

**LONG BEACH NAVAL COMPLEX
RESTORATION ADVISORY BOARD
FINAL MINUTES FROM 19 MAY 1999 MEETING**

The Long Beach Naval Complex (LBNC) held a Restoration Advisory Board (RAB) meeting on 19 May 1999, at the City of Long Beach Community Room, 200 Pine Street, Long Beach, California.

RAB ATTENDANCE:

Thomas Macchiarella - Present
Martin Hausladen- Absent
Alvaro Gutierrez - Present
Henry Brice - Absent
Mary Butler - Absent
Doug Carstens - Present
Carol A. Churchill - Absent
Greysen Edward Cooley - Absent
P. James Drake - Absent
John Essington - Present
Betsy Foley - Absent
Howard Hargrove - Absent
Tom Johnson - Present
Loyd Klock - Absent
Joseph Petway - Present
Darwin Thorpe - Present
Karl A. Tiedemann - Present
Anna Ulaszewski - Absent
Maria Vargas - Present

OTHERS PRESENT:

Michelle Gallice, CDM Technical Support
Ernie Jaramillo, City of Long Beach
Robert Schilling, BNI
Clyde Nash, Jr., City of Compton
Jim Sturm, Naval Complex Initiative
Ron Matsui, AMC
C. Tiedemann
Ken Larkey

MEETING BEGAN AT 6:30 PM – Thomas Macchiarella, Acting Navy Co-Chair, presiding as Chair.

The Chair welcomed the RAB members and members of the audience and later in the meeting reminded everyone to please sign in (PRINT LEGIBLY) - *"The sign-in sheet is the official record of attendance for each RAB meeting. It is the responsibility of each and every RAB member to sign into the official record. If you do not sign in, you did not attend the meeting."*

Mr. Macchiarella reminded the RAB members that the meeting was being tape recorded. No objections were voiced from the floor.

Administrative Issues

Mr. Macchiarella explained to the RAB that Mr. Alan Lee has been pulled away by the SWDIV Commander to perform some urgent tasks. Mr. Macchiarella will be chairing the RAB meeting tonight.

Ms. Vargas stated that Mr. Cooley was unable to attend the RAB meeting because he had to be in Washington DC.

Mr. Johnson explained that Dr. Bob Kanter of the POLB has been promoted and therefore, Mr. Johnson will be taking his place as a member of the LBNC RAB. Mr. Johnson has worked on the Site 7 sediments project at LBNC.

Mr. Macchiarella asked for comments on the Draft 17 March 1999 meeting minutes. Mr. Lee had provided some minor comments prior to the meeting, and Mr. Essington provided a comment at the meeting. The meeting minutes were approved with these minor changes.

The Rules of Operation, that Mr. Lee signed prior to the meeting, were signed by Ms. Vargas. A copy of the Final Rules of Operation will be distributed to the RAB members with the next meeting mailing package.

Ms. Vargas asked that the members of the RAB, and the members of the audience, introduce themselves.

Presentation of the Draft Feasibility Study for IR Sties 9, 12, and 13

Mr. Schilling, Bechtel International Inc., provided an overview of the Draft Feasibility Study (FS) report for IR Sites 9, 12, and 13.

Mr. Schilling began by providing the background of this study. IR Site 9 (Building 129 and vicinity) is located in the north central portion of the Long Beach Naval Shipyard (LBNSY). Building 129 is thought to have contained waste oils, greases and solvents associated with degreasing and paint removal operations. IR Site 12 (Parking Lot X) is located in the eastern portion of LBNSY on Pier E. There is a drum crushing area where drums reportedly containing paints and cleaning solvents were kept and a sandblast grit disposal area. IR Site 13 (Tank Farm) is located in the eastern portion of LBNSY on Pier E, adjacent to and south of IR Site 12. This was a hazardous waste storage area; there were no reported releases but stains provide evidence of small operational spills.

