Linda S. Adams
Secretary for
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Department of Toxic Substances Control

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Arnold Schwarzenegger
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May 25, 2007

Mr. Michael Bloom
Department of the Navy
BRAC Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

**Mare Island Navy Draft Work Plan, Time-Critical Removal Action, Installation Restoration Site 04, Installation Restoration Site 05, Parcel XVI Paint Waste Area, DRMO Scrapyard, and Horse Stables Area, dated May 2007**

Dear Mr. Bloom:

The Department of Toxic Substances Control has reviewed the subject document. The attached comments are forwarded to you for your consideration.

DTSC is concerned about possible complications at the site IR04 resulting from slope failure/excavation wall collapse near the Mare Island Strait side of the excavation. This aspect of the removal action plan needs further evaluation to ensure successful cleanup of the upland area of IR04.

Should you have any questions regarding this letter, please call me at (510) 540-3773.

Sincerely,

Chip Gribble
Remedial Project Manager
Base Closure Unit
Office of Military Facilities

Attachments

cc: See next page

cc: Mr. Brian Thompson
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Beckye Stanton
California Department of Fish and Game
Office of Spill Prevention and Response
1700 K Street, Suite 250
Sacramento, California 95814

Ms. Carolyn d'Almeida
U. S. Environmental Protection Agency
413 Poppyfield Drive
American Canyon, California 94503

Mr. Dennis Kelly
Tetra Tech EM Inc.
135 Main Street, Suite 1800
San Francisco, CA 94105

**DTSC Comments on the**
**Mare Island Navy Draft Work Plan Time-Critical Removal Action,**
**Installation Restoration Site 04, Installation Restoration Site 05, Parcel XVI**
**Paint Waste Area, DRMO Scrapyard, and Horse Stables Area, dated May 2007**

1. Title page: The title of this document should be modified to add "Interim Remedial Action Plan". Also it is our understanding that the DRMO Scrapyard site is to be deleted from this removal action plan, as a previous removal action for this site has already been approved by the Navy and DTSC.

2. Page ii: It appears that the Table of Contents needs reformatting. Please also add an approval section, providing a summary of the selected removal action and an approval page. Please also add a section addressing public participation. Please also add a section briefly describing alternatives considered and corresponding estimated costs. A cost estimate of the proposed alternative should also be clearly presented, with some breakdown of costs per each site.

3. Page 1-4, last para.: After the first sentence, please add a statement that The Navy is also performing this TCRA in accordance with Chapters 6.5 and 6.8 of the California Health and Safety Code.

4. Page 1-4, last para., line 8: California EPA DTSC role is not defined by Federal Executive Order 12580. In line 8 of this paragraph, please add a period to end the sentence after "for the cleanup effort" and follow with an additional sentence stating that "California EPA DTSC, with support from the San Francisco Regional Water Quality Control Board (RWQCB), provide regulatory oversight."

5. Page 1-5, section 1.1: Please provide a figure showing the various subareas within IA-F2.

6. Page 1-6, para. 2, last sentence: It is not clear what is meant by this sentence and the phrase "non-MEC scrap metal debris". Please revise for clarity.

7. Page 1-6, section 1.2: Please add a summary discussion regarding the COCs for IR05.

8. Page 1-13, 1st bullet: The text should be modified to clarify that the TCRA for IR04 is limited to the upland part of the site.

9. Page 4-12, section 4.10: Initial soil excavation and confirmation sampling will be based on criteria in some cases established at IA-H1 which assumed a

minimum 2 foot soil cover as a barrier to ecological exposure. DTSC agreed with the adequacy of the 2 foot soil cover for IA-H1 based on many assumptions and site specific conditions, some of which are not likely to be valid or appropriate for the sites included in this consolidation removal action. This issue should be discussed at the next removal action planning meeting.

10. Page 4-13, section 4.10.1, section 4.10.2, section 4.10.3, and section 4.10.5: Please state the proposed plan here with respect to leaving the excavated areas at a lower elevation vs. backfilling to existing grade. Also include a contour map of the proposed final site elevations. Please also specify the native grass seed mix to be used.

