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MOFFETT FIELD
SSIC NO. 5090.3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

June 16, 1995

Mr. Stephen Chao
Naval Facilities Engineering Command
Engineering Field Activity, West
900 Commodore Way, Bldg. 101
San Bruno, CA. 94066-2402

Re: *Draft Final Phase II Site-Wide Ecological Assessment Work Plan*, dated May 19, 1995

Dear Mr. Chao,

The U.S. Environmental Protection Agency (EPA) has received the subject document and the associated response to comments. As specified in the Federal Facility Agreement (FFA), the period between the draft final and the final submittal of a primary document is considered an informal dispute period. If the regulatory agencies have any issues that must be addressed, the document should not be finalized. Certain comments were not addressed to our satisfaction and need to be resolved before the workplan can be finalized. If the Navy responds satisfactorily to these comments, then the document can be finalized. Please submit responses to these additional comments at latest 30 days after receipt. If you have any questions, please call me at 415-744-2385 or Clarence Callahan for technical direction at 415-744-2314.

Sincerely,

Michael D. Gill

Michael D. Gill
Remedial Project Manager
Federal Facilities Cleanup Office

cc: C. Joseph Chou (DTSC)
Michael Bessette (RWQCB)
Ken Eichstaedt (URS)
Sandy Olliges (NASA)
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COMMENTS
Draft Final Phase II Site Wide Ecological Assessment Work Plan, dated May 19, 1995

1. Response to EPA comment #6. This comment concerned the choice of reference locations and stated that the criteria for judging the adequacy of these locations should include a comparison of the contamination levels to ER-L levels. If the Navy does not want to use ER-L levels, then responses to bioassays at these locations may be used. This appears to be the direction that the Navy intends to pursue. Please let us know if this is true. In the last sentence of this response, is the data being referred to bioassay data?

   The statement: "Physical factors at a reference area may cause toxicity (e.g., if the sediment was a coarse "clean" sand, toxicity could be observed because of a lack of food or physical abrasion of the test organism)." is not supported by any available data. Please provide citations.

2. Response to EPA comment #7. We still have concern about Section 3.4 and Figure 3-16. The response states that "It was impractical to address all of the possible contingencies in the Work Plan". Our comment provides you with these contingencies. Does Navy disagree with our outline of comparisons or do you just not want to address them in the work plan? The response also states "As discussed in Comment No. 3 (sic), the Navy does not agree with the ER-L criteria for the reference site." The issue in question here is not the ER-L, but test performance. A 90% survival rate is required to ascertain that the reference locations are adequate. To reiterate our comment, the figure must be redrawn to reflect comparisons of reference site bioassay results that must have 90% survival as the first criteria. If the survival is less than 90%, then the tests must be rerun and/or another reference location must be selected. If the reference site survival is greater than 90% and the test site control survival is greater than 80%, the comparisons can continue. If the test site controls are less than 80%, then the test must be rerun. This is not represented in Figure 3-16 and needs to be corrected.

3. The response to our comment #8 is satisfactory, although you end the response with a question, "...what is considered significant?". EPA assumes that your question is directed towards what is biologically significant. Examples and citations of your answer to this question should be provided in the workplan. Our suggestion is to use site specific bioassay data in the following way. From reference sample results, the concentration representing NOAEC should be determined. Next, from the test site bioassay results, an actual concentration is measured. The ratio of the two concentrations is then used to determine if a potential problem exists. If the ratio (bioassay test result : reference NOAEC) is less than 1, no problem likely exists. If the ratio is greater than 1, a potential problem could exist.

4. Response to Comment #10. Toxic identification evaluation (TIE) procedures are not still in development for sediment, as stated in your response. Procedures are available now. While your statement "In addition, assuming some remediation action is necessary, the alternatives would not likely be chemical specific..." may be true, this does not mean that a toxic identification evaluation will not add to the Navy's understanding of the site. Is the Navy stating that some remedial action is definitely going to occur to address ecological risks at Moffett Field? Has the Navy concluded that adverse effects have occurred? If so, then determining the specific cause of risk may or may not not be necessary.

5. Response to Comment #11. EPA's position regarding content of any toxicity profiles was made clear in this comment. To repeat, toxicity profiles must provide information on: 1) the mechanism of toxicity; 2) the known toxic effects; 3) known relationships for uptake characteristics; 4) literature review for ecological effects, not just toxicological effects; and 5) the relationship of the particular chemical to the particular receptor/endpoints and site conditions. No additional meetings on this issue are necessary.

6. Response to Comment #12. To add to the EPA (1992) reference citation, the Navy should also consider the following reference: Norton, S.B. et al., 1992. A Framework On Ecological Assessment at the EPA. Environmental Toxicology and Chemistry. Volume 11(12) pp. 1663-1672. We would like to stress a statement from pp. 1669-1670: "In addition, and perhaps most important, the assessor provides an interpretation of the ecological significance of the identified risks." The remainder of this paragraph defines what should be included in the risk characterization.