

**APPENDIX G
RESPONSES TO REGULATORY AGENCY COMMENTS ON THE
DRAFT CONSTRUCTION SUMMARY REPORT**

RESPONSES TO REGULATORY AGENCY COMMENTS ON THE DRAFT CONSTRUCTION SUMMARY REPORT, PARCEL B, HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

This document presents the U.S. Department of the Navy's responses to comments from the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board, San Francisco Bay Region (RWQCB) on the "Draft Construction Summary Report [CSR], Parcel B, Hunters Point Shipyard [HPS], San Francisco, California," dated November 18, 2002. The Navy received the comments addressed below from EPA on May 8, 2003; from DTSC on April 7, 2003; and from RWQCB on April 4, 2003. DTSC provided a portion of its comments in table form ([Attachment A](#) to these responses). EPA also provided additional tabular comments on September 9, 2003, and responses to these comments are incorporated into [Attachment A](#).

RESPONSES TO EPA COMMENTS FROM MS. CLAIRE TROMBADORE

General Comments

- 1. Comment:** Overall, need better area-wide maps that show not only where an excavation is on Parcel B but also which excavations, if any, are nearby. Currently, figures show a single excavation and those directly adjacent to it. It would be beneficial to see large sections of Parcel B to understand on a larger scale what excavations are proximate to one another and have a clearer picture of what is going on on a larger scale.

Response: [Figure 1-2](#) of the CSR shows the relative locations of all Parcel B excavations discussed in the report.

- 2. Comment:** When you mention the *1997 ROD* please follow it up with *as amended by the ESDs of 1998 and 2000*. It is the ROD as amended by these ESDs that is the selected remedy not the ROD alone.

Response: The requested modification will be made, as appropriate, throughout the text.

- 3. Comment:** In the executive summary where you note numbers of remedial areas/sites, please list or refer to a table which specifies which remedial areas/sites are being referred to in the text. For example, in the first sentence of the third paragraph of ES-1, the text states "eight sites were identified during the RI for excavation..." Please specify which 8 sites are being discussed. Another example, bottom of page ES-1, "one excavation that crosses multiple IR sites and parcel boundaries." Please specify which one.

Response: The footnotes of [Table 1-1](#) contain the explanation for the numbers of sites discussed in the executive summary. The eight sites in the cited example are eight areas where excavations were never opened. The industrial drain line crosses multiple Installation Restoration (IR) sites and parcel boundaries, as noted in [Table ES-1](#). The executive summary will be modified accordingly.

4. Comment: **Table ES-1. “Shoreline complications” - please reword.**

Response: The term “shoreline complications” will be replaced with “proximity to San Francisco Bay.” The term “shoreline complications” was only a placeholder to indicate that these excavations were not included in the draft report based on ongoing complications and discussions related to shoreline issues. The term “differing subsurface fill conditions” is a similar placeholder that explains why certain excavations were not included in the report.

5. Comment: **In Section 1.0, page 1-1, third paragraph, after the last sentence, please add a few clarifying sentences: These goals are presented in Table 2-1. All Parcel B excavations must meet the cleanup goals presented in Table 2-1. These goals were finalized in the ESD 2000.**

Response: Changes will be made where appropriate in context.

6. Comment: **If nickel is a COPC, please indicate whether or not the value was determined based upon magnesium or cobalt regression and present the values for the magnesium and/or cobalt for the record.**

Response: This information will be added to the discussions of excavation areas 10-4 and B4219 where nickel is a chemical of potential concern (COPC). Both regressions were made using cobalt concentrations. Cobalt concentration data will be added to the discussions for these excavation areas.

7. Comment: **Each excavation writeup under “Summary of Sampling” has the following statement: “All results for confirmation samples were consistent with the data for these samples.” What does this mean? Please explain in the RTCs and either revise text in the final so that the reader understands the meaning of this statement or delete.**

Response: Screening soil and waste profile soil samples were collected to provide preliminary information and to guide waste disposal, not to provide any site delineation information. These samples were not subjected to the same rigorous analytical and data validation methods as the confirmation samples. The cited sentence was included to indicate that, even though

screening soil and waste profile samples were not as rigorously collected, the results from these samples were comparable to and consistent with the results from confirmation samples.

8. **Comment:** For the exploratory excavations (EEs), particularly those said to be completed in 1996, please note the name and date of the close out report documenting the original EE excavation and remediation effort as well as the cleanup goals. How is it that the EEs of 1996 meet the ESD 2000 goals as the work predates the ESD 2000 cleanup goals by 4 years? Please explain this in the text. Also the EE writeup under Section 3.1 should be rewritten to reflect the information I have requested in this comment. In addition, the EE report listed in the references is not on file at EPA Region 9. At your convenience, please send EPA a copy of the document: *Completion Report, Exploratory Excavations, Hunters Point Naval Shipyard, San Francisco, California* prepared by IT Corporation and dated June 1999.

Response: Data from all the exploratory excavations (EE) at Parcel B were considered during preparation of the remedial design (RD). Only EE-02, EE-04, and EE-05 were identified during the RD as requiring additional remediation. The Navy interpreted past approval of the RD and remedial design amendment (RDA) as assent that the other EEs did not require additional remedial action (RA). However, EE-01 and EE-03 will be added to the final CSR. Another copy of the EE report prepared by IT Corporation (IT) (1999a) was sent to EPA on June 17, 2003.

9. **Comment:** Why is it that a sidewall that has a PAH slightly above the cleanup goal not colored red and why does that Navy believe it is certain that it has delineated all of the PAH contamination? This should be explained. Examples include the following Excavations: B2926, B3125, 18-1, 18-4 and 23-3.

Response: The comment is confusing because soil cleanup levels for polynuclear aromatic hydrocarbons (PAH) are not exceeded by any samples shown on the figures for excavations B2926 or B3125. Moreover, sampling locations that have samples exceeding the PAH cleanup levels on figures for excavations 18-1, 18-4, and 23-3 are colored red. The “U” qualifier indicates the analyte was not detected.

10. **Comment:** For the manganese (Mn) sites, it does not seem appropriate to reference the Mn technical memoranda of 2001 as these were never approved by the regulators. If anything, the Navy should cite EPA’s review and comment letter dated October 23, 2001 regarding the Draft Parcel B ESD of 2001 that never went final. The 11 Mn only sites in which the Navy was unable to meet the cleanup goal, EPA

agreed could be considered complete with respect to meeting the 1,400 mg/kg HPAL if the average concentration over the excavation area was 1,400 mg/kg or less as this would be protective of human health in our opinion. However, the Navy must clearly explain how the average over the excavation area was calculated including how composite samples and samples from different depths were considered. This is the only way that the reader can confirm that the Navy's statements in the CSR are correct that: *the average manganese concentration for the excavation area was less than the soil cleanup level...* For Excavation 23-2 for example, my calculations could not confirm that the average Mn over the excavation area was below 1,400 mg/kg. Further, it should be noted that while the 1,400 mg/kg is the current goal for Mn per the ESD 2000, it may change under the ROD amendment or land use controls may be warranted if the total risk due to Mn and/or other residual contaminants is unacceptable. Finally, DTSC has previously stated that they may not agree with this approach. The Navy should clarify this and discuss as necessary.

Response: Details of the average manganese calculation protocol are contained in the final manganese site proposal dated September 11, 2001 (Tetra Tech EM Inc. [Tetra Tech] 2001a), and the final evaluation of ambient manganese conditions dated December 21, 2001 (Tetra Tech 2001b). Figures for the CSR were kept as consistent as possible with the figures in the manganese technical memoranda to take advantage of this previous work. Discussions of ambient metals concentrations, including manganese, are part of the ongoing evaluations for the technical memorandum in support of a record of decision (ROD) amendment (TMSRA) for Parcel B.

11. Comment: The Navy may want to include a copy of its letter moving IR-6, etc. from Parcel B to Parcel C (dated 2001?). In this letter the Navy changed the Parcel B/C boundary. This is important as the RI, 1997 ROD and ESD 200) documents had a different Parcel B/C boundary and as a result of this boundary change, Parcel B has acres, fewer IR sites and fewer excavation areas currently than in the RI, 1997 ROD, ESD 2000 and RD documents.

Response: To reduce the amount of reproduction and supplies, a statement will be added to the executive summary describing the change. Formal description of the boundary changes will be developed upon transfer and included in any support documentation.

12. Comment: Delete frequent references to a "future addendum to this report" (example: Page 1-2, first paragraph, last sentence) and replace with simply "future report" as it may not be an addendum.

Response: The current plan is for this information to be submitted as an addendum to the CSR. No changes will be made to the text in response to this comment.

13. **Comment:** **Table 2-1: footnote a. For cobalt, a footnote not correct. The cleanup goal is the 1999 PRG with produce (3,200 mg/kg) or the HPAL which ever value is greater. For Nickel, the a footnote not correct. The cleanup goal is the 1999 PRG with produce (320 mg/kg) or the HPAL (determined by a magnesium regression or if the magnesium is weathered by a cobalt regression) whichever value is greater.**

Response: [Table 2-1](#) will be updated accordingly.

