UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
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July 30, 2007

Mr. Thomas Macchiarella, Code 06CA.TM
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

RE: Draft Final Work Plan for Data Gap Sampling Investigation, Operable Unit 1, Alameda Point

Dear Mr. Macchiarella:

EPA has reviewed the above referenced document, submitted on July 2, 2007. In general the Work Plan looks in good shape. There are a few areas where responses to agency comments have not been incorporated in the final text and a few items that have not been completely adequately addressed. We submit the following for your consideration:

1. **Response to General Comment (GC) 1:** It appears that the Sampling and Analysis Plan (SAP) was only partially revised to reflect collection of water quality parameters that are associated with natural attenuation. For example, neither the grab groundwater sampling procedures (Section 6.3.2) nor the Direct Push Technology (DPT) and Hydropunch sampling procedures (Section 6.3.3) include measurement of dissolved oxygen (DO) or oxidation reduction potential (ORP) before samples are collect. While stability of these parameters is not necessary, DO and ORP should be measured when any groundwater sample is collected. In addition, analyses for hydrogen, ethane and ethane should be included as natural attenuation parameters. Please revise the text of the SAP and Table A.6-2 to include these additional parameters.

2. **Response to GC 4:** The response partially addresses the comment. Neither the response nor revisions to the Work Plan address the first issue, namely, that the Bay Sediment Unit (BSU) is not present or is not continuous beneath IR Site 16.

Since second water bearing zone (SWBZ) well is proposed for IR Site 16 and the procedures for constructing a SWBZ well specify installation of a conductor casing into the Bay Mud, it is not clear how a SWBZ well can be constructed. Please clarify.

3. **Response to Specific Comment (SC) 8:** It is unclear why analyses for 1,4-dioxane have been dropped. Groundwater samples from IR Sites 6 and 16 should be analyzed for 1,4-dioxane. Please revise the Work Plan and SAP to include 1,4-dioxane or explain why this analysis has been dropped.

4. **Response to SC19:** The information in the response was not incorporated into the text of the Work Plan or the Data Quality Objectives Table in the SAP. Although the response indicates that at least one sample will be collected in the presumed downgradient direction, text in Section 3.5.2 of the Work Plan and Table A.3-1 (Data Quality Objectives, Page 2 of 6) indicate that one soil boring will be completed in the center of the former UST excavation of Underground Storage Tank (UST) R-18/NAS Generator Accumulation Point (GAP) 17. Based on the response, it appears that at least two borings should be completed at this site; one in the center of the former excavation and one in the downgradient direction. Please make this change.

5. **Response SC 23:** The response indicates some of the project action levels for soil samples were listed in error and that the SAP tables listing Screening Criteria for Soil have been corrected. While this appears to be true for arsenic and vanadium, a review of Table A.7-1 indicates the project action levels for mercury, molybdenum, nickel, and selenium may still be incorrect, as they differ significantly from their respective residential PRGs. For example, the project action level for mercury is listed as 1,800 mg/kg, which is significantly above the residential PRG of 23 mg/kg. Conversely, the project action level for nickel is listed as 390 mg/kg, which is significantly below its residential PRG of 1,600 mg/kg. Please review the screening criteria listed in Table A.7-1 and correct these and any other identified discrepancies.

6. **Response to SC 24:** The response addresses the comment; however, it is desirable to have project quantitation limits (PQLs) that are lower than maximum contaminant levels (MCLs). Please make an effort to procure a laboratory capable of meeting lower PQL limits for trichloroethene (TCE), tetrachloroethene (PCE), and cis-1,2-dichloroethene.

7. **Response to SC 46:** The reason it was concluded that a groundwater investigation at Site 8 is not necessary is unclear. The DTSC comment questioned the depiction of the VOC plume on Draft Work Plan Figure 5-9 because it did not include the benzene in M08-01. Recently, benzene concentrations in M08-01 have increased to 16 micrograms per liter (ug/L) so it appears that delineation of the extent of the benzene plume in the vicinity of this

well may be necessary. Please include delineation of the extent of the benzene plume or explain why this delineation is not necessary.

8. **Response to SC 47:** The response states that polychlorinated biphenyl (PCB) analysis of IR Site 16 soil samples is not necessary because PCBs are not a contaminant of concern (COC) for this site in the Record of Decision (ROD). However, one of the concerns for IR Site 16 has been whether soil contamination, including PCBs, extends beneath the CANS, since sampling beneath them has not been done; this was the basis for the original comment. Please provide more justification for excluding PCBs from the analyses of samples in the CANS area.

9. **Response to SC 70:** The response addresses the comment; however, the proposed changes do not appear to have been made to Section 5.4, Logging of Soil Borings, of the Draft Final Work Plan for OU-1. The text of Section 5.4 still indicates that soil samples will be collected after core logging and field screening using a PID have been completed. A review of Section 6.3.3 of the SAP, DPT and HydroPunch Sampling Procedures, also reveals that the proposed changes have not been incorporated into the OU-1 Draft Final Work Plan text. Please incorporate the proposed changes from the response to SC 70 into the text of the OU-1 Work Plan and SAP.

10. **Response to SC 72:** The response partially addresses the comment; however, the methodology for establishing step-out sample locations was not discussed. For example, if a step-out is needed, will step-out samples be done along a grid alignment or at a 45 degree angle to the grid? Please clarify.

Thank you for working collaboratively with the regulatory agencies in finalizing this comprehensive Workplan. We look forward to receiving the results of the data gap sampling effort and being able to factor them into developing the remedial design documents for OU 1. If you have any questions, please call me at (415) 972-3029.

Sincerely,

Anna-Marie Cook

Anna-Marie Cook
Remedial Project Manager

cc list: Steven Peck, Navy
Dot Lofstrom, DTSC
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