



# California Regional Water Quality Control Board

## San Francisco Bay Region



Alan C. Lloyd, Ph.D.  
Agency Secretary

1515 Clay Street, Suite 1400, Oakland, California 94612  
(510) 622-2300 • Fax (510) 622-2460  
<http://www.waterboards.ca.gov/sanfranciscobay>

Arnold Schwarzenegger  
Governor

N30519\_000451  
NFD POINT MOLATE  
SSIC NO. 5090.3.A

Date JAN 06 2006  
File No. 2119.1057 (AVC)

Department of the Navy  
Base Realignment and Closure  
Program Management Office West  
Attn: Mr. Michael Bloom  
BRAC Environmental Coordinator  
1455 FRAZEE ROAD, SUITE 900  
SAN DIEGO, CA 92108-4310

**SUBJECT: Comments on the "Draft Soil Feasibility Study Report Installation Restoration Site 3, Naval Fuel Depot Point Molate, Richmond, California"**

Dear Mr. Bloom:

Thank you for your "Draft Soil Feasibility Study (FS) Report Installation Restoration Site 3, Naval Fuel Depot Point Molate, Richmond, California", prepared by Bechtel Environmental, Inc., which we received on May 19, 2005. This draft FS was prepared to develop and evaluate remedial action alternatives to address human-health and ecological risks associated with contaminated vadose-zone soils within 10 feet below ground surface (bgs) at IR Site 3. Based on a thorough review of the above document we have the following general and specific comments:

### General Comment

Water Board staff support the Alternative 4(c) which consists of excavation/off-site disposal of surface-subsurface soil and industrial waste for a residential scenario. We support Alternative 4(c) because it protects human health and the environment, it complies with applicable and appropriate requirements (ARARs), it provides long-term effectiveness and permanence, it reduces toxicity, mobility, or volume through excavation, and it provides short-term effectiveness.

In general, the Water Board requires full site cleanup where it is practical as opposed to long-term monitoring of residual pollutants which can pose the potential for future releases to the Bay or negative impacts on human and ecological receptors. Reliance on monitoring and long-term operation of contaminant control measures are not appropriate long-term solutions. It is also staff's position that cleanup to unrestricted use is necessary where future land use is anticipated to include residential development and where human health concerns are a consideration. Any consideration of alternative control measures will not be considered until it is physically demonstrated that cleanup cannot be achieved.

*Preserving, enhancing, and restoring the San Francisco Bay Area's waters for over 50 years*

### Specific Comments

1. *Executive Summary*: On page ES-6, for consistency with the presentation of the Alternatives 2, 3, and 4(a) please include a brief presentation of alternatives 4(b) – excavation/off-site disposal of surface-subsurface soil and industrial waste for a proposed industrial scenario and 4(c) - excavation/off-site disposal of surface-subsurface soil and industrial waste for a proposed residential scenario. The same comment is applicable to Section 7.10 (*Conclusions*).
2. On Figure ES-2 – *IR Site 3 Location Map*, the name of IR Site 2 should be changed to read the correct designation for the IR Site 2.
3. Table ES-2 – *Comparative Analysis of Remedial Alternatives by Balancing Criteria*: We do not concur with the characterization of Alternative 4(c) for the long-term effectiveness and permanence criterion. As it is mentioned in this document, the FS and the Corrective Action Plan (CAP) alternatives will be coordinated so it is unlikely that the re-contamination by underlying fuel saturated soil will take place as a result of water table fluctuations over time. It is important to mention that the main cleanup objective presented in the CAP is the cleanup of the residual and dissolved constituents from the groundwater at Site 3. We consider that in this case the long term effectiveness and permanence criterion will be “**high**”, because after the cleanup, the contaminated groundwater will no longer be a source of contamination. The same comment is applicable to Table 7-2 (*Comparative Analysis of Remedial Alternatives by Balancing Criteria*).
4. Section 2.1.3.8. *IR Site 3 Fieldwork Summary Report*: On page 2-7 of this section, three different pilot tests, including soil vapor extraction testing, air sparge testing, and multiphase extraction testing were performed at Site 3. Please provide the site-specific results for each pilot test.
5. Section 2.3.1.1 *Soil Action Levels for Potential Human Receptors*: In 1995, the Presidio Fuel Product Action Level Development Report was prepared by Montgomery Watson. In 2000, the Presidio action levels were approved as cleanup levels at NFD Point Molate because of the similar environmental settings, proposed reuse alternatives, and potential exposure pathways and receptors. Please present in this section, if the new toxicity factor issued by OEHHA in 2004 for naphthalene had been considered for the residential exposure scenario.
6. Section 2.2.2. *Topography and Surface Water Hydrology*: In this section, please provide Site 3 specific topographic and hydrogeologic characteristics in addition to the general ones for the whole Point Molate property.
7. Section 2.2.3.2 *Land Use*: Please present in this section that in the Notice of Intent (NOI) to prepare an Environmental Impact Statement/ Environmental Impact Report published in the Federal Register Volume 70, No 47 it was written that “housing units” are proposed with the

future development at Point Molate. In the light of the published NOI, our evaluation of the remedial alternatives proposed in the FS will be based on a residential land use scenario.