14. **Comment:** **In several instances where two excavations merged together the text states, “confirmation samples collected at excavation X were also used to delineate the extent of contamination at excavation Y.” However, typically, only the data from the primary excavation of discussion is posted. If data from an adjacent excavation is used to delineate the extent of contamination - all data should be posted on one figure for the reviewer to consider. For example, Excavations B3114 and 24-2.**

Response: All data used in the delineation analysis are posted on the appropriate figure; the cited sentence is not applicable and will be deleted from the CSR.

15. **Comment:** **It is unclear in the text whether soil screening samples or waste profile samples were collected at each excavation. For example, the text on page 4-72 indicates that 9 soil screening and waste profile samples were collected at Excavation B3425 to guide the excavation process. However, Appendix A presents soil screening data for this excavation, but no waste profile data. Please revise the text in Section 4.0 to accurately reflect the type of samples that were collected at each excavation.**

Response: The terms “soil screening sample” and “waste profile sample” are used interchangeably within the text descriptions for each excavation. Soil screening samples were samples collected only during 1998 to 1999 activities used to roughly delineate the extent of contamination prior to collecting soil confirmation samples. Soil screening samples were collected from excavation sidewalls and bottom and analyzed for excavation-specific COPCs. Waste profile samples were collected during both the 1998 to 1999 and 2000 to 2001 phases. These samples were collected in situ before excavation activities commenced in 1998 and from soil stockpiles after excavation throughout the remedial actions. Waste profile samples were collected to support disposal activities. Analyte

concentrations that exceeded the soil cleanup level in either type of sample were added as COPCs for the respective excavation. The terms “soil screening sample” and “waste profile sample” are used interchangeably because the same action was taken (that is, adding a COPC) regardless of the type of sample. Soil screening and waste profile samples were not subjected to the same rigorous analytical and data validation methods as the confirmation samples and combining these samples with confirmation samples (for example, on the same figures) would be misleading based on the differences in data quality.

- 16. Comment:** **It is unclear why the analytical results for soil screening samples are inconsistently presented in Appendix A. For example, Aroclor-1242 is the only chemical of potential concern (COPC) for Excavation B2616, but the soil screening sample analytical results presented in Appendix A include results for numerous analytes. Arsenic, barium, beryllium, copper, and manganese are the COPCs for Excavation 24-6 and only results for these analytes are included in Appendix A. Please explain why some soil screening analytical results include only the COPCs for that excavation and some results include numerous analytes not listed as COPCs for that specific excavation. Please also note that all analytical results should be provided, regardless of whether they are COPCs.**

Response: [Appendix A](#) presents all available soil screening and waste profile data. Analytical suites were selected according to requirements from the disposal facility for waste profile samples and varied between excavations. Analytical suites for soil screening samples were based on the COPCs presented in the RD for each excavation.

- 17. Comment:** **The waste profile samples were not used consistently to add COPCs. In some cases, like Excavations 60-1 and 60-2, COPCs were added based on waste profile sample results. In other cases, like Excavation 20-2, analytes were detected above cleanup goals in waste profile samples, but were not added to the COPC list. The detection of analytes above their respective cleanup goals in a waste profile sample suggests that soil in that excavation area is contaminated with those compounds, but if the compounds were not added to the COPC list, the extent of contamination was not evaluated. As a result, there are a number of excavations where the extent of contamination is not known. Please explain why the waste profile samples were not used consistently to add COPCs when the Final Remedial Design Amendment for Parcel B, dated February 20, 2001 (RDA) indicates that analytes detected above their cleanup goals in the soil screening and waste profile data will be added as COPCs at the appropriate excavation. Please also explain what will be done to correct this problem.**

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). In these cases, the analytical result should have included a “U” qualifier, indicating that the analyte was not detected. The waste profile samples cited in this comment did not exceed soil cleanup levels, and no action is necessary.

18. Comment: It is unclear why delineation samples to determine the extent of contamination and confirmation samples were not collected at the same depth as the original contamination, or if contamination was found at two or more depths why samples were not collected at these depths to determine the extent of contamination. In many cases, it appears that there are layers of contaminated soil, but sampling was not always done at the depth(s) where contamination was expected to be found. As an example of a layer of contaminated soil, consider the northeast corner of Excavations 20-2/B4420, where Aroclor 1260 was detected above the cleanup goal as presented in the 1997 Record of Decision (ROD) and amended by the 2000 Explanation of Significant Differences (cleanup goal) in 5 samples that were collected at depths of 3.75 and 4 feet (ft) below ground surface (bgs). In this case, samples were collected at appropriate depths. Another example is Fuel Line F, where there appears to be a layer of soil contaminated by polynuclear aromatic hydrocarbons (PAHs) and metals at 3 ft bgs, as shown by consistent presence of these analytes in bottom composite samples. In this case, samples to delineate the horizontal extent of contamination were not collected, so it is not known whether the excavation was sufficient to remediate the contaminated soil. Please explain why samples were not consistently collected at the depth of the original sample.

Response: Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. The RDA specifies the following:

“The depth of each sample initially collected at a proposed location will be randomly selected from a depth near or below the depth where contamination was detected or from 1 foot bgs and the excavation floor. All subsequent stepout samples behind this location will be collected at about the same depth as the initial sample, approximately 5 feet behind the initial location.”

While the correlation of several samples collected at the same depth in Excavation B4420 could be interpreted to indicate a layer of contamination, no such layer was observed in the field during excavation activities. Similarly, observations made during excavation and sampling of Fuel Line F did not reveal any distinct, obviously contaminated

horizons. Stepout samples for both the cited excavations meet the requirements of the RDA.

19. Comment: **It is unclear why the Removal Action at numerous excavations is considered complete when the remedial action objective concerning removal of material containing COPCs at concentrations above cleanup goals has not been met. For example, the horizontal extent of contamination at Excavation B4715 is not defined. While the sample locations for most excavations comply with the procedures outlined in the RDA, is not possible to determine if all material containing concentrations of COPCs above the cleanup goals presented in the ROD has been removed without defining the horizontal extent of contamination. Please explain how the Navy proposes to resolve this issue.**

Response: Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not required by the RDA. Likewise, the RDA does not require that the stepout horizontal location be exactly in line at exactly 5 feet from the exceedance location. The Navy's interpretation is that the sample collection protocols contained in the RD and RDA represent the requirements necessary to delineate the horizontal and vertical extent of contamination at an excavation and that attainment of the sample collection requirements is the defining criterion for completion of an excavation.

The Navy acknowledges that the set of data remaining after excavation is not perfect. However, the data set is sufficient to calculate residual risk and to evaluate remedial alternatives during preparation of the TMSRA. The Navy has proposed that total risk, in the absence of data, would be represented by the risk associated with ambient metals at Hunters Point ambient level (HPAL) concentrations.

Excavation B4715 extended below the target sample during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of contamination in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.

Specific Comments

1. **Comment:** **Table of Contents, Table ES-1 and Appendix A - Soil Screening and Waste Profile Data:** The following excavations are included in Appendix A and have Screening Data or Waste Profile Data associated with them, but do not appear in the Table of Contents or Table ES-1, Excavations Included in this Report. Additionally, some excavations listed as having Waste Profile Data in Appendix A appear to be missing the prefix “B”. Please explain why these sites were not included in this report or Table ES-1, but were included in Appendix A. **Screening Data:** 24-7, A-1, B1127, B3530, B3822, and Steam Lines. **Waste Profile Data:** “B”3822, “B”3921, Fuel Line D (FLD).

Response: The intention behind including these other data was to have all the screening soil and waste profile sample data in one report. Future addenda could, then, merely refer back to this report. Excavations 24-7, B3530, B3822, B3921, A-1, and Fuel Line D are part of Parcel C and, therefore, not included. The area originally termed B1127 became Excavation B1227. Soil screening samples from B1127 apply to Excavation B1227. Excavation B1227 is located in IR-07 and will be included in the CSR addendum. Several excavation labels in [Appendix A](#) were inadvertently missing the “B” prefix and will be corrected in the final CSR.

2. **Comment:** **Section 3.2.1, Sampling Strategy, Page 3-2:** The text states that screening-level samples were collected to help establish whether an excavation would meet the cleanup levels. The text also states that if screening level samples indicated that COPC concentrations were below ROD cleanup levels, then confirmation samples were collected. However, there appear to be some excavations (e.g. B3324, 26-1, 26-2, B4815, EE-04C, B3229) where neither soil screening-level samples nor waste profile samples were collected, because this data was not included in Appendix A. Please explain in the text why neither soil screening-level samples nor waste profile samples were collected to guide these excavations. Also, please explain in the text how the decision was made to collect confirmation samples for excavations that do not have screening level data.

Response: Screening samples were collected to roughly delineate excavation areas and to characterize soil for disposal. Confirmation samples were the primarily tool for delineation. The use of screening samples for additional excavation characterization (such as the addition of a COPC) was a secondary application of the data. Screening sample data supplement the confirmation sample data, but are not necessary for delineation of any excavation. Soil screening and waste profile samples were not subjected to the same rigorous analytical and data validation methods as the

confirmation samples and combining these samples with confirmation samples (for example, on the same figures) would be misleading based on the differences in data quality.

Available soil screening and waste profile sample data were included in the report. However, these types of data were not available for excavations conducted in 1996 to 1997 as part of the exploratory excavations work (Excavations 26-1, 26-2, and EE-04C). Excavation B3229 was never opened, and a waste profile sample was not collected because this information was not needed. Screening soil sample data for Excavation B4815 immediately follow the data for Excavation B4715 in [Appendix A](#); however, the bookmark indicating this location was inadvertently omitted. The waste profile sample data for Excavation B3324 were inadvertently omitted from [Appendix A](#). Corrections for Excavations B4815 and B3324 will be made for the final CSR.