A summary of previous investigations was then provided by Mr. Schilling. The Remedial Investigation (RI) report for IR Sites 9, 12, and 13 was completed in 1997. The Supplemental Groundwater Investigation (SGI) for these sites was completed in June of this year.

The following recommendations were made:

IR Site 9

- 14 soil areas of potential concern (AOPCs) and 4 groundwater areas of potential concern (GWAOPCs) were investigated
- No further action is recommended for soil
- GWAOPCs 1 and 2 are recommended for further action

IR Sites 12 and 13

- 2 soil AOPCs and 2 GWAOPCs were investigated
- IR Site 12 area of concern (AOC) 1 soils is recommended for further action
- IR Sites 12 and 13 GWAOPC 1 is recommended for further action

Mr. Schilling continued by discussing the objectives of the FS. They are to develop and evaluate potential remedial action alternatives (remedies) that would prevent exposure to contaminants reported in soil and/or groundwater at IR Sites 9, 12 and 13 that present an unacceptable level of risk to human health and/or the environment. Also, to provide the basis for preparation of a Proposed Plan (PP) and Record of Decision (ROD).

The FS process includes the following steps:

- Identifying Applicable or Relevant and Appropriate Requirements (ARARs)
- Establish Remedial Action Objectives (RAOs) and Remediation Goals
- Identify General Response Actions
- Screen Remedial Technologies and Process Options
- Assemble Technologies into Remedial Alternatives
- Conduct Detailed and Comparative Analyses of Potential Remedial Alternatives

Mr. Schilling briefly described the Remedial Action Objectives (RAOs) of the FS. He explained that remediation goals are intended to satisfy the RAOs. Remediation goals are contaminant concentrations which serve as an endpoint for the response action, establishing both performance requirements for remedial technologies and a basis for measuring the success of remediation. The remediation goal for GWAOPC 1 Groundwater at IR Site 9 for VOCs is California Ocean Plan criteria or site-specific risk-based concentrations (RBCs). The remediation goal for GWAOPC 1 Groundwater at IR Sites 12 and 13 for Arsenic is background. The remediation goal for AOC 1 Soil at IR Site 12 for SVOCs is site-specific RBCs and for Arsenic is background.

The discussion then moved on to general response actions, which are broad categories of remedial approaches that will help to achieve the RAOs.

The general response actions considered at IR Sites 9, 12, and 13 are:

- No Action
- Institutional Controls
- Monitoring
- Monitored Natural Attenuation
- Containment
- Treatment (in situ and ex situ)
- Removal (extraction or excavation)
- Disposal (on-site and off-site)

Mr. Schilling then presented the potential remedial action alternatives for IR Sites 9, 12, and 13. They are as follows:

A detailed and comparative analyses of these remedial action alternatives was conducted based on the following nine criteria:

Threshold Criteria – Overall protection of human health and the environment
Compliance with ARARs

Primary Balancing Criteria - Long-term effectiveness
Reduction of toxicity, mobility or volume through treatment
Short-term effectiveness
Implementability
Cost

Modifying Criteria - State acceptance
Community acceptance

Mr. Schilling ended the presentation with the current schedule for IR Sites 9, 12, and 13. The Draft FS will be issued on 28 May 1999 (since the meeting the Lead RPM indicated that the draft will be postponed until approximately August), comments are due 30 days after the draft is issued, and the Final FS should be issued 7 days after comment resolution. It is anticipated that the PP and ROD will be issued in late fall 1999.

Questions and Answers

Mr. Essington stated that he thought SCE treats their water before they pump it into the harbor. Mr. Schilling said that he also believes that this is true, but the Navy still wants to prevent the groundwater from reaching SCE.

Mr. Tiedemann asked how fast the plumes are moving, when will they get to SCE? Mr. Schilling responded that the plumes are moving very slowly, about 4 feet/year at IR Sites 12 and 13. Site 9 might be slightly faster, but the exact rate is unknown. Because of the nature of the contaminants, there are many sister degradation products. The spill occurred in the 1950s and it has not moved very far since then. Mr. Tiedemann then asked if the arsenic could be mined and re-used. Mr. Schilling stated that this is probably not feasible.

