Linda S. Adams
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Maureen Gorsen, Director
700 Heinz Avenue
Berkeley, California 94710-2721

Arnold Schwarzenegger
Governor

June 8, 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 Action Memorandum/Interim Remedial Action Plan, Time Critical Removal Action, Installation Restoration Site 04, Parcel XVI Paint Waste Area, Horse Stables Area, and Installation Restoration Site 05, 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 to be addressed 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 May 2007 Draft Action Memorandum/Interim Remedial Action Plan, Time Critical Removal Action, Installation Restoration Site 04, Parcel XVI Paint Waste Area, Horse Stables Area, and Installation Restoration Site 05**

1. Title page: To avoid confusion, we suggest the draft version to be issued for public comment be identified as a "Final Draft Action Memorandum/Remedial Action Plan..."

2. Page 1-1, para. 1: Please modify the first sentence to state that this Action Memorandum/ Interim remedial Action Plan documents both the Navy decision to undertaken this Time Critical Removal Action and the DTSC approval pursuant to the California Health and Safety Code Chapter 6.8.

3. Page 1-1, para. 4, 1st sentence: Delete the end phrase "...reuse plans for the site" and replace with "...the reasonably anticipated final remedy."

4. Page 1-2, para. 2, 1st sentence: Before the word "future" in the 1st sentence, insert the word "anticipated."

5. Figure 4: The buildings 782 and 918, discussed on page 2-3 para. 2, are not clearly identified on this figure. The utility shown as FW is not identified in the legend. Please revise accordingly.

6. Page 2-32, last para. Please modify this sentence to state only what action was taken by the DON.

7. Page 3-2, section 3.1.1, last sentence: Please revise to clarify that the Navy has initially recommended no further action to address human health risk at this site; however, the Navy has not yet reached agreement on this point with the regulatory agencies.

8. Page 3-4, section 3.3.1: Please revise to state that the DON anticipates that a more rigorous HHRA may conclude that concentrations of metals are not likely to pose an unacceptable risk to human receptors.

9. Page 3-5, section 3.4.1, para. 1: Please revise the opening statement to state that "An initial HHRA was conducted..."

10. Page 5-1, section 5: Please modify to include the following regarding upland excavation soil screening criteria for the four sites that are part of the TCRA:

    - Point-by-Point concentration of confirmation samples not to exceed the HQ=1 for $TRV_{high}$;

- Area-wide concentration (i.e., the confirmation samples and the backfill samples) not to exceed 10 times the HQ=1 for the $TRV_{low}$ unless the 10 times the HQ=1 for the $TRV_{low}$ exceed the HQ=1 for the $TRV_{high}$, in which case the area-wide upland criteria is the HQ=1 for the TRV high or the ambient concentration.

This methodology should be applied only to the areas without mammalian or avian protected species or the likelihood of protected species.

This methodology should be applied to the upper three feet of upland excavations.

11. Page 5-1, section 5.1, 2nd sentence: S/A comment number 3.

12. Page 5-2, para. 1: Please revise for consistency with the workplan. The workplan is expected to state that the excavation limits will be determined through the use of field screening methods including visual detection and supported with XRF, followed by confirmation sampling.

13. Page 5-2, section 5.1.3: 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 to be addressed to ensure successful cleanup of the upland area of IR04. The project should also be modified to include dewatering plans for the IR04 excavation to maintain dry hole conditions.

14. Page 5-3 last para., and page 5-6 section 5.2.5, and page 5-9 section 5.3.5, and page 5-12 section 5.4.5: Please revise to delete that further characterization will not be required. Instead, please state that excavated soil will be monitored to ensure compliance with acceptance criteria established for IA-H1. Please also state for completeness the complete acceptance criteria, and cite the decision document where these criteria were defined. The workplan should provide QA/QC procedures to be followed to document that the criteria were met, or that failed and rejected material was disposed of accordingly.

15. Page 5-4 section 5.2, and page 5-10 section 5.4: S/A comment number 3.

16. Page 5-10, section 5.4.2, para. 1, and page 5-11 section 5.4.4: Please provide a rationale for a less dense sampling grid. Alternatively, revise the sampling grid for consistency with other sites sampling grid density.

17. Page 5-20, section 5.7: Please provide a grand total cost for the proposed TCRA at four sites.

18. Page 5-21: Please add a section 5.8 that presents a brief summary of alternatives considered and rejected in favor of the proposed action.

19. Page 6-1, section 6.2: Please add to the final draft for public review prior, a copy of the public notice, a copy of the fact sheet, and information on the planned public meeting.

20. Page 8-3, 3rd sentence: Please modify to indicate that DTSC views this AM/IRAP along with the Work Plan for the TCRA as providing the appropriate information...

21. Page 8-3, para. 2: Please modify for the final draft AM/IRAP only to state that DTSC has issued a Draft Negative Declaration...