3. **Comment:** **Section 4.2.2, Excavation 10-5, Page 4-8: The text states that the Navy collected one soil screening sample to guide the process. Appendix A contains data for a waste profile sample, but no soil screening sample. The text does not indicate that waste profile samples and soil screening samples are the same. Please resolve this discrepancy.**

Response: The terms “soil screening sample” and “waste profile sample” are used interchangeably within the text descriptions for each excavation.

4. **Comment:** **Section 4.2.2, Excavation 10-5, Figures 10-5 A and 10-5 B: It is unclear why the confirmation samples collected during the 2000 to 2001 RA Delineation at Excavation 10-5 were not centered around the boring with previously detected exceedances of arsenic (31 mg/kg), copper (181 mg/kg), and lead (777 mg/kg) in samples collected from boring IR10B009. As a result, the confirmation samples do not completely delineate the contamination in the vicinity of this boring because samples were not collected at the same depths as the original exceedance. It is possible that lead extends to the southwest and east of this boring location. The excavation only extended 2 feet southwest beyond this boring, so it is possible that lead extends beyond the excavation boundary. The sample locations do not appear to comply with the procedures outlined in the RDA because they were not centered around the location with the original exceedances. As a result, the horizontal extent of contamination was not delineated to the north, northeast or east. Therefore, there is no way to determine whether or not the excavation was sufficient to remove all of the contamination and the remedial action objective (RAO) that required excavation of material containing COPCs at concentrations exceeding cleanup standards does not appear to have been met. Please explain in the text why the confirmation samples were not collected to the**

southwest and east at a depth of 1.25 feet. Also, additional borings to delineate the extent of metals contamination at 1.25 feet and 4.75 feet to the southwest and east of IR10B009 or additional excavation with confirmation samples are necessary to ensure that all contamination above cleanup goals has been removed.

Response: Excavation 10-5 appears to have been mislocated approximately 7 feet north of the ideal location. However, considering the uniformly low concentrations of COPCs found in all the samples at this excavation, it is unlikely that any significant contamination was overlooked. No additional sampling is planned prior to a ROD amendment.

5. **Comment:** Section 4.2.4, Excavation B2925, Page 4-21: There appears to be a discrepancy between the Section 4.2.4 text and Appendix A. The text on page 4-21 states that Appendix A contains the analytical results for the screening and waste profile samples for this excavation, however, Appendix A appears to only contain screening data analytical results for Excavation B2925. Please resolve this discrepancy.

Response: The terms “soil screening sample” and “waste profile sample” are used interchangeably within the text descriptions for each excavation.

6. **Comment:** Section 4.2.7, Excavation B3324, Summary of Sampling, Page 4-35: Soil Screening Data for Excavation B3324 appears to be missing from Appendix A. The text indicates that one soil screening sample was collected to guide the excavation process, however there is no analytical data in Appendix A. Please provide the analytical results for the soil screening sample collected from Excavation B3324 in Appendix A.

Response: The waste profile soil sample data for Excavation B3324 were inadvertently omitted from [Appendix A](#) and will be added to the final report.

7. **Comment:** Section 4.2.7, Excavation B3324, Figure B3324: The extent of lead contamination at Excavation B3324 was not completely delineated. Lead was detected above the cleanup goal in two samples collected at 3.75 ft bgs (333 and 420 mg/kg), but confirmation samples were collected from Station 3324S1A at a depth of 5.25 ft bgs and from Station 3324B1 at depths greater than 5.25 ft bgs. Also, confirmation samples were not collected to the northeast of the exceedances. While it appears that the sampling strategy followed the protocols as outlined in the RDA, the horizontal extent of contamination was not delineated. Therefore, the remedial action objectives have not been met for this excavation because the extent of contamination was not

delineated to the northeast, south and southwest of the contamination detected in borings IR10B034 and 3324E1A. Please complete additional borings northeast, south and southwest of IR10B034 and 3324E1A to delineate the extent of lead at 3.75 feet and extent the excavation if necessary.

Response: Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not required by the RDA. Likewise, the RDA does not require that the stepout horizontal location be exactly in line at exactly 5 feet from the exceedance location. The Navy met the RDA sampling requirements for this excavation. This is a very small excavation (delineated extent is about 7 feet by 12 feet by 6.5 feet deep). It is unlikely that significant contamination extends between the closely spaced (horizontally and vertically) samples delineating this area. No additional sampling is planned prior to a ROD amendment.

- 8. Comment:** **Section 4.2.8, Table B3422, Page 1 of 24: It is unclear why benzo(a)anthracene is listed twice in Table B3422, first as a polynuclear aromatic hydrocarbon (PAH) and then for semivolatile organic compound analysis (SVOA). The text does not indicate that two separate analyses were performed for this analyte. Please explain why benzo(a)anthracene is listed as a PAH and SVOA.**

Response: Two separate analyses were performed for this analyte.

- 9. Comment:** **Section 4.2.8, Excavation B3422, Figure 3422A: The extent of Aroclor-1260 near Station 3422N1C (2.7 mg/kg) at the 2.25 foot depth was not delineated to the east or southeast. The only samples collected east of this location were collected from depths at and greater than 3.75 ft bgs. The sampling locations appear to have complied with the specifications outlined in the RDA, however, the horizontal extent of contamination was not delineated. Therefore, it is impossible to determine if the remedial action objectives to remove contamination have been met at this excavation. Please delineate the extent of Aroclor-1260 to the east and southeast of Station 3422N1C at the 2.25 foot depth.**

Response: The stepout sample at location 3422N2C bounds contamination identified at location 3422N1C. Location 3422N1D is not a stepout from 3422N1C, but rather it was collected to characterize the new eastern sidewall created as the excavation stepped north. The Navy met the RDA sampling requirements for this excavation. No additional sampling is planned prior to a ROD amendment.

10. Comment: Section 4.2.8, Excavation B3422, Page 4-40 and Appendix A - Waste Profile Data: Benzo(a)anthracene is not a COPC for Excavation B3422, but the waste profile data presented in Appendix A for this excavation indicates that the analytical result for benzo(a)anthracene was 1.2 mg/kg, above its cleanup goal of 0.37 mg/kg. This suggests that the soil in Excavation B3422 was contaminated with benzo(a)anthracene, but delineation was not done for this compound. As described in the RDA, detected screening and waste profile results above cleanup goals were to be added as COPCs at the appropriate excavation. Because this was not done, there is no way to evaluate whether the excavation was sufficient to remediate benzo(a)anthracene unless the data for this compound is available. Please provide data for benzo(a)anthracene to demonstrate that the extent of benzo(a)anthracene contamination has been delineated and remediated.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical result should have included a “U” qualifier indicating that the analyte was not detected. The waste profile sample did not exceed soil cleanup levels.

11. Comment: Section 4.2.11, Excavation B3622, Page 4-80 and Appendix A - Waste Profile Data: It is unclear why a number of analytes were not included as COPCs at this excavation when the analytical results from the waste profile samples indicate that detected concentrations of these analytes exceed their respective cleanup goals. For example, the cleanup goal for benzo(a)anthracene is 0.37 mg/kg, but the waste profile analytical results indicate that benzo(a)anthracene was detected at 1.1 mg/kg. The cleanup goal for benzo(a)pyrene is 0.33 mg/kg, but the waste profile analytical results indicate that benzo(a)pyrene was detected at 1.1 mg/kg. Other analytes detected at concentrations above their cleanup goal in the waste profile analytical results include benzo(b)fluoranthene (1.1 mg/kg), benzo(k)fluoranthene (1.1 mg/kg), dibenz(a,h)anthracene (1.1 mg/kg), indeno(1,2,3-cd)pyrene (1.1 mg/kg), and pentachlorophenol (5.6 mg/kg). As described in the RDA, analytes with detected screening or waste profile results above cleanup goals were to be added as COPCs at the appropriate excavation. This suggests that the soil in excavation B3622 was contaminated with these compounds, but if the extent of contamination was not delineated, it is not possible to evaluate if the excavation was sufficient to remediate these compounds. Please provide data for these compounds if it is available or propose borings to delineate the extent of these analytes.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile sample did not exceed soil cleanup levels.

12. Comment: Section 4.3.1, Excavation 18-1, Figure 18-1 B: The extent of benzo(a)anthracene (0.6 mg/kg), benzo(a)pyrene (0.36 mg/kg), and benzo(b)fluoranthene (0.92 mg/kg) at concentrations greater than their respective cleanup goals near Station 0181SN6 has not been completely delineated. These three analytes were detected at Station 0181SN6 at a depth of 8 ft bgs, but the confirmation samples were collected at depths of 4.25 and 9.75 ft bgs at Station 1801N1E. While it appears that the sampling strategy followed the procedures outlined in the RDA, the horizontal extent of contamination was not defined. Therefore, it is impossible to determine if the remedial action objectives regarding removal of contamination have been met. Please delineate the extent of PAH contamination at 8 ft bgs north and northeast of Station 0181SN6.