Mr. Thorpe asked about the deep plume at IR Site 9. Mr. Schilling stated that this would be discussed in the next presentation.

Mr. Petway asked what SCE is treating in their water. Mr. Schilling stated that he is not sure what contaminants SCE treats, but they have to test their water so they would pick up any contaminants that are present in their water.

Mr. Carstens asked why the Navy is using an industrial risk scenario. Would the scenario be different if there was a different planned reuse? Mr. Schilling said that the industrial risk scenario was chosen based on the future use of the land.

Ms. Vargas asked why the Navy is doing this if the future use of the land is undecided. Mr. Macchiarella stated that in the past the Navy had a good idea that the future use of the land was going to be industrial. Now, we know the future use of the land, it is going to be a container terminal which is industrial. Mr. Schilling added that the remediation goals are consistent with the industrial use scenario. Mr. Petway stated that this is consistent with the Navy's previous use of the land, it was industrial and it will continue to be industrial.

Mr. Tiedemann stated that this was the first time he had heard that the property would be used as a container terminal and not a shipyard. Mr. Johnson stated that the EIS/EIR stated that LBNC would be both a shipyard and a container terminal. Mr. Thorpe added that the entire process has stated an industrial use scenario. Mr. Johnson finished by saying that the City of Long Beach looked at many options, and they needed to know what to consider as far as risk for the future. Industrial use was determined to be the future use.

Mr. Essington asked about the community acceptance of the PP. He stated that the community never really states "yes, we accept the PP" but instead they provide comments on the document. This really is not the same thing. Mr. Macchiarella stated that he would look up the EPA definition of community acceptance for the next meeting.

Mr. Essington stated that institutional controls tend not to work. What are the institutional controls being considered for IR Sites 9, 12, and 13 and who will monitor them? Mr. Macchiarella stated that they are typically deed and land-use restrictions. Mr. Essington commented that he has looked at the use of institutional controls across the country and found

later that they are no longer being followed. Mr. Johnson stated that this was a good point. But in this case there are more than just land-use restrictions from the Navy. The use will be industrial and the port will use this property for a very long time.

Mr. Carstens asked about the long-term use of the land, say in 100-200 years. Does the deed prevent the use of the land from being changed? Mr. Macchiarella stated that this was true. If future owners of the land wanted to change the use of the land (i.e., residential) they would have to re-study the land and perform clean-up measures consistent with the intended use of the land. Mr. Johnson added that for the land to be used for residential purposes it would have to no longer be owned by the POLB.

Mr. Gutierrez added that the deed runs with the land. To change the use of the land, the new owner must re-investigate, do a risk assessment, and clean-up the property consistent with the intended use. Mr. Essington stated that his point was that this model is not always working across the country. Mr. Macchiarella said that he understands Mr. Essington's concern. In addition to the deed, the Navy prepares an Institutional Control Monitoring Plan, which is reviewed by the regulatory agencies.

Mr. Thorpe asked what happens to the deed if Parcel 2 is also conveyed under the early transfer process. Mr. Macchiarella stated that the lease document limits the things the lessee can do on-site before cleanup is complete.

Presentation of Draft Effluent Contingency Plan

Mr. Schilling, BNI, presented the Draft Effluent Contingency Plan (ECP) for Drydock No. 1 at LBNSY.

Mr. Schilling began with presenting the background for the development of this plan. The RI and SGI identified a benzene plume in the groundwater of the Upper Gaspur Aquifer at IR Site 9. Lesser amounts of other VOCs were also reported, but were below Water Quality Objectives. The regional groundwater flow direction in the affected interval is to the northwest. In addition, localized groundwater flow direction in the affected interval is to the southeast toward Drydock No. 1.

Drydock No. 1 is a concrete lined graving dock that was built between 1940 and 1942. The southern end opens to the Long Beach Harbor West Basin. The floor slab is founded within the Upper Gaspur Aquifer. Between 1941 and 1945, subsidence caused settlement and cracking of the drydock. Therefore, major alterations to the drydock were conducted through 1960 due to the subsidence.

