



# California Regional Water Quality Control Board

## San Francisco Bay Region



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**ALAMEDA POINT**  
**SSIC NO. 5090.3**

**Arnold Schwarzenegger**  
Governor

Date: **APR 8 7 2004**  
File: 2199.9285(JCH)

Mr. Thomas L. Macchiarella  
Southwest Division Naval Facilities Engineering Command  
Attn: Code 06CA.TM  
1220 Pacific Highway  
San Diego, CA 92132-5190

**Subject: Comments on the Draft Remedial Investigation Report, IR Site 28, Todd Shipyards, Alameda Point, Alameda, California**

Dear Mr. Macchiarella:

The San Francisco Bay Regional Water Quality Control Board (Water Board) staff reviewed the *Draft Remedial Investigation Report, IR Site 28, Todd Shipyards, Alameda Point, Alameda, California*, dated February 13, 2004 (draft RI). Based on the limited review of groundwater impacts, staff has the following comments:

General Comment:

1. San Francisco Bay Regional Water Quality Control Board (Regional Board) Resolution 89-39 and State Water Resources Control Board (State Board) Source of Drinking Water Policy, Resolution 88-6 establish criteria to exempt groundwater basins from being considered a potential drinking water source. Although the quality of the groundwater at the first water bearing zone meets these criteria, the second water bearing zone does not. Therefore, the groundwater beneath IR Site 28 is still considered as a potential drinking water source. Any chemical of potential concerns (COPC) that exceeds MCLs should be advanced to a Feasibility Study (FS).
2. If a COPC exceeds the criteria established in the *Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California* (Federal Register, Volume 65, Number 97, 18 May 2000, or the CTR) at near shore wells, it needs to be advanced to a FS.
3. The draft RI cited results of the offshore monitoring as an indication that the groundwater discharge to Oakland Inner Harbor is not adversely affecting aquatic organisms. Data Supporting this conclusion was not present in the draft RI. Please include the results of the offshore monitoring supporting this conclusion.
4. In the groundwater concentration figures in the draft RI, the groundwater plumes are not delineated. Please include the plume contours.

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5. The draft RI does not include human health screening criteria established in the CTR for the consumption of organisms. Please revise the draft RI and include these screening criteria.

Specific Comments:

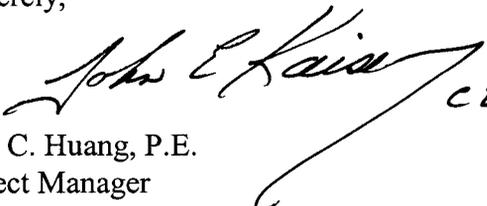
1. **Page 4-24, Table 4-5 Organic and Inorganic Analytes Reported in Groundwater at IR Site 28:** The table does not include lead monitoring results. Please include lead sampling results.
2. **Page 4-24, Table 4-5 Organic and Inorganic Analytes Reported in Groundwater at IR Site 28:** The table does not include CTR criteria for mercury. Please include the mercury criteria and revise the report to include mercury screening results and if applicable, the changes to ecological risk conclusions.
3. **Page 4-26, Table 4-5 Organic and Inorganic Analytes Reported in Groundwater at IR Site 28:** Footnote e was used in the table but never defined. Please define footnote e.
4. **Page 5-4, Section 5.2.5 Subsurface Conduits:** This paragraph stated “[t]his transport pathway may be insignificant at IR Site 28 because, even though an outfall is located within the Site (see Outfall\* on Figure 1-3), no storm sewer lines or other buried utilities have been confirmed at the site. It is possible that the open storm drain located adjacent to Main Street to the south of IR site 28 may have a subsurface connection to this outfall.” Although no storm sewer lines or other buried utilities have been confirmed at the site, staff remains concerned that a subsurface connection between the open storm drain and the unnamed outfall exists. Please investigate if the connection exists and if it is a preferential pathway for groundwater migration.
5. **Page 6-43, Section 6.4.4.2 Aquatic Receptors:** This section stated, “...neither the benthic community nor the aquatic life populations are confined to the area of groundwater discharge, but instead, exists throughout the Oakland Inner Harbor and San Francisco Bay. Because of this broad distribution, these ecological entities are at negligible risk. The potential ecological risk is applicable only to the individual aquatic life organisms and to the small portions of aquatic life populations and benthic community that exists in the area of the groundwater discharge.” Staff disagrees with this assessment. First, without actual benthic and aquatic impact monitoring data, it is inappropriate to conclude that only a small population will be affected. Second, page 3-4 of the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan), June 21, 1995, clearly stated that “[a]ll waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms. Detrimental responses include, but are not limited to, decreased growth rate and decreased reproductive success of resident or indicator species.” The Basin Plan

does not allow for a distinction between large and small aquatic community impacts. Please revise or delete the statement.

6. **Page 7-6, Section 7.2 Recommendation, Second Paragraph:** This paragraph stated that “Although elevated concentrations of arsenic, copper, and manganese are unbounded in the up gradient direction, bounding the up gradient extent of metals in groundwater is not critical to completion of the RI and the subsequent FS for two reasons. First the limited mobility of arsenic and manganese in groundwater due to site-specific hydraulic characteristics indicates that these metals in groundwater from the inland well will not reach the Oakland Inner Harbor for hundreds to thousands of years....” Please clarify how could this conclusion be reached by using hydraulic characteristics of only one up gradient well located in a heterogeneous fill area.
7. **Page 7-6, Section 7.2 Recommendation, Fourth Paragraph:** This paragraph stated that “... a significant ecological risk is unlikely because IR Site 28 is small (2.9 acres) and because any groundwater discharge is actively dispersed by tides and currents. Therefore, no further investigation or assessment of ecological risk is recommended for groundwater at IR Site 28.” This statement is contradictory to the modeling results as presented in Appendix K of the draft RI. The modeling indicated that there are ecological impacts from the groundwater discharge, especially from Well 28SW03. Please clarify.
8. **Appendix K, Sheet # 25, Table 5 Result Summary:** As presented, the units for copper concentrations at the well and shoreline are given as milligrams per liter. Staff believes this is a typographical error. Please confirm.

Please contact me at (510) 622-2363 or email [jch@rb2.swrcb.ca.gov](mailto:jch@rb2.swrcb.ca.gov) if you have any questions.

Sincerely,

  
for Judy C. Huang, P.E.  
Project Manager

*CEG/POD Pign  
1/11  
Pg 2*

Cc (via US Mail and email):

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