Response: The sample at location 0181SN6 was a composite sample collected during the 1998 to 1999 phase of the remedial action at Excavation 18-1. Because the sidewall sample was a composite sample, the symbol location does not represent an actual sampling location, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

13. Comment: Section 4.3.2, Excavation 18-4, Figure 18-4 A: The extent of contamination associated with the seven analytes detected at Station IR18B026 above their cleanup goals was not completely delineated. Benzo(a)anthracene (10 mg/kg), benzo(a)pyrene (8.6 mg/kg), benzo(b)fluoranthene (8.7 mg/kg), benzo(k)fluoranthene (2.9 mg/kg), chrysene (12 mg/kg), dibenz(a,h)anthracene (1.2 mg/kg), and indeno(1,2,3-cd)pyrene (4 mg/kg) were detected at concentrations above their cleanup goals at 6.25 ft bgs at this location. The excavation extended about 15 feet beyond this location to the south-southwest. However, samples were not collected from this depth, so it is not possible to evaluate whether the excavation was sufficient to remediate the PAH contamination. Therefore, while it appears that while the sampling procedures as outlined in the RDA were followed, it is not possible to determine if the remedial action objectives have been met for this excavation. The detected contamination was more than 10 times the cleanup goals for three of these PAHs. Please collect samples from a depth of 6.25 feet to the southeast and southwest of Station IR18B02 to verify that all contamination has been remediated.

Response: All the cited PAH compounds were delineated and excavated during the 1998 to 1999 phase of remedial action at Excavation 18-4. The composite samples collected from the sidewalls surrounding soil boring IR18B026 all indicated COPC concentrations less than the soil cleanup levels. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

14. Comment: **Section 4.3.3, Excavation B0146, Figures B0146 A and B:** The extent of lead and zinc contamination is not delineated on the west and northwest side of Excavation B0146. Lead and zinc were detected above their cleanup goals at Stations 0146N3A, 0146N2A, 0146W1B (sidewall sample), 0146N1A, and 0146W1A (sidewall sample). Lead concentrations ranged from 452 to 2,050 mg/kg and zinc concentrations ranged from 544 to 4,460 mg/kg. Two of these stations are on the parcel boundary, so it is possible that lead and zinc contamination extend off-site beyond the parcel boundary, but stepout samples were not collected. The remedial action objectives were not met nor were the procedures for stepout sidewall sampling followed. As described in the RDA, all subsequent stepout samples behind these sidewall samples should be collected at the same depth as the initial sample, approximately 5 feet behind the initial location. Please collect stepout samples to the west of Stations 0146N3A, 0146N2A, 0146W1B, 0146N1A, and 0146W1A as required by the RDA and extend the excavation, if necessary.

Response: The Navy has no plans to characterize chemical concentrations that may exist on off-site properties.

15. Comment: **Section 4.3.3, Excavation B0146, Figures B0146 A and B:** The extent of lead and zinc on the southwestern edge of this excavation was not delineated. Given the steeply sloping hillside, samples collected up-slope do not represent the same depth as samples collected further north (downslope), so the extent of contamination has not been delineated in several areas. Also, there are no samples along the southwestern edge of the excavation. The excavation was extended 2 to 10 feet beyond the area that was delineated, but there are no confirmation samples to evaluate whether the extent of excavation was sufficient and it is not possible to determine if the remedial action objectives to remove contamination above the cleanup goals were satisfied. Please collect confirmation samples along the southwestern edge as required by the RDA to determine if sufficient soil was excavated.

- Response:** The conceptual model for the area of Excavation B0146 was that of a blanket laid over the steep hillside. It is the depth below ground surface, not the absolute sample elevation, that is important in characterizing this sloping area. Samples were collected at consistent depths below ground surface throughout the excavation area. The southwestern portion of the excavation is bounded by samples 0146W1C, 0146S2A, 0146S3B, and 0146S3C. No additional sampling is planned prior to a ROD amendment.
- 16. Comment:** **Section 4.4.1, Excavation 20-1, Page 4-196: The text states that 13 soil screening and waste profile samples were collected, but Appendix A only contains screening sample data. Please provide the missing waste profile data.**
- Response:** The terms “soil screening sample” and “waste profile sample” are used interchangeably within the text descriptions for each excavation.
- 17. Comment:** **Section 4.4.1, Excavation 20-1, Page 4-196 and Figures 20-1 A & 20-1 B: The sampling strategy near the original detections at borings IR20B003 and IR20B002 is unclear because the samples collected during the 1998 to 1999 RA are not centered around these borings. Please explain in the text why subsequent samples were not centered around borings IR20B002 and IR20B003.**
- Response:** Excavation area 20-1 was excavated in accordance with the RD (see drawings on sheets 5 [previous sample locations] and 7 [soil cleanup areas] of the RD). Excavation 20-1 is approximately centered around boring IR20B003. Although boring IR20B002 is near the northeastern corner, it was included within the excavation boundary and manganese concentrations measured at that location that exceeded the cleanup goal were removed. Composite samples from locations 0201SNA and 0201SEA confirm the excavation extent near boring IR20B002.
- 18. Comment:** **Section 4.4.2, Excavation 20-2, Page 4-203 and Appendix A - Waste Profile Data: Eleven analytes were detected in the waste profile analytical results above their cleanup goals and were not included as COPCs. For example, Aroclor-1221 was detected in the waste profile sample collected at a concentration of 0.57 mg/kg and benzo(a)anthracene was detected at a concentration of 0.57 mg/kg. Other analytes that were detected above their cleanup goals in the waste profile analytical results include Aroclor-1016 (0.28 mg/kg), Aroclor-1232 (0.28 mg/kg), Aroclor-1242 (0.28 mg/kg), Aroclor-1248 (0.28 mg/kg), benzo(a)pyrene (0.57 mg/kg), benzo(k)fluoranthene (0.57 mg/kg), dibenz(a,h)anthracene (0.57 mg/kg), indeno(1,2,3-cd)pyrene (0.57 mg/kg), and pentachlorophenol (2.8 mg/kg). As outlined in the RDA, analytes detected above their cleanup goals in**

the soil screening and waste profile data were to be added as COPCs. The presence of these analytes in waste profile samples suggests that soil in Excavation 20-2 was contaminated with these compounds, but because they were not added to the COPC list, the extent of contamination was not delineated. As a result, there is no way to evaluate whether the excavation was sufficient to remediate them. Please provide the data for these compounds or collect additional samples to verify that there is no contamination beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

19. Comment: Section 4.4.4, Excavation B4217, Figure B4217 B: The extent of manganese in the vicinity of sample locations 4217SWA (1,440 mg/kg), 4217E1A (9,530 mg/kg) and 4217E1D (3,400 mg/kg) has not been delineated. There are no confirmation samples beyond these locations. As a result, the calculated weighted average does not truly represent the average level of manganese contamination. Confirmation samples south and southeast of 4217E1D and west of 4217SWA are needed to confirm that sufficient soil was excavated.

Response: Details of the average manganese calculation protocol are contained in the final manganese site proposal ([Tetra Tech 2001a](#)). Sample 4217SWA does not exceed the soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the Base Realignment and Closure Cleanup Team (BCT) during preparation of the May 2000 explanation of significant differences (ESD) ([Navy 2000](#)). Cleanup goals in the 1997 ROD were expressed to as many as six significant figures. In creating the 2000 ESD, the cleanup goals were uniformly rounded to two significant figures. The Navy and the BCT approved this process in approving the 2000 ESD. Discussions of ambient metals concentrations, including manganese, are part of the ongoing evaluations for the TMSRA for Parcel B.

20. Comment: Section 4.4.7, Excavation B4420, Page 4-420 and Appendix A - Waste Profile Data: Benzo(a)anthracene, benzo(a)pyrene, benzo(k)-fluoranthene, dibenz(a,h)anthracene, indeno(1,2,3-cd)pyrene, and pentachlorophenol are not included as COPCs at this excavation, but were detected at concentrations above their cleanup goals (0.57 mg/kg, 0.57 mg/kg, 0.57 mg/kg, 0.57 mg/kg, 0.57 mg/kg, and 2.8 mg/kg, respectively) in the waste profile data presented in Appendix

A. The RDA states that analytes detected above their cleanup goals in soil screening and results were to be added as COPCs at the appropriate excavation. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

21. Comment: **Section 4.5.1, Excavation 23-1, Figure 23-1: The extent of zinc and copper near boring IR23B015 was not completely delineated. Copper (1,370 mg/kg) and zinc (423 mg/kg) were detected at Station IR23B015 at a depth of 1.75 ft bgs, but the only other samples in this area were collected at a depth of 3.5 feet. There are samples 10 to 13 feet to the northeast of this location that were collected at depths of 3.5, 6 and 3.5 ft bgs, however, no samples were collected at or near the 1.75 ft bgs depth in the entire excavation area. Further, the sampling strategy described in the RDA was not followed at this excavation because the excavation and sampling were not centered around the boring with the original contamination. The horizontal extent of contamination was not delineated at this excavation and therefore, it appears that the remedial action objectives were not met. Please collect samples south and west or southwest of IR23B015 at a depth of 1.75 feet to verify that the extent of excavation was sufficient to remediate copper and zinc.**

