



California Regional Water Quality Control Board

San Francisco Bay Region



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MARE ISLAND
SSIC NO. 5090.3.A

Letter sent via email

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Department of the Navy
BRAC Program Management Office
Attn: Mr. Michael Bloom
1455 Frazee Road, Suite 900
San Diego, CA 92108-4301
michael.s.bloom@navy.mil

SUBJECT: Comments on the *Draft Engineering Evaluation and Cost Analysis/Interim Remedial Action Plan, Installation Restoration Site 17 and Building 503*, dated November 7, 2008, Former Mare Island Naval Shipyard, Vallejo, California

Dear Mr. Bloom:

Thank you for providing the Water Board with the Draft Engineering Evaluation and Cost Analysis/Interim Remedial Action Plan, Installation Restoration Site 17 and Building 503, dated November 7, 2008. Water Board staff has reviewed the above-reference document and have the following comments.

GENERAL COMMENTS

1. Recent groundwater (October/November 2008) sampling results indicate that light nonaqueous-phase liquids (LNAPLs) are present west of Azuar Ave and immediately north of the wetlands area of the IR17 and Building 503 Area; however, current soil and groundwater samples have yet to be collected in the wetlands. Groundwater potentiometric surface maps presented in the Remedial Investigation Report, dated January 27, 2006, indicate that groundwater in the approximate area west of Azuar Ave and south of J Street is flowing towards the wetlands. LNAPLs were not detected in groundwater monitoring wells during the recent groundwater sampling event; however, it is assumed that free product exists based on calculations using soil and groundwater concentrations (Section 2.4.2.1).

Even though the Navy has determined that “there is no risk to groundwater” and “groundwater remediation is not required” (Section 4.2.2), groundwater in this area is clearly impacted. The Water Board will not consider the case for closure unless the Navy can show that groundwater concentrations of constituents of concern are decreasing.

As stated in the Water Board’s comments on the Feasibility Study (dated January 19, 2006), if post-remedial “groundwater contamination exceeds the ESLs, or the site’s

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screening criteria, monitoring will be required for a minimum of four consecutive quarters. If groundwater contamination cannot be shown to be receding by naturally occurring processes, additional remedial actions may be needed. We can consider the case for closure, or "No Further Action", if the pollutant concentrations in the groundwater are receding by naturally occurring processes and will likely continue to do so. Any request for closure should include an estimate for the time needed to eventually achieve water quality objectives".

During the design phase of this non-time-critical removal action (NTCRA), the Navy should include post-excavation groundwater sampling as part of the NTCRA performance evaluation. This groundwater sampling effort should include the collection of groundwater samples from the monitoring wells located in the wetlands.

2. The Navy proposes conducting the excavation of LNAPL during the dry season to take advantage of the low groundwater table, which will "minimize excavation dewatering and maximize the removal of LNAPL in the smear zone. At that time, most of the smear zone soils would be unsaturated and excavation would continue to an average depth of 6 inches below the low water table" (Section 5.4.4.1). The Navy has no way of predicting the elevation of the water table at the time of excavation, and should not assume that the excavation will only need to extend to a depth 6 inches below the water table. The Navy should excavate the smear zone to the maximum extent practicable, regardless of the groundwater elevation at the time of excavation.

SPECIFIC COMMENTS

1. Page 14, Section 2.3 – It is reported that a sheen was observed on the surface of the purge water generated during groundwater sampling of wells 17W02, 17W04, 17W05, 17W10, 17W12, 17W13, and 17W15. It is unclear if the sheen was observed on the purge water from each of these wells, indicating sheen in each well, or if a sheen was observed on the combined purge water from all seven wells. If the latter is the case, does the Navy know from which well(s) the purge water with sheen was pumped?
2. Page 18 and 19, Section 2.4.2.1 – The thickness of LNAPL measured in monitoring well 17W15 in 2002 is stated as "0.01 foot" on Page 18, and "less than 0.01" foot on Page 19. Please resolve this discrepancy by reviewing the well sampling forms and determining if the thickness of LNAPL was less than, or equal to, 0.01 feet.
3. Page 43, Section 5.4.4.1 – The last sentence of the second paragraph is missing a period.
4. Label the oil/water separator on all appropriate figures.

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Please contact me at (510) 622-2756 or pjorgensen@waterboards.ca.gov if you have any questions.

Sincerely,



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Engineering Geologist

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