11. Page 4-15, section 4.11, last para.: Please provide more detail regarding storage of wastewater in ponds or modify to delete this option.

12. Figure 4-1: Please modify for consistency/clarity between the legend and figure. Please clearly indicate the proposed approximated extent of excavation. The heavy dark blue line should be defined. The heavy red line should be defined. The offshore area should be defined.

13. Figure 4-1a: Please modify for consistency/clarity. "Data Quality=A" is not defined. The data quality evaluation provided for the boring locations with ABM should also be provided for the boring locations with no ABM. It is not clear what is meant by "UXO Excavation Areas" and why this is included in this figure; Construction support for possible MEC should be included as part of the proposed TCRA for the entire IR04 activity. Please expand the figure to cover the entire IA-F2 and additional area included in the proposed TCRA.

14. Figure 4-3 (also Figure 5 of Appendix D): DTSC recommends that this removal action workplan be modified to include a confirmation sampling plan over a broader geographic range around the paint waste area to reduce the probability of having to return to this general area in the future for additional excavation/cleanup.

15. Figure 4-5 (also Figure 6 of Appendix D): The number and placement of confirmation samples appears to be insufficient to adequately confirm completeness of the removal action. Please modify accordingly.

16. Appendix B: Please modify to ensure consistency with the air monitoring plan for IA-H1.

17. Appendix C: This appendix should be modified for consistency with the removal action workplan/action memorandum/interim RAP. Also, OE construction support should be added to this section.

18. Appendix D, page 3-2, section 3.1.2, last statement: The material to be brought to IA-H1 for placement under the containment cap must meet requirements specified in the IA-H1 RAP/ROD/RCRA Closure Plan. The QA/QC for this consolidation removal action must include appropriate measures to ensure compliance with these requirements. The consolidation removal action summary report should include appropriate documentation demonstrating such compliance.

19. Appendix D, page 3-5, para. 2, last statement: Please modify to state that direction and approvals (not guidance) must come from both Navy and DTSC. Please also modify elsewhere for consistency regarding direction/approval vs. guidance.

20. Appendix E, page E-2-3, para. 4: Please modify to state when the seismographs will be read and a response plan in the event that data indicate a potential for concern.

Mare Is Navy/Weston TCRA initial feedback, May 2007

1. Overall
    a. Since IA H1 upland clean up goals were part of a remedy that included a two foot soil cover, we recommend the use of the upland backfill material criteria (low TRV HQ=10 if less than high TRV HQ=1) as identified in the IA H1 remedial design document. These criteria would apply to the extent of removal actions and the acceptance of backfill material for upland areas. Please revise the text and tables accordingly.
    b. The potential ecological risk, if any, from residual contamination should be assessed at each site based on the confirmation sample data and any original sample locations outside the excavations.
    c. We support DTSC HERD's recommendation for XRF use to guide excavation and improve distribution of confirmation sample locations.
    d. The inclusion of sidewall samples is inconsistent across different areas. We recommend surface sidewall samples be taken around the perimeter of each excavation consistent with the proposed grid spacing at each area (*e.g.*, every 50 foot around perimeter for an area with 50 by 50 foot grid proposed). Please revise the main text and Appendix D to include surface sidewall sampling for all four areas.
    e. As consistent with the IA H1 actions, a depth of two feet of soil that met the upland backfill criteria was sufficient for all upland ecological receptors except for the fox. For upland areas, soil concentrations to depths of four feet should address potential risk to the fox by achieving low TRV HQ of 10 or high TRV of one, whichever is lower (or ambient/background if higher).
    f. Tables 2-7 and 2-8 ARARs. The DFG-OSPR provided ARARs for IA H1 and H2 via a memo dated December 21, 2004. The tables should be revised to include the following Fish and Game Code Sections: 3503, 3503.5, 3511, 3800, 4700, and 5650. Also, Title 14, Section 460 should be added, and was included in the December 21 memorandum.
    g. A field trip should be scheduled for the near future to worksites to refine the specific excavation boundaries for the TCRA. Consideration should be given to wetland boundaries, areas to be cleared of pickleweed to preclude adverse impacts to the salt marsh harvest mouse, any necessary buffers, wetlands where excavation might occur subject to mitigation requirements, and possibly other factors. A GPS unit with sub-meter accuracy should be a useful tool for recording and subsequently mapping all boundaries and other spatial references.
    h. These are our preliminary comments. We anticipate that we will have additional comments that will be formalized in regular correspondence in the near future.

