



Winston H. Hickox
Agency Secretary
California Environmental
Protection Agency

Department of Toxic Substances Control

Edwin F. Lowry, Director
700 Heinz Avenue, Suite 200
Berkeley, California 94710-2721

N00217.003971
HUNTERS POINT
SSIC NO. 5090.3



Gray Davis
Governor

June 21, 2000

Commanding Officer
Department of the Navy
Naval Facilities Engineering Command
Southwest Division
1220 Pacific Highway
San Diego, Ca 92132-5190
Attention: Mr. Richard Mach

PARCEL F DRAFT VALIDATION STUDY WORK PLAN, HUNTERS
POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Dear Mr. Mach:

The Department has completed its review of the above-mentioned document dated May 15, 2000. Our comments are provided below.

In addition to the Draft Validation Study (VS) Work Plan, this document contains the minutes of Parcel F telephone conference calls from January 18, 2000 through April 25, 2000, a list of agreements and points still to be resolved as of April 25, 2000 and several technical memoranda in support of the risk assessment decisions made in the development of this VS Work Plan. Risk assessment telephone conference calls among regulatory agencies and representatives of the Navy continued after the April 25, 2000 cut-off presented in this Draft VS Work Plan. What appears to be significant progress in the criteria for the Weight of Evidence (WOE) approach was made after release of this Draft VS Work Plan.

General Comments

Many of the specific comments listed in this memorandum appear to be the result of the rapid 'tracking' of this project. Comments made by Navy representatives regarding some of these specific comments during the weekly telephone conference calls have indicated that many of the issues contained in the specific comments have either been changed or will be changed in response to comments made by regulatory agencies subsequent to preparation of this Draft VS Work Plan.

Several areas of HPS were specifically excluded from evaluation during the VS. These areas were judged by the risk assessors to not be amenable to the standard sediment evaluation methods. There was agreement that these areas would proceed to the Feasibility Study without sediment evaluation. This may require that these areas be further evaluated by methods other than sediment methods (i.e., terrestrial ecological risk assessment or comparison to HPS 'ambient' for inorganic elements). These areas include:

1. The area inshore of the concrete tie downs in Area III;
2. The area of oxidized metal material on the point in Area VIII, and;
3. The areas along the shoreline between the concrete and other rip rap material with elevated concentrations (e.g., 8000 mg/kg lead) which may serve as a source of future contamination of offshore sediments.

Specific Comments

1. The Low Volume Footprint (LVF) of sediments identified in the Draft Feasibility Study (FS) is not presented in Figure 1-1 (Page 3) as stated in the text (Section 1.2.2, page 2). In fact, it appears to be presented in Figure 3-1 (Page 9). Please correct this portion of the text.
2. Please specify the 'ancillary data' which will be used to qualitatively support the results of the WOE assessment (Section 2.1, page 5). Many types of information (e.g., sediment Toxicity Identification Evaluation (TIE) and sediment structural characteristics) are being collected as part of this VS, but may not enter into determination of which areas to carry forward into the FS.
3. Please indicate in the text that both a high volume footprint as well as a low volume footprint were developed in the Draft FS (Section 3.1, page 8).
4. Any difficulty encountered in collecting intact cores for the SWI tests at reference areas (Section 3.1.1, page 8) should be immediately communicated with the regulatory agencies work group representatives. This is the first indication we have heard that there may be some difficulty collecting these reference station sediment cores.
5. The five proposed reference areas are not indicated in Figure 3-1

(Section 3.1.1, page 9). The proposed reference station locations appear to be indicated in Figure 1-1 (Page 3).