Response: Excavation area 23-1 was excavated in accordance with the RD (see drawings on sheets 5 and 7 of the RD). The samples that exceeded copper and zinc cleanup levels at boring IR23B015 were bounded horizontally and vertically by samples at locations 0231SSA and 0231SSW. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

22. Comment: **Section 4.5.1, Excavation 23-1, Page 4-259 and Appendix A - Waste Profile Data: It is unclear why certain analytes were not considered COPCs at this excavation. Benzo(a)anthracene (1.6 mg/kg), benzo(a)pyrene (1.6 mg/kg), benzo(b)fluoranthene (1.6 mg/kg), benzo(k)fluoranthene (1.6 mg/kg), dibenz(a,h)anthracene (1.6 mg/kg), indeno(1,2,3-cd)pyrene (1.6 mg/kg), and pentachlorophenol (7.9**

mg/kg) were detected above their cleanup goals in the waste profile sample collected during the 1998 to 1999 RA. This data suggests that the soil in Excavation 23-1 was contaminated with these compounds, but because they were not COPCs, the extent of contamination was not delineated, so it is not known if the excavation was sufficient to remediate the contamination. Additionally, it is outlined in the RDA that if analytes are detected at concentrations exceeding their cleanup goals in the soil screening or waste profile analytical results, that they should be added as COPCs. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

23. Comment: **Section 4.5.3, Excavation 23-3, Figures 23-3 A and B:** The extent of copper (447 mg/kg), benzo(a)anthracene (0.69 mg/kg), benzo(a)pyrene (0.88 mg/kg), benzo(b)fluoranthene (1.5 mg/kg), benzo(k)fluoranthene (0.54 mg/kg), and indeno(1,2,3-cd)pyrene (0.54 mg/kg) was not delineated at the 1.75 foot depth near boring IR23MW14A. The excavation extended 5 to 10 feet beyond this location to the northeast and west, but it is not clear if this was sufficient because samples were only collected from 4, 7.75 and 8.25 ft bgs. The sampling strategy described in the RDA appears to have been followed at this excavation. However, the horizontal extent of contamination at 1.75 ft bgs was not defined at this excavation; as a result, it cannot be assumed that the remedial action objectives were met. Please collect a sample from the 1.75 foot depth to the north of IR23MW14A and analyze it for the listed analytes to verify that contamination does not extend beyond the excavation boundaries.

Response: All the cited compounds were delineated and excavated during the 1998 to 1999 phase of remedial action at Excavation 23-3. The composite samples collected from the sidewalls surrounding soil boring IR23MW14A all indicated COPC concentrations less than the soil cleanup levels. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

24. Comment: Section 4.5.3, Excavation 23-3, Page 4-275 and Appendix A - Waste Profile Data: It is unclear why dibenz(a,h)anthracene and pentachlorophenol are not considered COPCs at this excavation when these compounds were detected above their cleanup goals at 1.6 mg/kg and 7.9 mg/kg, respectively in the waste profile sample collected from this site. The RDA describes that analytes detected above their cleanup goals in the soil screening or waste profile results should be added as COPCs. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

25. Comment: Section 4.5.5, Excavation B2127, Page 4-296 and Appendix A - Soil Screening Data: The text indicates that the soil screening sample collected at Excavation B2127 was used to add benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene to the list of COPCs, but the list of analytical results for the soil screening sample in Appendix A only includes metals. Please resolve this discrepancy.

Response: The soil screening sample data for PAHs are not available. However, samples collected at this excavation completely bound the PAH contamination.

26. Comment: Section 4.6.1, Excavation 24-1, Figure 24-1 B: At Station PA24B003 the 9.25 foot manganese exceedance is still in place, even though the sample is crossed out. Manganese was detected above the cleanup goal at Station PA24B003 at depths of 1.75, 6.75, and 9.25 ft bgs, but the excavation depth was only 8 ft bgs. Please revise Figure 24-1 B to include a notation explaining that the manganese exceedance at Station PA24B002 at 9.25 ft bgs remains in place. Also, please explain how the weighted average concentration for manganese was calculated.

Response: The convention used on the CSR figures was that if any sample at a point location was removed, that location was marked as removed. It is correct that the 9.25-foot sample remains in place. Removed/not removed status is maintained by individual sample in the HPS database. Details of the average manganese calculation protocol are contained in the September 11, 2001 final manganese site proposal ([Tetra Tech 2001a](#)). Discussions of ambient metals concentrations, including manganese, are part of the ongoing evaluations for the TMSRA for Parcel B.

27. **Comment:** Section 4.6.2, Excavation 24-2, Page 4-328: The text states that “confirmation samples collected at Excavation B3114 were also used to delineate the extent of contamination at Excavation 24-2,” but these sample results were not posted on Figure 24-2. Please post the relevant sample results on Figure 24-2.

Response: All data used in the delineation analysis are posted on the figure; the cited sentence is not applicable and will be removed from the final CSR.

28. **Comment:** Section 4.6.3, Excavation 24-3, Page 4-338 and Appendix A - Waste Profiling Data: It is unclear why certain analytes were not included as COPCs at this excavation. Benzo(a)anthracene (2.2 mg/kg), benzo(a)pyrene (2.2 mg/kg), benzo(b)fluoranthene (2.2 mg/kg), benzo(k)fluoranthene (2.2 mg/kg), dibenz(a,h) anthracene (2.2 mg/kg), indeno(1,2,3-cd)pyrene (2.2 mg/kg), and pentachlorophenol (11.0 mg/kg) were detected above their cleanup goals in the waste profile sample collected during the excavation process. As described in the RDA, analytes detected above their cleanup goals in the soil screening or waste profile results should be added as COPCs at the appropriate excavation. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

29. **Comment:** Section 4.6.3, Excavation 24-3, Figure 24-3: It is unclear why this figure indicates that the detection of Aroclor-1260 in boring IR46B017 remains in place after the excavation was completed. The Aroclor-1260 detected at 1.75 ft bgs should have been removed because the excavation depth was 3 ft bgs. Please resolve this discrepancy.

Response: Boring IR46B017 will be shown as removed on [Figure 24-3](#).

30. **Comment:** Section 4.6.4, Excavation 24-4, Figure 24-4: It is unclear whether the excavation was sufficient to remediate benzo(b)fluoranthene and benzo(k)fluoranthene. The RI sample station samples had detection limits in excess of their cleanup goal of 0.34 mg/kg at a depth of 3.75 feet. The maximum depth of the excavation was 3 feet bgs. Please explain.

Response: PAH detection limits that were greater than the soil cleanup level were not investigated unless the detection limit exceeded 3 milligrams per kilogram (mg/kg). This was in accordance with the RDA, Appendix 6:

Sites where remedial investigation (RI) reporting limits for PAHs were elevated to 3 mg/kg or greater were considered for sampling in the phase I investigation. The reporting limit of 3 mg/kg is approximately 10 times greater than the 0.33-mg/kg contract-required quantitation limit (CRQL) for PAHs required by the Contract Laboratory Program (CLP) semivolatile organic analysis (SVOA), and the lowest-concentration soil cleanup values in the ROD ESD dated May 4, 2000, for heavy molecular weight PAHs at Parcel B. The gas chromatography/mass spectrometry method used in the CLP SVOA can typically report qualitatively reliable (though quantitatively estimated) results about 10 times lower than the CRQL, depending on the concentration and type of interference in the particular sample.

31. Comment: **Section 4.6.4, Excavation 24-4, Page 4-345 and Appendix A - Waste Profile Data: It is unclear why pentachlorophenol is not included as a COPC at this excavation. Pentachlorophenol was detected at a concentration of 2.8 mg/kg in the waste profile results presented in Appendix A, however, this analyte was not included as a COPC. As described in the RDA, analytes detected above their cleanup goals in the soil screening or waste profile data should be added as COPCs for the appropriate excavation. Therefore, please provide confirmation sampling data for this analyte, if available or collect samples to verify that contamination does not extend beyond the excavation boundaries.**

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

32. Comment: **Section 4.6.4, Excavation 24-4, Figure 24-4 and Section 1.0, Figure 1-2: There appears to be a discrepancy between Figure 24-4 and Figure 1-2. Excavation 24-4 does not appear to be the same shape on Figure 1-2 as it is on Figure 24-4. Please resolve this discrepancy.**

Response: [Figure 24-4](#) is correct; [Figure 1-2](#) is incorrect and will be revised.

33. Comment: **Section 4.6.5, Excavation 24-5, Figure 24-5: It is unclear why Excavation 24-5 was not centered around boring IR46B027, where the exceedance of manganese (4,780 mg/kg) was located; the center of the excavation appears to be 7 or 8 feet northwest of this boring.**

Confirmation samples were not collected east or northeast of this exceedance. The confirmation sampling strategy as outlined in the RDA was not followed at this excavation because the excavation and samples were not centered on the original exceedance. It also appears that the remedial action objectives have not been met because the horizontal extent of contamination was not defined to the east or northeast. Please collect additional samples at a depth of 1.75 feet to the northeast and east to verify that the excavation was sufficient.

Response: Excavation 24-5 appears to have been mislocated approximately 7 feet west of the ideal location. However, considering the uniformly low concentrations of COPCs found in all the samples at this excavation, it is unlikely that any significant contamination was overlooked. No additional sampling is planned prior to a ROD amendment.