2. IR04
    a. As consistent with the IA H1 actions, a depth of two feet of soil that met the upland backfill criteria was sufficient for all upland ecological receptors except for the fox. Soil concentrations to depths of four feet should address

potential risk to the fox. On Table 2-1a, a comparison between the industrial preliminary remediation goals for human health and risk-based values for the fox (low TRV HQ of 10 or high TRV of one, whichever is lower) would be helpful. We understand that excavations for green sand will likely extend below four feet in many areas and acceptable depths of soil over any residual contamination could be achieved in those locations.

b. Section 4.8.1 for confirmation sampling at IR04 mentions excavation bottom samples, but not sidewall samples. Please add sidewall samples every 50 foot along the excavation perimeter.
c. We concur with the recommendation of the Regional Water Quality Control Board, requesting that consideration should be given to using alternatives to silt fencing along wetlands and any open waters to be excavated, as well as establishing appropriate buffers.

3. IR05
    a. For Section 4.8.2, we recommend including dioxin/furan and explosives sampling for confirmation samples consistent with proposal for dioxin/furan and explosives sampling in lowland/VOC area in the *Draft Data Gaps Sampling Plan* (Figure 2-22). Appendix D should be revised accordingly to include these analyses.
    b. It would be helpful to post existing sample locations on Figure 4-2 so direct comparison of excavation boundaries with existing contaminant distribution data can be done.
    c. We recommend adding excavations in upland subarea based on comparison to low TRV HQ=10 (if less than high TRV HQ=1). Based on initial feedback from Weston (conference call May 23, 2007), the areas listed below will be added to the proposed excavation areas and a revised figure will be added to the work plan.
        i. IR05HA008 (Zn 1350, Cr 149)
        ii. IR05HA005 (Sb 8.7)
        iii. IR05HA002 (Cu 715)
        iv. 05W12 (Cr 154, Cu 295)
        v. IR05SS005 (Cr 156)
        vi. IR05GB021 (Cr 170, Cu 434)
        vii. IR05HA009 (Cr 156)
        viii. IR05HA003 (Cr 179)
    d. All or most of Dredge Pond 7s as well as the eastern pickleweed area shown in Figure 4-2 may be suitable for excavation of contaminated soil based upon compliance with state and federal ARARs, including those applicable to the salt marsh harvest mouse or other endangered species. As mentioned before, a field trip to the site to establish work plans and boundaries would be very beneficial.

4. Horse stables area
    a. We have not yet reviewed the Site Inspection (SI) document to evaluate the contaminant data for this area in order to evaluate extent and COPECs for

confirmation sampling. When a copy of the document is received, we will confirm the COPECs and excavation boundaries.

b. In Section 4.8.5, sidewall samples are proposed only if the excavation continues below two feet. We recommend surface sidewall samples around the perimeter of the excavation regardless of excavation depth.
c. Our preliminary indication from the recent field trip is that excavation in the immediate vicinity of the storm water outfall may cause minimal disruption of wetlands, particularly with the adjacent access of Charlton Road.

5. Paint waste area
    a. We have not yet reviewed the Site Inspection (SI) document to evaluate the contaminant data for this area in order to evaluate extent and COPECs for confirmation sampling. When a copy of the document is received, we will confirm the COPECs and excavation boundaries.