Mr. Schilling continued with a discussion of the hydrostatic pressure relief system (HPRS) at Drydock No. 1. The HPRS was installed between 1946 and 1947 to relieve excessive hydrostatic pressure resulting from subsidence. It was then modified several times between 1947 and 1992. The present design consists of: 10 dewatering wells (approximately 135 feet deep); 166 sand drains; 28 piezometers; and associated pumps, piping, valves and instrumentation. The groundwater of the Upper Gaspur Aquifer in the vicinity of the drydock is extracted from the 10

dewatering wells and discharged to the Long Beach Harbor West Basin. The average combined flow rate, measured in 1992, was approximately 3,142 gallons per minute (gpm).

The discharge from the HPRS to the Long Beach Harbor West Basin is regulated under a National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit is a provision of the federal Clean Water Act (CWA) and is administered by the state through the Regional Water Quality Control Board (RWQCB). The permit regulates point source discharges and specifies discharge limits.

Mr. Schilling stated that this plan was prepared to address the following concerns: (1) benzene has been reported in the groundwater of the Upper Gaspar Aquifer in close proximity to Drydock No. 1 at concentrations exceeding the NPDES permit discharge limit and (2) the groundwater entering the Drydock No. 1 HPRS may contain benzene at concentrations in excess of the NPDES permit discharge limit.

The objective of the ECP is to provide reasonable assurance that discharges from the Drydock No. 1 HPRS to the Long Beach Harbor West Basin continue to comply with the requirements of the federal CWA as governed by the NPDES permit.

The ECP provides a framework for satisfying the objective. The ECP will:

- Determine if benzene-impacted groundwater is being pumped by the Drydock No. 1 HPRS into the Long Beach Harbor West Basin.
- Establish a sampling plan to periodically monitor for such an occurrence.
- Delineate what action will be taken in the event that benzene-impacted groundwater is being discharged at concentrations in excess of NPDES permit limits, or such discharge appears imminent.

Mr. Schilling discussed the current status of the HPRS. BNI reviewed the latest design drawings and specifications, held discussions with the previous Drydock Master and current caretaker, and conducted a site visit and system walkdown. It was determined that 5 of the 10 HPRS wells are currently non-operable (2 on the east side and 3 on the west side.) The average combined system flow rate from the 5 operable wells is estimated at approximately 173 gpm.

Mr. Schilling continued with a description of the Effluent Monitoring Plan. This plan specifies the technical approach and field sampling methodologies to be employed for periodic monitoring of the HPRS wells for the presence of benzene. The technical approach was developed using the US EPA 7-step data quality objectives (DQO) process. The Effluent Monitoring Plan requires:

- Quarterly sampling of each operational HPRS well.
- Sampling of non-operational HPRS wells prior to their return to service.
- Analysis of samples for VOCs.
- Compare analytical results to NPDES permit discharge limits.
 - ⇒ If reported VOC concentrations are less than or equal to discharge limits, continue quarterly sampling.
 - ⇒ If reported VOC concentrations exceed discharge limits, implement mitigation measures.

- Reporting
 - ⇒ Effluent sampling results, HPRS status and recommendations for further action (if any) to be included in monitoring reports.

The ECP mitigation measures are designed to treat individual VOC-impacted HPRS wells rather than end-of-pipe. It will require modification of the existing HPRS well equipment (primarily discharge piping and valves). Three technologies were evaluated for the removal of benzene from the HPRS effluent: (1) liquid-phase granular activated carbon (GAC) adsorption, (2) air stripping with vapor-phase carbon adsorption, and (3) bioreactor (rotating biological contactor). The technologies were evaluated for effectiveness, implementability, and cost. The recommended technology is the liquid-phase GAC adsorption because it is the most effective, readily implementable and lowest cost method of reducing benzene concentrations from an HPRS well to below the NPDES discharge requirements.