34. Comment: Section 4.6.6, Excavation 24-6, Page 4-360 and Appendix A - Waste Profile Data: It is unclear why certain analytes are not included as COPCs at Excavation 24-6. The text indicates that 11 soil screening and waste profile samples were collected to guide the excavation process, but does not mention that benzo(a)anthracene (1.1 mg/kg), benzo(a)pyrene (1.1 mg/kg), benzo(b)fluoranthene (1.1 mg/kg), benzo(k)fluoranthene (1.1 mg/kg), dibenz(a,h)anthracene (1.1 mg/kg), indeno(1,2,3-cd)pyrene (1.1 mg/kg), and pentachlorophenol (5.6 mg/kg) were detected in the waste profile samples above their cleanup goals. This data suggests that the soil in Excavation 24-6 was contaminated with these compounds, but because they were not COPCs, the extent of contamination was not delineated. Therefore, it is not known if the excavation was sufficient to remediate the contamination or satisfy the remedial action objectives. Additionally, the RDA indicates that analytes detected above their cleanup goals in the soil screening or waste profile data should be added as COPCs. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

35. Comment: Section 4.6.7, Excavation 24-8, Page 4-371 to 4-372 and Appendix A - Soil Screening and Waste Profile Data: It appears that some analytical results were omitted from Appendix A. The text on page 4-372 indicates that 44 soil screening and waste profile samples were

collected during the 1998 to 1999 RA and that the analytical results for these samples are presented in Appendix A. It also states that the results of the waste profile samples were used to add benzo(a)anthracene, and benzo(a)pyrene as COPCs. However, Appendix A includes only analytical results for the metals detected in 9 soil screening samples. Please provide all analytical results for the 44 soil screening and waste profile samples collected during the 1998 to 1999 RA including the waste profile samples that were used to add benzo(a)anthracene and benzo(a)pyrene as COPCs.

Response: The text should have indicated that 14, not 44, soil screening and waste profile samples were collected during the 1998 to 1999 RA. The text will be corrected accordingly. [Appendix A](#) contains the results for these samples. Benzo(a)anthracene and benzo(a)pyrene were added as COPCs based on the results of a full-suite PAH analysis conducted on sample 2408FL4. Samples 2408FL1 through 2408FL9 were collected for additional characterization of fuel contamination in the area. Results for sample 2408FL4 are included in the data table in [Section 4.6.7](#).

36. Comment: **Section 4.6.7, Excavation 24-8, Figure 24-8 C: It does not appear that the weighted average concentration of manganese has been calculated correctly. When all of the crossed out samples are excluded, the average is 1,071 mg/kg, not 1,000 mg/kg. It is unclear why the results for sample 2408BC3, depth 10 feet are listed twice; however, if this sample is used an additional 5 times, the weighted average is 1,028 mg/kg. Please check the calculation of the weighted average.**

Response: Details of the average manganese calculation protocol are contained in the final manganese site proposal ([Tetra Tech 2001a](#)). Only one result for sample 2408BC3 should have been shown on the manganese delineation map, [Figure 24-8 E](#); this figure will be revised accordingly. Discussions of ambient metals concentrations, including manganese, are part of the ongoing evaluations for the TMSRA for Parcel B.

37. Comment: **Section 4.6.8, Excavation 24-9, page 4-448: The text states that “confirmation samples collected for Excavation B3916 were also used to delineate the extent of contamination at Excavation 24-9,” but samples from Excavation B3916 were only analyzed for zinc and the COPCs for Excavation 24-9 were diesel range organics, gasoline range organics, manganese, and trichloroethene. Also, none of the samples in the B3916 area are shown on Figures 24-9A or 24-9B. There is no data to indicate that samples from Excavation B3916 were used to delineate the extent of contamination in Excavation 24-9. Please either provide the data to support this statement and place it on the figures or delete this statement.**

Response: All data used in the delineation analysis are posted on the figure; the cited sentence is not applicable and will be removed from the text.

38. Comment: **Section 4.6.9, Excavation B2414, Page 4-458 and Appendix A - Waste Profile Data:** It is unclear why certain analytes are not included as COPCs at Excavation B2414. Benzo(a)anthracene (2.7 mg/kg), benzo(a)pyrene (2.7 mg/kg), benzo(b)fluoranthene (2.7 mg/kg), benzo(k)fluoranthene (2.7 mg/kg), dibenz(a,h)anthracene (2.7 mg/kg), indeno(1,2,3-cd)pyrene (2.7 mg/kg), and pentachlorophenol (14.0 mg/kg) were detected above their respective cleanup goals in the waste profile data presented in Appendix A. This data suggests that the soil in Excavation B2414 was contaminated with these compounds, but because they were not COPCs, the extent of contamination was not delineated. Therefore, it is not known if the excavation was sufficient to remediate the contamination or satisfy the remedial action objectives regarding removal of contamination. Additionally, the RDA indicates that analytes detected above their cleanup goals in the soil screening or waste profile data should be added as COPCs. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

39. Comment: **Section 4.6.9, Excavation B2414, Figures B2414 A and B:** The extent of Aroclor-1260 at this excavation was not completely delineated. Aroclor-1260 was detected in boring IR46B032 at a depth of 6.25 ft bgs (0.48 mg/kg), but no other confirmation samples were collected from this depth at this excavation. The sampling strategy does not comply with the spirit of the RDA, and the horizontal extent of contamination in every direction at 6.25 feet is undefined. Also, it is unclear from Figure B2414B why mercury was a COPC for this excavation. Please clarify.

Response: The horizontal extent of Aroclor-1260 detected in the sample at 6.25 feet below ground surface (bgs) in boring IR46B032 is bounded by the eight sidewall composite samples and discrete samples 2414E1A and 2414W1A. The discrete samples were collected east and west of sample 2414SNA, which exceeded the cleanup goal; the seawall and the termination of subsurface soil prohibited excavation farther north. Mercury exceeded the soil cleanup level in the waste profile sample so mercury was added as a COPC for this excavation. The Navy met the RD and RDA sampling requirements for this excavation.

40. Comment: Section 4.6.10, Excavation B2614, Page 4-466 and Appendix A - Soil Screening Data: It is unclear why dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene were not included as COPCs at this excavation. These analytes were detected at concentrations (0.42 mg/kg and 0.36 mg/kg, respectively) above their cleanup goals in the soil screening samples collected during the 1998 to 1999 RA. It appears that the excavation should have been based on these two analytes rather than the selected PAHs, but they were not included as COPCs. The RDA indicates that analytes detected above their cleanup goals in the soil screening and waste profile data should be added as COPCs at the appropriate excavation. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: The analytical suite for the bounding samples at Excavation B2614 should have included dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene as COPCs. None of the five PAH compounds listed as COPCs detected in the original RI boring (IR46B031) exceeded soil cleanup levels; detected PAH concentrations were often 5 to 20 times lower than the soil cleanup levels. Consequently, it is unlikely that dibenz(a,h)anthracene or indeno(1,2,3-cd)pyrene would exceed soil cleanup levels. No additional sampling is planned prior to a ROD amendment.

41. Comment: Section 4.6.11, Excavation B2616, Page 4-470 and Appendix A - Waste Profile Data: Thirteen analytes detected above their cleanup goals in the waste profile samples collected at this excavation were not included as COPCs: Aroclor-1016 (0.86 mg/kg), Aroclor-1221 (1.7 mg/kg), Aroclor-1232 (0.86 mg/kg), Aroclor-1248 (0.86 mg/kg), Aroclor-1254 (0.43 mg/kg), Aroclor-1260 (0.43 mg/kg), benzo(a)anthracene (0.86 mg/kg), benzo(a)pyrene (0.86 mg/kg), benzo(b)fluoranthene (0.86 mg/kg), benzo(k)fluoranthene (0.86 mg/kg), dibenz(a,h)anthracene (0.86 mg/kg), indeno(1,2,3-cd)pyrene (0.86 mg/kg), and pentachlorophenol (4.3 mg/kg). This data suggests that the soil in Excavation B2616 was contaminated with these compounds, but because they were not COPCs, the extent of contamination was not delineated. Therefore, it is not known if the excavation was sufficient to remediate the contamination and satisfy the remedial action objectives. As described in the RDA, analytes detected above their cleanup goals in the soil screening and waste profile data should be added as COPCs at the appropriate excavation. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

42. Comment: **Section 4.6.11, Excavation B2616, Figure B2616:** The extent of Aroclor-1242 near location 2616B1 was not completely delineated. At this location, Aroclor-1242 was detected above its cleanup goal at depths of 6.25 and 7.25 ft bgs (0.88, 2.6 mg/kg), but there do not appear to be any other confirmation samples at these depths at this excavation. This location is only 2 feet from the western excavation boundary, so it is possible that contamination extends beyond the excavation boundary. It is also unclear if the underground vault extended below the 10 foot excavation depth. Please discuss whether the underground vault extended below 10 feet. If so, please either extend the excavation west of 2616B1 or collect confirmation samples from 6.25 feet and 7.25 ft bgs at the 5 foot step out distance west-northwest of 2616B1. If the vault did not extend below 6.25 feet, please propose a solution that would result in delineation of the extent of contamination and excavation of contaminated soils to the north, east and south.

