



# California Regional Water Quality Control San Francisco Bay Region

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Secretary for  
Environmental  
Protection

Date: September 8, 1999  
File No. 2169.6032 (DFL)

Commanding Officer  
Engineering Field Activity, West  
Naval Facilities Engineering Command  
900 Commodore Drive  
San Bruno, California 94066-2402  
Attention: Mr. Richard Powell

**Re: RWQCB Comments on Draft Technical Memorandum, Groundwater Classification and Analysis of the A- and B-Aquifer Interconnections for Parcel D, Hunters Point Shipyard, San Francisco, California**

Dear Mr. Powell:

Thank you for the opportunity to review the subject document. San Francisco Bay Regional Water Quality Control Board (RWQCB) comments are included as an attachment to this letter.

Should you have any questions regarding these matters, please contact me by telephone at 510-622-2377 or by email at [dfi@rb2.swrcb.ca.gov](mailto:dfi@rb2.swrcb.ca.gov). After September 22, 1999, please contact Dennis Mishek at 510-622-2490.

Sincerely,

David F. Leland, P.E.  
Associate Water Resources Control Engineer  
Groundwater Protection and Waste  
Containment Division

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cc: Ms. Amy Brownell  
San Francisco Department of Public Health  
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Mr. Richard Powell  
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Mr. Mike McClelland  
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900 Commodore Drive  
San Bruno, CA 94066-2402

Ms. Claire Trombadore (SFD-8-2)  
U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105

**RWQCB Comments on Draft Technical Memorandum, Groundwater Classification and Analysis of the A- and B-Aquifer Interconnections for Parcel D, Hunters Point Shipyard, San Francisco, California (dated July 15, 1999)**

**GENERAL COMMENTS**

1. The text of the evaluation in Section 3.2.2 (Step 2) is not well supported by any analysis or results. The report must provide better support for the various factors discussed in this section.
2. The Navy needs to propose specific locations and a schedule for investigation of the B-aquifer.
3. The RWQCB does not agree with the Navy is proposed redefinition of the point of compliance at the shoreline.

**SPECIFIC COMMENTS**

1. Page 2, first paragraph. The last sentence notes only one type of activity that would be affected by consideration of B-aquifer water quality. The statement should be broader in that any activities affecting or conducted in the A-aquifer would need to consider water quality impacts on the B-aquifer, whether or not the B-aquifer were being pumped. This would include source control activities in the A-aquifer.
2. Page 7, first paragraph. The federal guidelines are actually more stringent in the sense that more water is considered as a potential drinking water source by federal guidelines than by state guidelines.
3. Page 9, Historic, Current, and Potential Future Groundwater Uses. The first sentence refers to poor water quality and expensive pretreatment. Since there are no B-aquifer wells in Parcel D it does not seem possible to make these statements with respect to Parcel D. We encourage the Navy to propose specific locations for installation of B-aquifer wells.
4. Page 9, Conceptual Groundwater Extraction and Treatment Scenarios. The Navy needs to provide a more specific demonstration of the statements with respect to limited yield and expensive pretreatment. The beneficial uses identified by the state are associated with specific daily pumping rates. Is pumping at these rates possible? What is the basis for the statement that pumping from any portion of the A-aquifer would require expensive pretreatment? Additional support for these statements is necessary to give them credibility.
5. Page 9, Impact of Groundwater on Surface Water Replenishment. We do not understand the statement that San Francisco Bay is recharging the A-aquifer. Some more detailed discussion and support for this statement are necessary. A water balance for the parcel would more clearly illustrate the main elements of recharge for the parcel. With regard to the last sentence, what level of sustained extraction could be implemented without causing declining quality of A-aquifer groundwater?
6. Page 9, Vulnerability of Groundwater to Contamination. The analysis in this section appears flawed. With a minimum seal length of 20 feet, any aquifer occurring at

depths of greater than 20 feet could be developed in accordance with the ordinance. In other words, it is the distance from ground surface to the bottom of the aquifer that is important, not the depth from ground surface to the water table. This section should be revised to be more specific as to areas that don't meet the minimum seal depth requirements. It is our understanding that this would comprise areas where the depth to Bay Mud is less than 20 feet from ground surface.

7. Page 10, Impact of Consolidation of Soils and Damage to Existing Structures Through Subsidence. Some specific demonstration of land settling and subsidence that would result from groundwater extraction is needed to strengthen this point.
8. Section 3.2.3. We do not see any analysis that supports this conclusion. What specific parts of the exemption criteria in Section 3.1.2 are being invoked here to make this statement? If a case cannot be made with respect to the criteria, it is not possible to state that no portions of the A-aquifer retain the stated beneficial use designation.
9. Section 4.2. The COPC analysis is not clear. Are COPCs only associated with IR-09 and IR-33? Even using the one round criteria, there are sites other than these two where chemicals were detected at concentrations above MCLs and HGALs (for metals). The first sentence in the section appears to contradict this.
10. Section 4.3. The Navy needs to propose specific locations and a schedule for investigation of the B-aquifer.
11. Section 5.0. The RWQCB does not concur with the Navy's proposed redefinition of the point of compliance as the shoreline in areas of the parcel where the seawall is absent. This is not consistent with the agreement reached earlier with respect to Parcel D, the agreement documented in the Parcel B Record of Decision, or with long-standing regulatory policy. Separation between the point of compliance and the point of exposure is used routinely to allow for response to exceedances without threatening water quality of the receiving water. The separation between compliance point and exposure point varies from site to site based on site hydrogeologic conditions, nature of the contaminants, and the demonstrated ability of the responsible party to mobilize a timely response, among other factors. The RWQCB finds no basis for agreement to the Navy's proposal. In fact, site-specific factors including those noted above indicate a large separation is warranted at Hunters Point. The RWQCB supports the use of the inland edge of the tidally influenced zone in those areas of Parcel D where there is no seawall. In areas where there is seawall, the Navy must propose a monitoring network and program to verify the integrity of the seawall and its continued functionality in preventing Parcel D groundwater from discharging through or across the seawall.

#### Appendix B

12. Section 2.0. Please provide a reference for the groundwater screening criterion of 100 ug/L.
13. Section 2.0, tables. Please modify the tables to provide the following information: method reporting limits, frequency of exceedances, and dates of exceedances. Tables like those presented in Appendix A should be prepared for Appendix B and

would address these concerns. Similar information should be presented for the other sites in Parcel D as part of the Parcel D Corrective Action Plan.

14. Section 3.0. Please provide a reference for the groundwater screening criteria for the various TPH measures.
15. Section 3.0, tables. The tables should present method reporting limits and should include the measured value for those samples where results were below the screening criteria. Alternatively, a set of data tables showing all the TPH results should be presented for the sites considered here. Similar information should be presented for the other sites in Parcel D as part of the Parcel D Corrective Action Plan.