hu asked if plans were afoot to assign a percent contribution of cleanup to the phytoremediation plot. Dr. Kornuc answered no and added that because of other remedial

actions, determining a percentage would be difficult.

Mr. Franz asked if NFESC would consider planting native or non-deciduous trees for phytoremediation. Dr. Kornuc said that they are looking for a different tree variety for future use—such as the Fremont Cottonwood, a native Poplar.

Palos Verdes Peninsula Land Conservancy

Presentation by Mr. Dan Ryan, Palos Verdes Peninsula Land Conservancy

Mr. Ryan stated that the Palos Verdes Peninsula Land Conservancy (Conservancy), formed by concerned citizens, has been working at the San Pedro Facility for the last five years to restore coastal sage scrub plant communities, monitor and reintroduce the endangered Palos Verdes blue butterfly, and conserve habitat for the threatened California gnatcatcher. Restoration of coastal sage scrub occurs on site; this includes collecting seed and propagating, installing, monitoring, and maintaining plants. The on-site nursery is unique because it can produce many coastal sage scrub plants specific to the Palos Verdes peninsula that are key to the success of the gnatcatcher. Mr. Ryan indicated that native plant (locoweed) loss results in a decline in the blue butterfly population. The Conservancy works with the Soil Ecology Group to establish native plants. Ms. Barbara Dye noted that the gnatcatcher was heard at the San Pedro Facility this past year.

Status of Installation Restoration Program

Presentation by Ms. Theresa Trost, SWDIV

Ms. Trost began by explaining the CERCLA remedial action process for the Defense Installation Restoration (IR) Cleanup program. In 1995, more than 4000 sites were identified for cleanup in the IR program. Only 12 sites were added in 2002. The IR Program is a risk-based program. Based on investigations and samplings, the Navy has prioritized the sites. Those sites that pose the greatest risk to human health and the environment were placed into the high-risk category. High-risk sites are addressed first, followed by medium- and low-risk sites. The estimated cost to clean up the remaining sites in the Navy IR Program is approximately 4.1 billion dollars.

Currently there are three IR sites on the active portion of the installation that have been investigated and sampled (Sites 3A, 3B, and 6). In these investigations, the Navy found that the soil contamination was primarily from semi-volatile organic compounds and metals originating from construction debris that filled the ravines. Two of the San Pedro Facility IR sites are ranked low risk (Sites 3A and 6), and one is ranked medium risk (Site 3B). Anticipated dates for implementing cleanup are 2007 for the medium-risk sites and 2011 for low-risk sites. Ms. Trost explained that the typical cleanup strategy for such sites involves a “dig and haul” approach, but that other approaches may be considered due to the endangered and threatened species near the sites. She noted that an Engineering Evaluation/Cost Analysis and a Baseline Risk Assessment must be prepared for the IR sites prior to commencing cleanup.

Questions

Mr. Alberio asked who pays for the IR Program. Ms. Trost answered that the tax payers via Congress provide the funding. A Navy estimator tool estimated the cost to remediate the three IR sites at between 5 and 10 million dollars.

Base Realignment and Closure (BRAC) Update

Presentation by Mr. Thomas Macchiarella, SWDIV

Mr. Macchiarella began by explaining that a Finding of Suitability to Transfer (FOST) is prepared at the end of the environmental process, and that the Navy takes the documents seriously because they carry the weight of the Commander's signature after thorough evaluation of all environmental data.

The Final FOST for the Community Center and Retail store was finalized in December 2002, and it contained no use restrictions from environmental factors. The site currently includes two non-residential structures.

The Final FOST for the former San Pedro Navy Housing was finalized in August 2003. The site includes the fire fighter training facility and 122 residential structures.

Operable Unit 1 (OU-1) at Palos Verdes Housing is the only remaining BRAC site. OU-1 is a former landfill containing miscellaneous debris. Periodic maintenance of the landfill cap includes: topographic surveying and groundwater monitoring every other year; annual site inspections; and post-rain storm surveys.

Mr. Macchiarella provided a map of the proposed plan for dividing up the parcels to be transferred.

Questions

Ms. Dye asked if notification of the conservation conveyance will occur. Mr. Macchiarella stated that the conservation conveyance is a new process, and that he did not know the details of notification.

Mr. Albiero asked how the maintenance inspection work corresponds with the blue butterfly habitat. Mr. Macchiarella answered that physical work has not been required at the sites.

Mr. Franz asked who will be responsible for monitoring once OU-1 is transferred. Mr. Macchiarella replied that the Navy will likely give the monitoring responsibility to the property recipient.

Mr. Albiero asked who would take responsibility if problems develop with the sites following the transfers. Mr. Macchiarella stated that newly discovered sites will be the Navy's responsibility and will be included in the transfer covenant.

Mr. Chuck Hart asked how the transferee parties were selected. Mr. Macchiarella explained that the Local Reuse Agency is responsible for the transferee selections. He added that the Reuse Plan is not final because no consensus exists among Agency members.

Update on the Petroleum Remediation Program

Presentation by Mr. Kola Olowu, DESC Headquarters

Mr. Olowu announced a new contractor, The Shaw Group, has been selected for the compliance and cleanup program. The contractor also will monitor the groundwater treatment system at the

Pump House Area. Mr. Olowu stated that the effluent groundwater from the treatment system is monitored weekly to comply with the NPDES permit.

To address possible commingling of fuel-contaminated groundwater plumes, data has been requested from Phillips RM&T oil refinery located across Gaffey Road. Mr. Olowu added that DESC is working with the fire marshal to determine ownership of the pipeline along Gaffey Road.

Open Forum for RAB Members and Members of the Audience

Mr. Trani stated that the security improvement project involving the 8-foot fence installation has been delayed by United States Fish and Wildlife Service concerns about the blue butterfly and the gnatcatcher. Ms. Dye said that she would be interested to discuss the project's impact with the United States Fish and Wildlife Service.

With no further comments, the RAB meeting was adjourned at 8:50 p.m.

Approved RAB meeting minutes will be located on the SWDIV web page:
[http://www.efds.w.navy.mil/Environmental/San Pedro.htm](http://www.efds.w.navy.mil/Environmental/San_Pedro.htm)