Response: As a bottom sample, the delineation from location 2616B1 is downward, not westward. The bottom composite sample collected at 10 feet bgs at location 2616BC1 bounds the bottom of the excavation. Samples from locations 2616SWA and 2616W1A bound the western sidewall. The underground vault extends to 8 feet bgs. No additional sampling is planned prior to a ROD amendment.

43. Comment: **Section 4.6.12, Excavation B2715, Page 4-478 and Figure B2715 A:** It is difficult to discern whether or not the extent of PAHs near Station 2715E1A has been delineated. The text on page 4-478 states that “confirmation samples collected for Fuel Line A were also used to delineate the extent of contamination at Excavation B2715”, but the adjacent excavation depths and confirmation sample data are not provided on this figure. Also, the Fuel Line A figure is at a very different scale. Please display the excavation depths for Excavation Fuel Line A1 and Excavation Fuel Line A2 on this figure and include any confirmation sample locations and results associated with these two excavations that were used to help delineate the extent of PAH contamination in the vicinity of Station 2715E1A.

Response: Samples 460N1A, 4600SEK, 4600SWK, and 4600B01 bound the PAH contamination at sample 2715E1A. All PAH results at these samples were lower than the soil cleanup levels. Segment A1 of Fuel Line A was excavated to 5 feet bgs; segment A2 was excavated to 10 feet bgs.

44. Comment: Section 4.6.12, Excavation B2715, Figure B2715 A: The extent of PAHs in the vicinity of Stations 2715W1C, 2715W2C, 2715W3C, and 2715W4C (sidewall samples) at 1.25 ft bgs have not been completely delineated. The detected concentrations of PAHs at station 2715W2C were more than an order of magnitude higher than the cleanup goals (4.2-5.5 mg/kg). There were no confirmation samples along the southern edge of this excavation at this depth. The sampling strategy employed at this excavation was not in compliance with the RDA. As described in the RDA, subsequent stepout samples were to be collected at the same depth as the initial sample, approximately 5 feet beyond the initial location. For example, PAHs were detected above their cleanup goals in samples collected from Station 2715W1B, but subsequent stepout samples were collected more than 5 feet to the north and south of this location and were not collected from the same depth. At other locations, the excavation was extended, but no stepout or confirmation samples were collected. Therefore, the extent of contamination has not been defined at this excavation. Please explain why the excavation was extended beyond the confirmation sample locations and collect confirmation samples as required by the RDA to the north of 2715W1C, 2715W2C, 2715W3C, and 2715W4C and southeast of 2715W1C at the 1.25 foot depth.

Response: The excavation appears to extend beyond the confirmation sample locations on the west and north sidewalls because the excavation was advanced for other COPCs (copper and zinc) and new sidewall samples from these extended locations were not analyzed for the PAHs shown on [Figure B2715A](#), in accordance with the RDA. Samples 2715W2B, -W3B, -W4B, and -W5B bound the PAH contamination along the north sidewall. Samples 2715S1A, -S1E, and -S2A bound the PAH contamination along the south sidewall. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not required by the RDA. Likewise, the RDA does not require that the stepout horizontal location be exactly in line at exactly 5 feet from the location of a sample that exceeded cleanup goals. The Navy met the RDA sampling requirements for this excavation.

45. Comment: Section 4.6.12, Excavation B2715, Figure B2715 B: The extent of copper and zinc at 1.25 ft bgs at this excavation was not completely delineated. Copper (1,900 mg/kg) and zinc (1,500 mg/kg) were detected at Station 2715W1G at a depth of 1.25 ft bgs, but there are no confirmation samples at this depth west of this location. Also,

copper (360 mg/kg) and zinc (550 mg/kg) were detected above their cleanup goals at Station 2715W1D at a depth of 4.25 ft bgs, but there are no confirmation samples at this depth to the south, southwest or southeast of this location. The sampling strategy employed at this excavation did not comply with the RDA. As described in the RDA, subsequent stepout samples were to be collected at the same depth as the initial sample, approximately 5 feet beyond the initial location. For this excavation, subsequent stepout samples were collected at distances greater than 5 feet from Station 2715W1G and were not collected from the same depth as the initial sample and were not collected southwest or west of 2715W1D. Therefore, the extent of contamination was not defined and it is not possible to determine if the remedial action objectives were met. Please collect samples to verify that contamination does not extend beyond the excavation boundaries at the 1.25 and 4.25 foot depths in the western portion of this excavation.

Response: Samples 2715W2G and -W2D bound the western extent of copper and zinc contamination. Location 2715W2G is about 5.5 feet from the sample location that exceeded the cleanup goal, -W1G. Likewise, samples at location 2715S1D bound the southern extent of contamination. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. The RDA specifies the following:

“The depth of each sample initially collected at a proposed location will be randomly selected from a depth near or below the depth where contamination was detected or from 1 foot bgs and the excavation floor. All subsequent stepout samples behind this location will be collected at about the same depth as the initial sample, approximately 5 feet behind the initial location.”

Likewise, the RDA does not require that the stepout horizontal location be exactly in line at exactly 5 feet from the location of the sample that exceeded cleanup goals. The Navy met the RDA sampling requirements for this excavation.

46. Comment: Section 4.6.14, Excavation B2918, Figure B2918: The extent of benzo(a)pyrene (1.3 mg/kg), benzo(b)fluoranthene (1.4 mg/kg), benzo(k)fluoranthene, (1.4 mg/kg) and indeno(1,2,3-cd)pyrene (0.51 mg/kg) at 1.75 feet have not been determined to the east, northeast or north of soil boring IR10MW31A1D. It is not clear why this excavation was not centered around this boring; the boring is located in the extreme northeast corner (about 2 feet from the eastern boundary and 3 feet from the northern boundary) of this excavation. It is also unclear why sampling was not done to the east, northeast or southeast of this boring. Sampling procedures outlined in the RDA

were not followed at this excavation; the sampling locations and excavation were offset to the southwest. As a result, the horizontal extent of contamination was not delineated to the north, northeast or east, and it appears that the remedial action objectives were not met. Also, the original RI station sample had data from only two depth intervals, 1.75 feet where contamination was detected and 6.75 feet where concentrations were below levels of concern. For this reason it is not clear why the Navy stopped the excavation at 2 feet. Also, it is unclear whether the excavation was sufficient to remediate benzo(k)fluoranthene and benzo(b)fluoranthene as detection limits exceeded the cleanup goals at 6.75 feet. Please extend the excavation to the east, north and northeast with the proper confirmation samples or collect stepout samples 5 feet north, east and northeast of IR10MW31A1D to verify that contamination does not extend beyond the excavation boundary.

Response: Excavation B2918 appears to have been mislocated approximately 7 feet west of the ideal location. However, considering the uniformly low concentrations of COPCs found in all the samples at this excavation, it is unlikely that any significant contamination was overlooked. Composite confirmation samples 2918SNA and -SEA bound the northern and eastern sidewalls. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. PAH detection limits (0.37 mg/kg) in the 6.75-foot sample only slightly exceeded soil cleanup levels. PAH detection limits that were greater than the soil cleanup level were not investigated unless the detection limit exceeded 3 mg/kg. This was in accordance with the RDA, Appendix 6. Excavation to 2 feet bgs was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

47. Comment: Section 4.6.15, Excavation B3114, Page 4-507 and Appendix A - Waste Profile Data: Benzo(a)anthracene, dibenz(a,h)anthracene, and pentachlorophenol are not considered COPCs at this excavation, but these three analytes were detected at concentrations above their cleanup goals (1.1 mg/kg, 1.1 mg/kg, and 5.6 mg/kg respectively) as indicated in the waste profile data presented in Appendix A. This data suggests that the soil in Excavation B3114 was contaminated with these compounds, but because they were not COPCs, the extent of contamination was not delineated, so it is not known if the excavation was sufficient to remediate the contamination. The RDA indicates that if analytes are detected above their cleanup goals in the soil screening or waste profile data that they should be added as COPCs to the appropriate excavation. Furthermore, it is not possible to determine whether the remedial action objectives were met at this

excavation because the extent of contamination has not been defined. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

48. Comment: **Section 4.6.15, Excavation B3114, Page 4-508 and Figure B3114 A: It is unclear whether the excavation was sufficient to remediate benzo(a)pyrene. All four 3 foot depth bottom composite samples had detection limits (0.35 U mg/kg, 0.75 U mg/kg, 0.77 U mg/kg, and 1.6 U mg/kg) that exceeded the cleanup goal of 0.33 mg/kg. Please collect confirmation samples from just below the bottom of the excavation to verify that the excavation was extended to a sufficient depth.**

Response: PAH detection limits that were greater than the soil cleanup level were not investigated unless the detection limit exceeded 3 mg/kg. This approach was in accordance with the RDA, Appendix 6.

49. Comment: **Section 4.6.16, Excavation B3415, Page 4-522 and Figure B3415: The extent of Aroclor-1260 was not delineated because the Navy believed it unnecessary since this excavation is included within the Fuel Line A7 excavation; as a result, it is unclear if sufficient excavation was done. Contamination was originally detected at a depth of 2.25 feet. Confirmation samples collected for the fuel line excavation were used to evaluate whether the excavation was sufficient to remediate Aroclor-1260, but no confirmation samples were collected south of the B3415 area at a depth of 2.25 feet, so it is unclear if excavating 7 feet beyond the original boring was sufficient. While the sampling strategy employed at this excavation appears to follow the procedures outlined in the RDA, it is not possible to determine if the remedial action objectives have been met because the horizontal extent of contamination was not defined. Please collect a confirmation sample to the south at a depth of 2.25 feet or explain how the Navy intends to address this deficiency.**

Response: Composite confirmation sample 4600SS13 bounds the southern extent of contamination. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. The Navy met the RD and RDA sampling requirements for this excavation. No additional sampling is planned prior to a ROD amendment.

