

**RESPONSE TO COMMENTS ON THE DRAFT ANNUAL GROUNDWATER MONITORING REPORT, IRP SITES 9, 12, AND 13
FORMER LONG BEACH NAVAL SHIPYARD, CALIFORNIA, DATED JUNE 2000
CTO-177**

Comments from Ron Okuda

Written on 31 July 2000	
Ron Okuda Hazardous Substances Engineering Geologist Department of Toxic Substances Control	
COMMENTS	RESPONSE
Comment 1: <p>GSU recommends that this Report be revised to only discuss the results of the groundwater monitoring activities. We feel that the evaluations and recommendations for no further action decisions, revised groundwater monitoring schedule or destruction of groundwater monitoring wells would be more appropriate as part of the feasibility study for each IRP site. Specific remedial alternatives may require changes in groundwater monitoring schedule and the addition or abandonment of groundwater monitoring wells. The groundwater data presented in the Report could be used to support recommendations in the feasibility study report, but it should not be used as the document to propose the changes.</p>	Response 1: <p>The Report was written following decision rules developed in the final Work Plan for Groundwater Monitoring, IRP Sites 9, 12, and 13, Former Long Beach Naval Shipyard, Long Beach, California. The decision rules are found in Section 3.5 of the final Work Plan.</p>
Comment 2: <p>The Report evaluates groundwater contamination plumes by presenting concentration data from individual wells, presented as either increasing, decreasing, or inconclusive, and compares the concentration to contaminant screening criteria. Although the Report mentions that attenuation of the contaminants may be occurring, it does not appear that geochemistry data or "lines of evidence" is being collected to support natural attenuation to remediate the contamination. If natural attenuation is one of the remedial alternatives being evaluated for these sites, the groundwater monitoring program should incorporate the collection of groundwater parameters necessary to support this remedy.</p>	Response 2: <p>The groundwater monitoring program was designed for quarterly groundwater monitoring of VOCs at IR Site 9. The statement "attenuation . . . may be occurring" is based on the presence of vinyl chloride, which is produced by biological degradation. Oxidation-reduction potential readings are also being collected for conversion to Eh readings. These readings can be used as part of the feasibility study work to determine whether conditions are aerobic or anaerobic. Further evaluation of parameters that may be useful will be part of the feasibility study work.</p>

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Comment 3:

Several of the wells show an increasing concentration of vinyl chloride over time which may indicate that volatile organic compounds (VOCs) such as tetrachloroethene and trichloroethene are biodegrading to vinyl chloride. Since the water table is shallow, a potential exist for vinyl chloride to volatilize from the groundwater, enter the vadose zone and pose a health risk to workers. GSU suggests that the chemical and physical groundwater properties at the sites be investigated to determine the fate and transport of vinyl chloride and other VOCs.

Response 3:

Disagree. The data were evaluated using the Mann-Kendall trend test methodology as described in U.S. EPA Guidance for Data Quality Assessment. Results for vinyl chloride indicate insufficient evidence for increasing or decreasing trends. Most of the vinyl chloride concentrations are less than 10 parts per billion. The highest concentration was 70 to 75 parts per billion from MW-SGI-16, which was measured during the October 1999 sampling event. The subsequent quarterly sampling event resulted in a concentration of 30 parts per billion, which is consistent with historical concentrations. Vinyl chloride concentration data do not indicate that concentrations are elevated enough to produce vadose concentrations that would pose a risk to workers. Risk assessment and fate and transport modeling from the final Remedial Investigation (Bechtel 1997) are still applicable, since current vinyl chloride concentrations are similar to historical concentrations.

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Comments from Sue Hakim

Written on 1 August 2000	
Sue Hakim Hazardous Substances Scientist Department of Toxic Substances Control	
COMMENTS	RESPONSE
<p>Comment 1:</p> <p>MW-SGI-16 still shows high levels of vinyl chloride and 1,1-dichloroethene, which is a major concern, as we discussed earlier during the last BCT meeting, due to the pumping activities at Dry Dock #2, the contaminants might be discharged into the Long Beach Harbor, West Basin.</p>	<p>Response 1:</p> <p>The highest concentration from MW-SGI-16 was 70 to 75 parts per billion measured during the October 1999 sampling event. The subsequent quarterly sampling event resulted in a concentration of 30 parts per billion, consistent with historical concentrations. There is insufficient data to indicate an increasing trend based on the Mann-Kendall trend test.</p> <p>At the request of the Los Angeles Regional Water Quality Control Board, groundwater samples were collected from MW-FW-13 and MW-FW-14. The samples were analyzed for VOCs to address concerns regarding VOC migration toward Long Beach Harbor. VOCs were nondetect for these samples.</p> <p>Water is pumped at Dry Dock #2 to eliminate seepage water that accumulates in the dry dock. Water is not actively pumped to relieve hydrostatic pressure as it is at Dry Dock #1.</p> <p>During May 1999, an estimate was generated for the volume of water pumped at Dry Dock #2. The flow estimate was obtained from Ed Nunn (BRAC site caretaker). The estimated volume of water flow at Dry Dock #2 was 400,000 gallons per day.</p> <p>The Port of Long Beach is in the process of decommissioning Dry Dock #3 by sealing the gate to Long Beach Harbor and filling the dry dock with hydraulic fill. Dry Dock #2 will be sealed and filled next. This will eliminate the need for continued pumping of groundwater at both dry docks.</p>

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Comments from Sue Hakim

Comment 2:

The Field Change Notice form required by the Navy-CLEAN program standard operating procedure for deviations from the Work Plan, is not included at the end of Appendix A. Please add this form; also, please include CLEAN in the Acronyms/Abbreviation list.

Response 2:

Noted. A Field Change Notice form will be added to Appendix A, and the acronym "CLEAN" will be added to the acronym list.



BECHTEL NATIONAL INC.

CLEAN II TRANSMITTAL/DELIVERABLE RECEIPT

Contract No. N-68711-92-D-4670

Document Control No. CTO-0177/0133

File Code: 02181

TO: Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R1
1220 Pacific Highway
San Diego, CA 92132-5190

DATE: September 21, 2000
CTO #: 0177
LOCATION: Long Beach Naval Shipyard

FROM: Bong T. Kown, Ph.D., Project Manager

DESCRIPTION: Response to Comments on the Draft Annual Groundwater Monitoring Report, IRP Sites 9, 12, and 13 Dated June, 2000

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CLEAN II Program
Bechtel Job No. 22214
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IN REPLY REFERENCE: CTO-0177/0133

September 21, 2000

Contracting Officer
Naval Facilities Engineering Command
Southwest Division
Mr. Richard Selby, Code 02R1
1220 Pacific Highway
San Diego, CA 92132-5190

Subject: Response to Comments on the Draft Annual Groundwater
Monitoring Report
IRP Sites 9, 12, and 13
Former Long Beach Naval Shipyard, Long Beach, CA

Dear Mr. Selby:

Enclosed is a copy of our Response to Comments on the Draft Annual Groundwater Monitoring Report for Installation Restoration Program Sites 9, 12, and 13 at the Former Long Beach Naval Shipyard, Long Beach, prepared under Contract No. N68711-92-D-4670. The responses to California Environmental Protection Agency/Department of Toxic Substances Control (DTSC) comments are being submitted for review by the Navy before forwarding the responses to the (DTSC). If the Navy concurs with the responses they can be forwarded to the DTSC.

If further information is required, please contact me at (619) 744-3058 or Scott Donovan, CTOL, at (619) 744-3019.

Very truly yours,


Bong T. Kown, Ph.D.
Project Manager

BTK/sp
Attachments