



California Regional Water Quality Control Board

San Francisco Bay Region



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TREASURE ISLAND
SSIC NO. 5090.3.A

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File No. 2169.6013 (AF)

Mr. Jim Whitcomb
U.S. Department of the Navy
BRAC Program Management Office – West
1455 Frazee Rd., Suite 900
San Diego, CA 92108-4310

SUBJECT: Water Board comments on Draft Annual Groundwater Status Report: Summary of Groundwater Monitoring at Site 12, July and November 2006, Naval Station Treasure Island, San Francisco dated March 2007

Dear Mr. Whitcomb:

I reviewed the subject report and provided my comments below. It should be noted that my review was based on an incomplete report, since Appendices B-G were not included.

My comments mainly focus on how information is presented in this report. My intent in forming these comments is for the revised and future reports to present a more complete picture of the groundwater monitoring program at Site 12. If you have any questions, you can contact me via phone (510) 622-2401 or email at AFarres@waterboards.ca.gov.

Purpose

The stated purpose of this report is to present data collected through the groundwater monitoring program. This purpose is incomplete and begs the question, "Why collect data for over ten years?" In the revised report, provide a discussion of what led to the decision to monitor groundwater at Site 12 beginning in 1995, when the groundwater monitoring program will end, and when remediation efforts will begin. Also, explain when the RI/FS will be completed and discuss how the groundwater monitoring program will support their development.

Clarify the role of MNA at Site 12. The report alludes to monitored natural attenuation (MNA) but it is never discussed as a remedy for Site 12. A summary of information and results for MNA is supposed to be included in Appendix E, but it is on CD only and was not provided to me.

Site Specific Information

The report includes a lot of general site-wide information about Treasure Island rather than site specific information on Site 12. In fact, most of the information in Section 2 and Section 4 are not specific to Site 12. For example, Section 4.2.2 summarizes the results from two different studies; one of tidal influence on groundwater levels and one estimating the extent and degree of the physical mixing of surface water and groundwater at Treasure Island. However, there is no discussion of how these studies' findings are relevant to Site 12. Please revise the text to include site specific information.

Findings

The following comments apply to the results of the report:

- Since monitoring data has been collected since 1995, it would be useful to discuss the results over the entire monitoring period and not just 2006 data.
- The report focuses only on TPH, arsenic and copper. Discuss detections of additional analytes (e.g. aluminum, manganese) exceeding screening criteria.
- Provide a table summarizing data rather than using a narrative summary. Data for all four areas can fit into one table.
- Section 5.5 states that "elevated concentrations of arsenic are suspected to be geochemically associated with the TPH contamination in this area." Provide a more complete explanation with supporting references.
- Results for arsenic are indicative of discharge to San Francisco Bay above ambient and water quality criteria concentrations. In a January 24, 2005 letter¹, we previously argued that discharge of arsenic above screening criteria, regardless of the cause, needs to be addressed.

Discussion & Recommendations

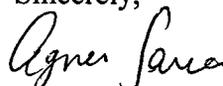
A final section should be included in the report to present a discussion of the results and recommendations for future activities. Based on the results, several issues need to be addressed and recommendations for future groundwater monitoring may be appropriate. For example, are there any proposed changes to the groundwater monitoring program in light of the elevated copper concentrations and lack of explanation for these findings?

¹ "Response to Agency Comments, Draft Technical Memorandum, Investigation of Arsenic in Groundwater Installation Restoration Site 12, Naval Station Treasure Island". Letter from Alan Friedman, Project Manager, Groundwater Protection Division, San Francisco Regional Water Quality Control Board. To Ellen Casados, BRAC RPM.

References

- The reference (RWQCB 2003) should be updated to the Interim Final February 2005 version. Also verify that screening criteria are based on the 2005 document.
- Include a References section for all the citations listed in Appendix A.

Sincerely,



Agnes Farres
Project Manager

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