Questions and Answers

Mr. Carstens asked if the flow rate has changed, does that mean that the pressure on the drydock has increased? Mr. Schilling responded that BNI did not measure this but it is a likely assumption. This does not mean it will pop out of the water, it is still very stable under normal loads.

Open Forum for RAB Members and Members of the Audience

Mr. Thorpe described the site tour to the other RAB members. He stated that the Long Beach Naval Station is now flat, it appears that all of the buildings have been demolished. Mr. Thorpe asked how the IR sites are marked now. Mr. Macchiarella stated that the POLB is using a Geographical Information System (GIS), aerial photos, and a state wide grid to locate the exact boundaries of the IR sites. Mr. Johnson added that monitoring wells are pushed right into the ground, so they are easily identifiable, and the monitoring wells are surveyed.

Mr. Carstens asked about the early transfer letter to the governor. Mr. Macchiarella stated that the 21 July RAB meeting will contain a detailed discussion of the early transfer process. He also noted that the cleanup of the IR sites contained with Parcel No. 1 began several years ago. Mr. Gutierrez added that DTSC provided a presentation to the RAB last September about the early transfer process.

A member of the audience asked why the Navy is going with an early transfer instead of the regular transfer process. Mr. Macchiarella said that he did not have that answer at this time. A detailed discussion of the process will be held at the next meeting. The person with this sort of information will be available at that time.

Mr. Essington stated that he had asked Dr. Bob Kanter at the last meeting how the RAB would be involved with the sediment issues at IR Site 7. Dr. Kanter had stated that the RAB would not be involved because the sediments are covered under the POLB dredging project. Mr. Johnson and Mr. Macchiarella clarified that the RAB will be involved with the Navy's cleanup of the portion of IR Site 7 that the Navy is currently investigating under CERCLA.

The portion of the Long Beach Harbor West Basin that is the POLB's dredging project was not an early transfer, the land actually reverted back to the POLB. The remainder of the area is still under CERCLA. Ms. Tiedemann expressed a concern that the RAB was involved with the entire site, then part of the site reverted to the POLB, and the RAB is now only involved with the remaining portion of the site. She is concerned that this will happen with other sites at LBNC.

Mr. Thorpe requested that the Navy provide a picture that details the POLB and the Navy portions of the Long Beach Harbor West Basin. Mr. Macchiarella stated that there is a great picture of this in the Draft FS. He will provide a copy to Ms. Gallice and she will mail it to the RAB members with the next meeting mailing.

Mr. Thorpe asked why the POLB is volunteering to pay for the cleanup of areas that are the Navy's responsibility to clean up. Mr. Essington expressed his concern that the cost is coming from the City of Long Beach taxpayers and not the Navy. Mr. Johnson stated that the POLB decided it was more effective to cleanup some areas so that the land could be reused more quickly. Mr. Johnson pointed out that the all revenue for the POLB is self-generated from tenants and is not tax payer dollars.

Mr. Macchiarella stated that there will be a public meeting to present the Proposed Plan for IR Sites 1 and 2 and the EE/CA for IR Site 14 on 28 June at 6:30 P.M.

Having no additional comments, the RAB meeting was adjourned at 9:00 P.M.

The next LBNC RAB meeting is scheduled for **21 July 1999** at the City of Long Beach Community Room at 200 Pine Street.

These minutes were recorded by Michelle Gallice of CDM Federal Programs Corporation acting as the RAB Technical Support at 619-268-3383, and reviewed and approved by all members of the Long Beach Naval Complex Restoration Advisory Board.

Approved meeting minutes for the Long Beach Naval Complex (LBNC) RAB can be found at:

- (1) The LBNC Information Repository located at the Long Beach Public Library, Government Publications Department; and*
- (2) The Internet at the Southwest Division Naval Facilities Command Web page at <http://www.efdswest.navy.mil/DEP/ENV/default.htm> - SWDIV Point of Contact: Mr. Lee Saunders (619) 532-3100.*