Mare Is Navy/Weston TCRA
Draft Action Memorandum / Interim Remedial Action Plan (IRAP)
DFG-OSPR Initial Feedback, June 2007
(comments provided to Chip Gribble as an e-mal attachment on 6/7/07)

1. Overall
    a. Page 1-1. A brief explanation of the relationship between the IRAP and the recently released draft Time Critical Removal Action (TCRA) Work Plan should be provided, especially if explained in the context of the Comprehensive Response, Compensation, and Liability Act (CERCLA).
    b. Page 1-2. Text here should briefly specify which sites, if any, will require additional CERCLA remediation after completion of the TCRA. Further remediation at IRO4 and IRO5 may be needed following the TCRA completion to address unexcavated areas.
    c. 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.
    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 text to include surface sidewall sampling for all four areas.
    e. For upland areas, soil concentrations to depths of four feet should address potential risk to the fox.
    f. Consistent with IA H1 remedial design, acceptance criteria for upland backfill should be based on low TRV HQ of 10 (if lower than high TRV HQ of one) or ambient, whichever is higher. This information should be provided in the text and the specific values provided in a table.
    g. Table 5b, Applicable, Relevant, or Appropriate Requirements (ARARs). The DFG-OSPR provided ARARs for IA H1 and H2 via a December 21, 2004 memorandum. Since an ARARs request has not been received for the TCRA specifically, the appropriate sections of the TCRA and the IROP 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.
    h. Page 5-10, Section 5.4.2 (Soil Excavation)- We do not approve of the use of a mower to remove plants from the proposed work areas. Hand tools should be used instead because a mower will not "encourage" salt marsh harvest mice (SMHM) to move from areas of disturbances. With respect to pre-excavation characterizations, we recommend that there be flagging of the work areas.
    i. 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 establishing wetland boundaries, areas to be cleared of pickleweed to preclude adverse impacts to SMHM or other listed species, 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.

j. It appears that the design grade and other elements of each TCRA worksite will need to be maintained in perpetuity or until additional remediation is completed via separate CERCLA actions. This includes the stability of the required grade and thickness of the backfill cover. Future land uses under the base reuse plan have the potential to directly influence the stability of each restored site. Examples include the use of off-road vehicles that could damage the integrity of the cover, or land uses that enable or encourage the presence of burrowing animals that could burrow into the backfilled material and expose contaminants. A brief description of the potential use of Institutional Controls (ICs) at any of the sites would be helpful, as well as how each IC will be implemented in conjunction with the allowed land uses under the base reuse plan. Proper Project design, including placement of adequate backfill cover thickness, should be implemented such as to reduce the need for ICs and site maintenance.

2. IR04
   a. Soil concentrations to depths of four feet should address potential risk to the fox. 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 5.1.4 for confirmation sampling at IR04 mentions excavation bottom samples, but not sidewall samples. Please add surface 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.
   d. Page 5-4, Section 5.1.6. This section addresses backfilling with new fill material. We endorse the concept of backfilling to existing grade. However, the backfill material may erode from tidal action and/ or boat wakes. Although the material apparently will be filled to the same grade as the existing green sand material. The IRAP should contain elements in addition to hydro seeding, erosion control grasses, straw waddles, silt fences, and a long-term monitoring and maintenance plan. Beginning with a greater backfill depth may be advisable, such as three feet as was recommended by the Regional Water Quality Control Board. Also, various methods and products for stabilizing surface soils are available, including placement of erosion control mats and/ or wave barriers. This will help insure that the desired depth of backfill material is maintained.

3. IR05
   a. For Section 5.4.4, 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).

b. Regarding the stability of any backfilled material, please incorporate our comments for Page 5-4 regarding the IRO4 site.

4. Horse stables area (HSA)
   a. In Section 5.3.4, 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.
   b. Our preliminary indication from the May 16, 2007 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.
   c. Sample location HSASS009 has lead concentrations of 441 mg/kg at the surface and is within a proposed excavation area. However, the boundary of the proposed excavation area is within five feet of HSASS009 based on Figure 10. Please expand the excavation to at least 10 feet out from this location in all locations. We also recommend that the excavation boundary be extended further to the east from WMAGSS029 and WMAGSS033 in grid E5-F5.
   d. Please add a table that includes wetland target clean up goals for HSA that would apply to the excavation at the storm water outfall (HSASS0026).
5. Paint waste area (PWA)
   a. Table 1b should include comparison criteria for pesticides as well since pesticides were detected at elevated concentrations in the September 2004 sampling event at this site. In addition, please identify on Figure 9 the sample locations that had elevated pesticide concentrations.
   b. Based on figures in the Preliminary Assessment/Site Inspection for the PWA, three wetland sample locations not identified for excavation appear to have metals at concentrations in the top two feet above H1 average wetland numbers: PWAGB004 (zinc 240 mg/kg), PWAGB005 (lead 120 mg/kg; zinc 320 mg/kg) and PWAGB007 (zinc 360 mg/kg). Please demonstrate whether area-wide 95UCL will meet the average wetland numbers with these locations remaining and with proposed excavation areas at ambient values. If not, please consider excavating these additional areas.
   c. The discussion of proposed work at the footprint of the waste area appears to be fairly complete. However, any access roads and staging areas for equipment should be described, as well as mitigation measures for any adverse impacts to wetlands or listed species from construction and operation of such roads.
   d. Page 5-4. Section 5.2.1. We concur with hand clearing of pickleweed-dominated vegetation within the excavation area. Hand clearing of such plants should also take place at any access roads, staging areas, or other areas where the SMHM is likely present.

G:\Science\Stanton\Mare Is\Mare IsTCRAActionMemo_initialFeedback0607.doc