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

February 5, 2001

Mr. Richard Mach
Department of the Navy
Naval Facilities Engineering Command
Southwest Division
BRAC Office
1220 Pacific Highway
San Diego, CA 92132-5190

RE: EPA Review of the Draft 5th Quarterly Groundwater Sampling Report, Parcel B, Hunters Point Shipyard

Dear Mr. Mach:

EPA has reviewed the above referenced document. Our comments are presented in an attachment to this letter.

If you have any questions about this letter, please contact me at (415)744-2409.

Sincerely,

Claire Trombadore
Remedial Project Manager

cc: Chein Kao, DTSC
Brad Job, RWQCB
Mike Wanta, TtEMI
Tom Shoff, TtEMI
Dave DeMars, Navy
Rich Pribyl, Navy
Indira Balkissoon, Tech Law
Amy Brownell, City of SF
John Chester, City of SF

ATTACHMENT
EPA REVIEW AND COMMENT
DRAFT OCTOBER TO DECEMBER 2000 FIFTH QUARTERLY GROUNDWATER SAMPLING REPORT FOR PARCEL B
HUNTERS POINT SHIPYARD

General Comment

1. Additional water level data from the eastern portion of Parcel B are not presented in the Report. EPA had requested that additional water levels be collected in this area to investigate the groundwater mounding near IR25 and IR06. The Navy states that it collected additional water level data from this area, however, the data was not used in contouring, pending confirmation next quarter. The Report does not list the additional wells from which the measurements were taken, nor is the data presented in Table 1. Please revise the Table 1 of the Report to include the additional groundwater elevation measurements collected. Also, in order to evaluate the groundwater mound near IR25/IR06, please include both the 5th Quarter and 6th quarterly sampling event groundwater contours in the next Groundwater Sampling Report for Parcel B.

   Additional groundwater monitoring well water depths should be measured in future groundwater sampling events. In order to evaluate the groundwater mound near IR25/IR06, it is recommended that groundwater elevations be measured at the following wells: IR06MW34A, IR06MW41A, IR06MW27A, IR06MW30A, IR06MW35A, IR06MW44A.

2. The Report does not contain any analysis of contaminant trends. In Section 3.2.4 the Navy concludes that the VOC plume at IR10 is stable, however no plots of concentration versus time are presented. Please revise the Report to include graphs of contaminant concentration over time.

3. The Report does not include any discussion about the groundwater mound near the Parcel C/B interface near IR-25/IR-06. Please revise the Report to include a discussion of the groundwater mound near IR-25/IR-06.

Specific Comments

1. **Section 2.0, page 2.** Monitoring well IR07MW21A1 was not sampled because the well screen was exposed due to a nearby excavation, which compromised the well integrity. However, the Report does not mention how groundwater samples will be collected from this well in the future. If the well screen has been exposed, then it is likely that the monitoring well will need to be replaced.

   Also, it is unclear whether the IR07MW21A1 well or the IR07MW25A well was destroyed or damaged during excavations. The Response to Comments from the September 1999 to September 2000 Annual Groundwater Sampling Report Parcel B dated December 22, 2000 (RTCs), indicated that monitoring well IR07MW25A was

destroyed due to excavations and IR07MW21A1 was suggested as one of the monitoring wells t o be used to meet the post remedial action monitoring requirements for IR-7. The RTCs requested that the IR07MW25A be replaced. It appears based on the Report that IR0MW25A was sampled. Please revise the Report to clarify which monitoring well was damaged or destroyed during excavations and how both monitoring wells IR07MW21A1 and IR07MW25A will be replaced, if they have not already been replaced.

2. **Section 3.2.7, page 8.** The groundwater monitoring well sampling sheet for low flow purging of well IR46MW37A could not be found in Appendix B. The monitoring well sampling sheet for traditional purging and sampling of monitoring well IR46MW37A is included in the Report but the low flow purging sheet is not present. Table 7 indicates that the traditional purging and sampling of this well took place on October 12, 2000 but that low flow purging took place on October 17, 2000. This is different than the text of Section 3.2.7, which states that low-flow and traditional purging samples were collected on the same day. Please revise the report to include the well sampling sheet for low flow purging of well IR46MW37A. Also, please revise Section 3.2.7 to indicate that monitoring well IR46MW37A was sampled on different dates, using the low flow purging technique and the traditional purging technique.

3. **Section 3.2.7, page 8.** The Navy states that no significant differences were noted between the metals results from filtered/ traditional purge and unfiltered/low flow samples. However, no statistical analysis was performed on the different metals results to show this. Several compounds (including manganese, iron, and nickel) showed large differences in analytical results between traditional and low flow purge methods. For example, the unfiltered/low flow purge sample from well IR07MWS-2 had a manganese result of 745 (estimated) ug/l, while the filtered/traditional purge sample from the same well had a manganese result of 158 (estimated) ug/l. Before concluding that there were no significant differences between the results the Navy should perform statistical analysis on each of the sets of samples to show that the analytic differences are insignificant.

   In addition, the Report does not state if additional evaluation of the different sampling techniques on metals analytical results will continue. Since the sampling procedures for this evaluation were changed recently, it is recommended that two or three more quarters of samples be collected and evaluated using both methodologies. Revise, Section 3.2.7 to indicate that the evaluation of metals results using both methodologies will continue into future sampling rounds.

4. **Section 3.3, page 8.** The results of field duplicate analyses on groundwater samples collected during the 5th Quarterly Groundwater Sampling Event are not discussed in the Data Quality section of the Report. The results of field duplicates and their corresponding primary sample are presented in Appendix E. However, the Report does not calculate or discuss the relative percent differences (RPD) in sampling results. Please revise the Report to include calculation of RPD for duplicate results, and discussion of any RPD criteria exceedences.

5. **Table 1.** Groundwater elevations were not measured at monitoring wells IR10MW12A,

IR10MW13A1, and IR10MW14A. Groundwater elevations should be measured at each of the monitoring wells sampled during the sampling event. Please explain why groundwater elevations were not measured at these monitoring wells. In addition please include groundwater elevation measurements at each well sampled during future sampling events.

6. **Table 7.** Please revise Table 7 to indicate the concentration units of the metals analytical results.

7. **Figure 3.** Groundwater elevation contours are not presented in the vicinity of IR-26 on Figure 3. Please revise Figure 3 to include groundwater elevation contours near IR-26 or provide the rationale for not including these contours.

8. **Figures 3 and 4.** Monitoring wells IR10MW12A, IR10MW13A1, and IR10MW14A are not shown on Figures 3 and 4. All three wells were sampled as VOC monitoring wells during the Fifth Quarterly Groundwater Sampling Event. Revise Figures 3 and 4 to include monitoring wells IR10MW12A, IR10MW13A1, and IR10MW14A.