



# Department of Toxic Substances Control

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HUNTERS POINT  
SSIC NO. 5090.3



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California Environmental  
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October 20, 2000

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

PARCEL F DRAFT FINAL VALIDATION STUDY WORKPLAN, HUNTERS  
POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

Dear Mr. Mach:

Attached please find our comments for the above-mentioned document, It should be noted that we are still awaiting Navy's responses to our comments dated September 5, 2000 for the proposal for bioaccumulation line of evidence as part of this review.

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

Enclosure

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## MEMORANDUM

**TO:** Chein Kao, Project Manager  
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**FROM:** James M. Polisini, Ph.D.  
Human and Ecological Risk Division (HERD)

**DATE:** October 18, 2000

**SUBJECT:** DRAFT FINAL VALIDATION STUDY WORKPLAN FOR HUNTERS  
POINT SHIPYARD (HPS)  
[PCA 14740, SITE 200050-47 H:46]

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### Background

We have reviewed the document titled *Draft Hunters Point Shipyard Parcel F Validation Study Work Plan, San Francisco Bay, California, Contract No. N62474-94-D-7609, Delivery Order No. 0084*. This report is dated September 12, 2000 and was prepared by Batelle, of Duxbury, MA, Entrix, Inc. of Walnut Creek, CA and Neptune & Company, of Los Alamos, NM. This review is in response to your written work request dated October 17, 2000.

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 August 15, 2000 (Appendix A).
- Position Papers prepared in support of the HPS VS (Appendix B).
- Integrated design for the VS field sampling which outlines the process used to derive the number of samples to be taken (Appendix C).
- The Field Sampling Plan for the VS (Appendix D) with the Field Standard Operating Procedures (Attachment 1 to Appendix D).
- The Draft Final Quality Assurance Project Plan (QAPP) for the VS (Appendix E) with the Analytical Documentation from STS Consultants (Attachment A to Appendix E) and Analytical Documentation from Severn-Trent Laboratory – Los Angeles (Attachment B to Appendix E).
- The Response to Agency Comments on the Draft HPS Validation Study Work Plan (Attachment F).

HERD comments on the assessment of ecological risk to upper trophic levels contained in a HERD memorandum dated September 5, 2000 have not yet been addressed by the Navy. Review of those responses will be furnished under separate cover.

Hunters Point Shipyard (HPS) is situated on a promontory in the southwestern portion of San Francisco Bay. HPS is bounded on the north and east by San Francisco Bay and on the south and west by the Bayview Hunters Point district of San Francisco. The area within the property boundaries is approximately 955 acres of which approximately 400 acres are offshore sediments.

### **General Comments**

We have reviewed the response to HERD comments contained in Appendix F and find the changes in the Draft Final VS Work Plan acceptable with the exception of the comments listed in the Specific Comment section of this memorandum. We have yet to receive the Navy response to the September 5, 2000 HERD comments on the bioaccumulation proposal.

### **Specific Comments**

1. Several areas 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:

- A. The area inshore of the concrete tie downs in Area III;
- B. The area of oxidized metal material on the point in Area VIII, and;
- C. 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.

These areas were identified in HERD comments on the Draft VS Work Plan. We do not agree completely with the Navy proposal in response to this comment on the Draft VS Work Plan (Appendix F, General Comments). We do agree that discussion of the methods for evaluating the oxidized metal in Area VIII and areas of rip rap material with elevated concentrations can be discussed by the Project Managers. However, the area inshore of the concrete tie downs in Area III can still serve as a future source to Parcel F sediments even if the adjacent soft sediments do not presently pose an ecological hazard. HERD recommends that all three areas listed be evaluated regardless of the 'adjacent' sediment conditions. We also object to the condition that these areas be within the 'FS footprint'. This VS is scoped to determine the lateral extent of sediment contamination which poses an unacceptable ecological hazard. Limitation to areas within the Low Volume 'FS footprint' is not appropriate.

2. HERD Specific Comment 6: We appreciate the clarification that the 95, 95 Upper Tolerance Limit (UTL) as a specific statistic for comparison of Effects Range-Median (ER-M) Hazard Quotients (HQs) on a sample-by-sample basis was not discussed. HERD will defer to the San Francisco Regional Water Quality Control Board (SFRWQCB) staff listed in the response on use of a UTL at HPS.
3. HERD Specific Comment 7: The 69.5 percent SFRWQCB decision criterion for amphipod survival should not be adjusted for control mortality. Our understanding is that this is an absolute limit, not a limit relative to the control mortality.
4. HERD Specific Comment 13: It is unclear how a single station could have a single tissue sample concentration except in the case of field collected tissue. The response to HERD Specific Comment 11 indicates that the Navy will run three

*Macoma nasuta* replicates at each HPS station. At those stations with three *Macoma nasuta* replicates (i.e., above the reference station UTL [Minutes June 30, 2000, Appendix A, Page A-77]), the lesser of the upper 95 percent confidence limit on the mean (95UCL), or the maximum, should be used as the tissue concentration in evaluation of the upper trophic level hazard.

5. HERD Specific Comment 19: HERD does not consider the Weight of Evidence (WOE) proposal finalized. Several agencies have stated that we will consider the outcome of the Navy's proposed WOE approach, but will also evaluate the results of the VS samples to determine whether the WOE results agree with the independent evaluation by the regulatory agencies and the resource trustees.

As the funding for the Parcel F VS for the current year has been diverted to other HPS projects, the proposed WOE approach should be applied to the sediment results from another Navy site in San Francisco Bay. Naval Air Station (NAS) Alameda would seem the best candidate. There are already results of sediment sampling and biological testing at multiple areas around NAS Alameda. The remaining data gaps in sediment concentration along the west side and the Oakland Inner Harbor could easily be filled using the same rapid screening techniques applied to inorganic elements and polychlorinated biphenyls (PCBs) at HPS. HERD would accept the screening investigation being done by SPAWAR Systems San Diego, given their success in achieving low screening detection limits during the HPS Parcel F screening. The NAS Alameda results can then be evaluated using the Navy's proposed WOE approach. NAS Alameda WOE results which mirror the regulatory agency and trustee independent evaluation of NAS Alameda would increase confidence in the outcome of the WOE approach for HPS. We urge the Navy to undertake this study in this period prior to sampling HPS Parcel F sediments in the summer of 2001.

6. Appendix B: We do not agree that the prey tissue concentration ( $C_{\text{prey}}$ ) for upper trophic level assessment will necessarily be the depurated *Macoma nasuta* tissue concentration (Appendix B, Attachment B.7, page B-27). HERD has repeatedly stated that the  $C_{\text{prey}}$  concentration term will be dependent on the comparison among the depurated and non-depurated *Macoma nasuta* tissue and the field collected tissue concentrations.
7. Appendix B: The Toxicity Reference Values (TRVs) developed jointly by the Navy and the Region 9 Biological Technical Assistance Group (BTAG) should be used where available. TRVs from the U.S. EPA *Draft Ecological Soil Screening Level Guidance* (Appendix B, Attachment B.7, page B-27) will require HERD review.

### **Conclusions**

There remain some issues to resolve regarding the assessment of the data to be collected as part of the VS for Parcel F. The Navy's proposed WOE approach seems the largest item. The proposed WOE approach should be tested using existing NAS Alameda data, supplemented by the screening techniques utilized at HPS to fill minor data gaps in sediment concentration.

Reviewed by: John P. Christopher, Ph.D., DABT  
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cc: Michael J. Wade, Ph.D., Senior Toxicologist, HERD

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