6. We do not recall agreeing to the '95, 95 upper tolerance limit' as the statistical delimiter for Effects Range-Median (ER-M) Quotients (ERM-Qs) (Section 3.1.1.1, page 11). HERD has agreed to a sample-by-sample evaluation in addition to the area comparison to reference areas, but no agreement was made regarding the specific statistic to be applied in the sample-by-sample comparison. Please provide some reference to the telephone conference or meeting minutes in which this agreement was reached.
7. Please amend the discussion of potential amphipod mortality at reference sites (Section 3.1.1.2, page 12) regarding the 'assumption' that reference site amphipod mortality exhibits ambient toxicity. There have been numerous discussions during the weekly telephone conference calls of the problems encountered with significant amphipod toxicity at reference stations in past studies of HPS. The text should indicate that 'best professional judgment' of the amphipod mortality at the reference stations will also be employed by all parties to determine if the reference stations truly represent 'ambient' effect levels.
8. A Student's t-test may not be appropriate depending on whether the results of the amphipod mortality data fit the assumptions of the t-test (Section 3.1.1.2, page 12). The text should state that appropriate statistical tests will be applied depending on the normality and homogeneity of variance. A non-parametric test such as the Wilcoxon Rank Sum Test or the Kolmogorov-Smirnov two sample test may be more appropriate.
9. The decision criteria for the bioassay results should be modified to reflect the agreements reached during the June 1, 2000 conference call. These decision criteria are cited in many of the Data Quality Objective (DQO) Tables and portions of the text in Section 3. Please also include a statement regarding the basis for the decision criteria for the amphipod and echinoderm bioassay results. The decision criteria for amphipod mortality and echinoderm development were based on input from Ms. Karen Tabursky of the San Francisco Regional Water Quality Control Board and Mr. Brian Hunt and Mr. John Anderson of the Granite Canyon Bioassay Laboratory, the developers of the SWI test protocol.
10. Both methods of counting for the echinoderm larvae development

bioassay should be performed, not one primary counting method (Section 3.1.1.2, page 15).

11. Two replicates of each sediment sample are proposed for the *Macoma nasuta* bioaccumulation test (Section 3.1.1.3, page 15). Some consideration should be given to increasing the number of replicates to allow for some unsuccessful replicates. The additional replicates can be archived and the cost would not be substantially greater as the major cost is in the analytical work, not the bioaccumulation test.
12. There was agreement that the HPS tissue concentrations for *Macoma nasuta* would be considered different from the reference area tissue concentrations if they differ by a factor of 1.4 rather than 1.5 (Section 3.1.1.3, page 15).
13. The statistical test employed to assess the relative magnitude of the *Macoma nasuta* tissue concentration in relationship to the reference areas may test the difference in the means or some central tendency (Table 3-4, page 16, step 5). However, the tissue concentration used in any assessment of upper trophic levels should be the 95 percent upper confidence limit on the mean tissue concentration.
14. The fish species proposed for collection as part of the VS appear appropriate (Section 3.1.2.2, page 19), but HERD will defer to the opinion of the California Department of Fish and Game, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Fish and Wildlife Service (FWS) members of the Sediment Work Group (SWG).
15. Please make a distinction between natural attenuation (i.e., degradation) and sediment accretion which might serve as a capping mechanism to limit ecological exposure (Table 3-7, page 20, Step 5).
16. Please identify 'beneficial reuse guidelines' for sediment chemical concentration (Table 3-8, page 22, Step 5). I do not recall discussing beneficial reuse as a criterion for any part of the FS. In fact the City of San Francisco has objected to the Navy interpretation on future use at Treasure Island Naval Station.
17. The sampling positions and number of locations (Section 3.2, pages 23 through 26) appear to be those discussed in the May 1,

2000 meeting in Oakland.

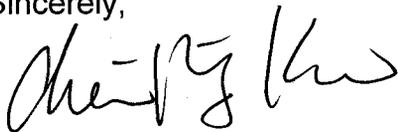
18. We agree that additional subsurface sampling may be required for development of the FS (Section 3.2, page 27).
19. The genus of the purple sea urchin is misspelled (Appendix B, Item B.3, page B-3). Please correct this typographic error.
20. The text of the proposed WOE approach (Attachment B, Item B.8, page B-20 through B-23) should clearly indicate that this is one proposal. The final WOE approach has yet to be determined.
21. Please explain why two laboratories appear to be performing the grain size analysis of sediments. The Quality Assurance Project Plan (QAPP) indicates that Severn-Trent Laboratory in Los Angeles, California and Severn-Trent Laboratory in Colchester, Vermont are performing grain size analysis (QAPP, Page E-33). One laboratory should perform these analyses to reduce the variability as much as possible.

Conclusions

Once the comments listed above are addressed this work plan outlines methods and procedures which should allow evaluation and further refinement of the Low Volume Footprint presented in the Parcel F Draft Feasibility Study.

If you have any questions, please contact me at (510) 540-3822.

Sincerely,



Chein Ping Kao, P. E.
Senior Hazardous Substance Engineer
Office of Military Facilities

cc: Ms. Sheryl Lauth
US EPA Region IX
75 Hawthorne Street
San Francisco, California 94105-3901

(continue)

Mr. Brad Job
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Ms. Amy Brownell
San Francisco Department of Public Health
1390 Market Street, Suite 910
San Francisco, California 94102