8. Section 2.2.3.3 *Groundwater Use*: In the last paragraph on page 2-16, for the groundwater beneficial use, please use the beneficial use designation from the Basin Plan (i.e. *freshwater replenishment*.)

9. Section 2.2.7.3. *Fuel Product*: In the general description of the petroleum hydrocarbons reported at Site 3 it was stated that “results of the laboratory analysis show that fuel product at Site 3 is weathered and does not provide a significant source of the more soluble constituents.” We do not agree with this statement. The soil testing results presented in section 2.2.7.4 and the description from page 2-33 show that “fuel product may occupy up to 50 percent of the soil pore volume under residual saturation conditions.” It is our concern that during a catastrophic event, like an earthquake, a sufficient volume of residual fuel product could be released and may migrate through the soil column to groundwater.

10. Section 2.4.5. *Risk Characterization Results*: In the paragraph presenting the cancer risk for the *on-site resident*, please explain why the arsenic detected values were not used for the calculation of the human health risk number.

11. Section 2.4.7 *Conclusions*: This section starts with the statement that “total residential cancer risk” was not considered in the general presentation of the site human-health risk assessment (HHRA). Considering that the residential scenario is a proposed future land use scenario, this section must include in the summary the HHRA numbers and the hazard index for the residential scenario.

12. On the Figures 2-1, 2-10, and the other figures presenting the site features, in the name for the “groundwater extraction system and former containment wall”, the word “former” should be deleted.

13. Section 3.6 *Volume of Impacted Media*: In this section it is presented that the volumes of soil exceeding the remedial action objectives (RAOs) are presented in Figures 3-1 through 3-3. We do not concur with the method used to show the limits of contaminated soils based on the site boundaries, mainly in the areas of soil borings SB11-111, SB11-92, and SB11-91. The Site 3 geographic limits do not correspond to the limits of contaminated soil areas. Please revise section 3.6 to reflect the limits of contaminated soil using the radius of influence approach formally agreed to. The figures 3-1 through 3-3 and the tables showing the volumes of contaminated soil must be also corrected.

14. Section 6.5.1.1. *Preliminary Soil Sampling*: In the assumption that a soil sampling event would be a pre-design activity, the criteria for selecting a number of 100 shallow soil borings

should be presented. Please explain the rationale behind sampling 100 soil borings for confirmatory sampling.

15. Section 7.10 *Conclusions*: It is our understanding that the implementation of the FS and CAP activities will be coordinated. The CAP presents the cleanup of petroleum product impacted groundwater and impacted soils beneath the water table at depths greater than 10 feet bgs. For clarification, present in this section how the estimated cleanup cost will be affected when the soil and groundwater cleanups are coordinated (i.e. implemented at the same time).

16. Appendix A, *ARARs*, page A2-4, in the paragraph presenting the State of California position regarding SWRCB Res. 92-49 it is mentioned that the state does not agree with the Navy in the determination that the Resolutions 92-49 and 68-16 and certain provisions of CCR Title 23, Div.3, Chapter 15 are not ARARs. To support this determination an example from the State of Colorado is presented in Appendix A. Please explain how this Colorado example is applicable to our Point Molate project and how the California State resolutions and laws are comparable to the example provided.

17. Appendix A *ARARs*: On page A5-2, in the last paragraph it is mentioned “alternatives that include institutional control (IC) will use the DON’s land use protocol.” Please specify if State protocols are applicable for the future ICs at Point Molate.

18. Appendix B *Contaminated Soil and Groundwater Volume Estimates*: On page B-2 please revised the calculated volumes to be addressed under the different exposure scenarios, Figures B-2 and B-5, and Table B-1 according to comment number 13, above.

19. Appendix C *Supporting Cost Information*: Please explain in this appendix if the cost estimate for the Alternative 4(c) will be different if the groundwater cleanup occurs at the same time as the soil removal/remediation.

If you have any questions, please contact Mr. Adriana Constantinescu at (510) 622-2353, or via e-mail at [AConstantinescu@waterboards.ca.gov](mailto:AConstantinescu@waterboards.ca.gov).

Sincerely,



Adriana Constantinescu, PG  
Project Manager for Point Molate

cc: Ms. Glenna Clark, Navy RPM  
Mr. Steve Duran, City of Richmond  
Mr. Don Gosney, RAB Co-Chair

C:\MyDocuments\PointMolate\PointMolateSite3DraftFSCommentsLetter.doc