



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Field Office
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Carlsbad, California 92008

MAY 29 1998

Mr. Thomas Macchiarella, BRAC Remedial Project Manager
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, California 92132-5190

Subject: Draft Feasibility Study Work Plan for Installation Restoration Site 7, Naval Station
Long Beach

Dear Mr. Macchiarella:

The U.S. Fish and Wildlife Service (Service) has reviewed the above document including the appendices and finds it to be reasonably complete. The Service provides the following comments for your consideration in producing the final document.

Section 2.4.3 IR Site 7 Biological Characteristics, p. 2-4: There are still Areas of Ecological Concern (AOEC's) that are being evaluated so it is premature to conclude that there is not an ecological risk from surface sediments. It is acceptable to conclude that new discharges from the Naval Station to Site 7 do not appear to pose an ecological risk.

Section 3.2.6 Step 6 - Specify Limits on Decision Error, p. 3-3: The horizontal and vertical delineations of the AOEC's may require an iterative approach. This may extend beyond the Feasibility Study, with sediment sampling extending into the design phase.

Section 6.1.1 Temporal Patterns by AOEC, p. 6-2: It is important that the limitations of the data for identifying temporal patterns are recognized. Having only 2 sample collections set 4 years apart may not be adequate for supporting any particular remedial alternative. If such trend information is needed to support a particular alternative, additional sampling may be required.

Appendix A, Section 4.8.1 Field Blanks, p. A-19: Please provide the frequency of field blank collection.

Appendix A, Figures A-1 and A-2: The new surface and subsurface samples identified agree with the sample locations discussed at the March 9, 1998 meeting. These should better support the needed horizontal and vertical delineation of AOEC's.

Appendix B, Section 3.1 Summary of Data Quality Objectives, Step 7, p. B-6: It is the Service's understanding that the sediment samples collected from IR Site 7 from the Remedial Investigation (RI) sample locations were to be surface samples rather than subsurface samples as described in this section of the text.

Appendix B, Section 6.3.1 Duplicates, p. B-22: This section describes the distinction between field duplicates and field replicates, and provides the frequency of collection of field replicate samples. Please provide the frequency of collection of field duplicates. Field duplicates should be collected as blind duplicates for the analytical laboratory.

Appendix B, Section 6.3.2 Blanks, p. B-22: Please provide the collection frequency for field blanks.

Appendix B, Section 6.7 Internal Quality Control and Corrective Action, p. B-25: Samples must be reprocessed if analyte concentrations are not greater than 10 times the method blank concentrations. Please clarify that this is separate from the rejection of such reprocessed samples at a threshold of 5 times the method blank concentration.

Appendix B, Section 7.2.4.1 Precision and Accuracy, p. B-30: Please clarify the equation for RPD under Duplicates as the text defines a variable (x) that does not currently appear in the equation.

Appendix B, Section 7.2.4.2 Completeness, p. B-31: This section calls for valid data to constitute 85 percent of the total data collected. Section 5.3.3 (p.5-5) calls for a completeness level of 90 percent. The text of this section should be amended to agree with the general Work Plan. Because the sampling procedures are the same as those used previously in the RI, 90 percent completeness is a reasonable goal.

Appendix B, Section 9.3 Analysis of Ammonia and Hydrogen Sulfide, p. B-35: This section calls for un-ionized ammonia to be calculated to 3 significant figures from total ammonia measurements taken to 2 significant figures. This is not appropriate as calculations should not result in more significant figures than the measurements on which they are based, and should be corrected in the final version. Hydrogen sulfide is to be calculated to 4 significant figures from total sulfide measurements taken to 3 significant figures. This should also be corrected in the final version.

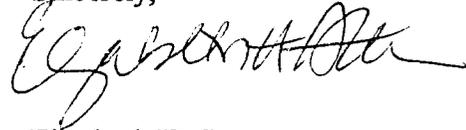
Appendix B, Section 9.4 Monitoring Parameters and Collection Frequency, p. B-37: This section calls for measuring hydrogen sulfide whereas the previous section calls for it to be calculated from total sulfide. Please correct the text appropriately so these sections agree.

Mr. Thomas Macchiarella

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The Service appreciates the opportunity to provide comment on this document. If you have any questions, please contact Carol Roberts of my staff at (760) 431-9440

Sincerely,

A handwritten signature in black ink, appearing to read "Elizabeth H. Stevens". The signature is fluid and cursive, with a large initial "E" and "S".

Elizabeth H. Stevens
Deputy Field Supervisor

cc: Omer Kadaster, Bechtel
Ned Black, USEPA
Laurie Sullivan, NOAA
Scott Flint, CDFG