



California Regional Water Quality Control Board

San Francisco Bay Region



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Secretary for
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Arnold Schwarzenegger
Governor

Letter sent via email

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U.S. Department of the Navy
Attn: Mr. Jim Sullivan
BRAC Program Management Office – West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310
Via email only: james.b.sullivan2@navy.mil

Subject: Comments on the *Draft 2009 Annual Groundwater Monitoring Report for IR Sites 12 and 6, Naval Station Treasure Island, San Francisco*, dated June 24, 2010

Dear Mr. Sullivan:

I reviewed the June 24, 2010 *Draft 2009 Annual Groundwater Monitoring Report for IR Sites 12 and 6*; the document was received at our offices on July 23, 2010. In addition, I reviewed comments on the document provided by the California Department of Toxic Substances Control (DTSC) dated July 26, 2010 and comments provided on behalf of the Treasure Island Development Authority (TIDA) by AMEC Geomatrix, Inc. dated July 29, 2010. I concur with the DTSC and TIDA comments, and provide the following additional comments.

GENERAL COMMENTS

- 1. Estimated Values of Analytes Excluded** – The laboratory analytical results with estimated concentration values are not presented on the report figures. For example, see monitoring well 12-MW22 on Figure 12 (TPH-e in Groundwater at Site 12). The figure shows a detected concentration of 1,400 ug/L in June, however this does not include the estimated (J-flagged) detection of 100 ug/L of TPH-motor oil. The estimated detection is a legitimate detection that should be included. Please check and update all figures accordingly.
- 2. Inconsistent Use of TTPH Screening Criterion** – The screening criterion for petroleum hydrocarbons is used inconsistently throughout this document. The notes in Tables 4 and 8 correctly indicate that the sum of the TPH-gasoline, TPH-diesel, and TPH-motor oil analytical results are compared against the screening criterion of 1,400 ug/L. However, throughout the document the separate TPH-gasoline, TPH-diesel, and TPH-motor oil analytical results are compared against the criterion without including a total TPH (TTPH) comparison. For example, see the data shown on Figure 14 (Groundwater at Site 6) for the detections of TPH-g and TPH-d in June, 2009. The individual TPH-gasoline and TPH-diesel results are 17,000 ug/L and 1,300 ug/L, respectively. Both of these results should be in red-color font because the TTPH result is 18,300 ug/L. I recommend that the TTPH results be

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presented on the figures and an explanation of the TPH criterion included in the notes. Please address this issue throughout the document, including adding a TTPH graph(s) to Appendix E.

3. **TPH-p versus TPH-e** – TPH-g is a purgeable hydrocarbon (TPH-p). It's not an extractable hydrocarbon (TPH-e). Please update Note 3 in both Tables 8 and 9 (Analytical Results for Sites 12 and 6) and make the appropriate clarifications throughout the document.
4. **Aquatic Screening Criteria Table Still Incomplete** – As previously stated in the October 8, 2009 Regional Water Board letter entitled *Comments on the Draft 2008 Annual Groundwater Monitoring Report for IR Sites 12 and 6*, Table A1 of Appendix A should be modified to include the aquatic screening criteria values for total petroleum hydrocarbons and the appropriate citation to the *Final Preliminary Remediation Criteria for Petroleum and Petroleum Constituents Technical Memorandum, Naval Station Treasure Island, San Francisco, California* dated November 13, 2001.
5. **Consistency in Presentation of Laboratory Analytical Results** – Throughout the text, it appears that the laboratory analytical results are compared to the reporting limits listed in Table 4. This is problematic because in some cases a chemical was detected, and reported by the laboratory as detected at concentrations lower than the reporting limit. For instance, the text in Section 4.3 (Groundwater Analytical Results, Building 1311/1313 Petroleum Area - page 29, first paragraph) states that “TPH-p was not detected above the reporting limit in any of the seven groundwater monitoring wells...” This is confusing because the data entry in Table 8 indicates that TPH-p was detected at an estimated concentration (J-flagged) of 29 ug/L at monitoring well 12-MW20; the reporting limit listed on Table 4 for TPH-p is 100 ug/L.

SPECIFIC COMMENTS

1. **Executive Summary** – Please address the following:
 - 1a. **Next Steps, page i, last sentence** – Revise this sentence to indicate that these groundwater data will be more fully evaluated in the future Remedial Investigation Reports for Site 12 and 6, respectively. This statement should also be incorporated into Section 6.0 (Summary).
 - 1b. **Ethylbenzene toxicity criterion, page iii** – The text incorrectly states that the toxicity screening criterion for ethylbenzene is 1,400 ug/L. The correct criterion is 43 ug/L (see Table 4).
2. **Section 3.1 (Monitoring Well Inspections), page 15** – As stated in the comment letters provided by the DTSC and TIDA, well maintenance activities should be performed as soon as possible if not yet completed. Please update the text to accurately reflect the status of this activity.

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3. **Figure 12 (TPH-e in Groundwater at Site 12)** – Please address the following:
 - 3a. **Incorrectly Colored Data Results** – The concentration of 760 ug/L detected at monitoring well 12-MW24 is incorrectly highlighted red, which is supposed to indicate that the result exceeds the screening criteria of 1,400 ug/L.
 - 3b. **Well Symbol Issue** – There are yellow-colored well symbols on the map, but not in the legend. Check and rectify, as appropriate.
4. **Figure 14 (Analytes in Groundwater at Site 6)** – To make the presentation more clear, I recommend combining the data into a single table/data posting box. Consistent with General Comment #2, include a column for TTPH. Also, in the current presentation, the leader line for the TPH-d box is incorrectly drawn.
5. **Table 5 (2009 Field Analyses Results)** – Please update Table 5 so that all labels are readable.
6. **Tables 8 and 9 (Groundwater Analytical Results for Sites 12 and 6)** – Please check the spelling of all analytes.

Please contact me at (510) 622-2445 or rsteenson@waterboards.ca.gov if you have any questions.

Sincerely,



Digitally signed by Ross
Steenson
Date: 2010.08.05 16:02:16
-07'00'

Ross Steenson, PG, CHG
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Cc (via email only):

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