50. Comment: Section 4.6.18, Excavation B3614, Figure B3614: It is not clear why the excavation was stopped at 2 feet below ground surface. The original RI sample and subsequent sampling did not adequately characterize the extent of PAHs beyond 1.75 feet depth.

Response: Excavation to 2 feet bgs was in accordance with the RD and encompassed the contamination detected in the RI sample collected at 1.75 feet bgs. Confirmation samples from the excavation sidewalls and floor did not indicate any COPCs at concentrations above cleanup goals.

51. Comment: Section 4.6.19, Excavation B3718, Page 4-535: Manganese was detected in boring PA24B007 (2,320 mg/kg) at 6.75 ft bgs, but samples were not collected west of this boring at a comparable depth. It should also be noted that the excavation depth was only 5 ft bgs, so the 6.75 foot exceedance remains in place. Manganese was also detected at Station 3718S1B at a depth of 2.75 ft bgs, but there were no confirmation samples to the west or south at this depth. Manganese was also detected in samples from Stations 3718SEA, 3718E1A, 3718N1A, 3718E2A, and 3718E3A at depths of 3.00 to 3.75 ft bgs, yet there are no confirmation samples to the north. It appears that excavation was done without delineating the extent of contamination since there are no samples northeast or southeast of the 2000 to 2001 excavation area at all. As a result, the extent of contamination is unbounded and it is not clear how a weighted average concentration can be reliably calculated. Please explain how the weighted average concentration was calculated and also explain why this average should be considered reliable when the extent of contamination was not delineated. Also, the confirmation sample for cadmium was not collected in the vicinity of the original RI sample station in which cadmium was elevated.

Response: The 6.75 feet bgs sample at boring PA24B007 does remain in place. The Navy will evaluate the most efficient means to characterize manganese concentrations that may extend below 5 feet bgs. Details of the average manganese calculation protocol are contained in the final manganese site proposal ([Tetra Tech 2001a](#)). Part of the intent of the manganese site proposal was to address the ongoing inability to delineate excavations to the 1,400-mg/kg cleanup level. Cadmium was not detected in any samples collected from RI boring PA24B007 or from the 1998 to 1999 excavation. Cadmium was added as a COPC based on a concentration that was observed during a full-suite metals analysis at location 3718S1A. Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.

52. Comment: Section 4.6.20, Excavation B3914, Text, Figures and Appendix A - Waste Profile Data: It is unclear why certain analytes detected above their cleanup goals were not considered COPCs for this excavation. Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)-fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected at a concentration of 0.55 mg/kg in the waste profile samples. Additionally, pentachlorophenol was detected at a concentration of 2.7 mg/kg in the waste profile samples. As stated in the RDA, analytes detected above their cleanup goals in the soil screening and waste profile samples should be added as COPCs at the appropriate excavation. Therefore, it is not possible to determine whether the remedial action objectives have been met at this excavation because the extent of contamination was not defined. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries. Also, did this excavation go deep enough? The bottom confirmation sample at 5 feet (3914B0A) appears to have been excavated. The excavation was then extended to 6 feet. Bottom confirmation samples at 6 feet including 3914BC2 and 3914BC1 are also crossed out indicating they were excavated. Where is the final bottom confirmation sample at 6 feet indicating the bottom of the excavation is clean?

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels. Bottom composite samples 3914BC1 and -BC2 demonstrate that the excavation bottom, at 6 feet bgs, was clean. However, the entire area was later excavated to 10 feet bgs for Fuel Line B; therefore, these samples were marked as removed. Refer to the data tables and figures for Fuel Line B for additional bottom composite sample data in the general vicinity of Excavation B3914.

53. Comment: Section 4.6.20, Excavation B3914, Figure B3914 A: It does not appear that the extent of copper in the vicinity of boring PA24MW03AD was completely delineated. Copper was detected at this location at a depth of 4.25 ft bgs (537 mg/kg). However, there were no confirmation samples at this depth, so it is not possible to determine if the excavation was sufficient to remove all of the soil contaminated with copper to the north, northeast and east of this location. The spirit of the RDA was not followed and it is impossible to determine whether the remedial action objectives have been met, because the horizontal extent of contamination at 4.25 feet remains undefined. Please collect samples from the 4.25 foot depth to the north, northeast and east of this location.

Response: Excavation B3914 extended to 5 feet bgs during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of copper concentrations in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. The Navy met the RD and RDA sampling requirements for this excavation. No additional sampling is planned prior to a ROD amendment.

54. Comment: **Section 4.6.21, Excavation B3916, Page 4-558:** The text indicates that **Appendix A contains the analytical results for the screening soil sample collected from this excavation but Appendix A does not appear to contain this information. Please provide the soil screening sample analytical results in Appendix A for Excavation B3916.**

Response: Excavations B3916 and 24-9 merged and the soil screening sample for this area is listed under Excavation 24-9 in [Appendix A](#).

55. Comment: **Section 4.6.21, Excavation B3916, Page 4-558 and Figure 3916:** The text states that “confirmation samples collected for Excavation 24-9 were also used to delineate the extent of contamination at Excavation B3916,” but the samples collected at Excavation B3916 were only analyzed for zinc while the COPCs for Excavation 24-9 were diesel range organics, gasoline range organics, manganese, and trichloroethene. Also, none of the samples in the 24-9 area are shown on Figure B3916. There is no data in the data tables to indicate that samples from Excavation 24-9 were used to delineate the extent of contamination in Excavation B3916. Please either provide the data to support this statement and include this data on the figure or delete the quoted statement from the text.

Response: All data used in the delineation analysis are posted on the figure; the cited sentence is not applicable and will be removed from the final CSR.

56. Comment: **Section 4.6.23, Excavation B4018, Page 4-569 and Appendix A - Waste Profile Data:** The waste profile results in Appendix A indicate that benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were detected at 0.55 mg/kg and pentachlorophenol was detected at 2.8 mg/kg, but these analytes were not considered COPCs for this excavation.. As stated in the RDA, analytes detected above their cleanup goals in the soil screening and waste profile analytical results should be added as COPCs at the appropriate excavation. Please provide data for these compounds if it is available or collect samples to verify that contamination does not extend beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical results should have included a “U” qualifier indicating that the analytes were not detected. The waste profile samples did not exceed soil cleanup levels.

57. Comment: **Section 4.6.23, Excavation B4018, Page 4-569:** The text states that “confirmation samples collected for Fuel Line C were also used to delineate the extent of contamination at Excavation B4018,” but figures B4018A and B4018AB do not include any data from Fuel Line C. Also, Fuel Line C Figure B does not have any samples in close proximity to this excavation or at the same depth and there is no lead data on any of the Fuel Line C figures or in the table. Please either provide the data to support this statement and include the data on the figure or delete the quoted statement from the text.

Response: All data used in the delineation analysis are posted on the figure; the cited sentence is not applicable and will be removed from the final CSR.

58. Comment: **Section 4.6.24, Excavation B4113, Page 4-585:** The text states “confirmation samples collected for Fuel Line B were also used to delineate the extent of contamination at Excavation B4113,” but there are no Fuel Line B samples posted on the B4113 figures. An examination of the Fuel Line B figures indicates that of the samples closest to Excavation B4113, all but three Fuel Line B samples were collected at greater depths than the B4113 detections and cannot be considered relevant. Please post the data from Fuel Line B samples 4600SE19, 4600SW19 and 460E1BG on the B4113 figures or delete the quoted statement.

Response: All data used in the delineation analysis are posted on the figure; the cited sentence is not applicable and will be removed from the final CSR.

59. Comment: **Section 4.6.24, Excavation B4113, Figures B4113A and B4113B:** The extent of benzo(a)anthracene (0.56 mg/kg) and benzo(a)pyrene (0.53 mg/kg) at 2.5 ft bgs has not been delineated north and northeast of station B4113SNA. No samples have been collected north of this location for either the B4113 or Fuel Line B excavation. It is likely that there is a layer of PAH contaminated soil at 2.5 feet, because PAHs have also been detected above the cleanup goal in three samples collected from the 2.5 foot depth south of station B4113SNA. PAHs were detected in samples collected from 2.5 feet from stations 4113SSA and from Fuel Line B stations 4600SE19 and 4600SW19. Because of these detections and the fact that the extent of PAH contamination north and northeast of station B4113SNA has not been

delineated, it does not appear that the horizontal extent of contamination has been defined and subsequently that the remedial action objectives regarding removal of material containing compounds of concern at concentrations exceeding cleanup standards have been met. Please collect confirmation samples along the northern boundary of the Fuel Line B4 excavation in the vicinity of B4113 from a depth of 2.5 feet to verify that PAH contamination does not extend beyond the excavation boundary.

Response: Is it not correct to assume that a layer of contamination at 2.5 feet bgs exists because all the samples cited were composite samples that represent varying depth intervals. The northern extent of Excavation B4113 and Fuel Line segment B4 was limited by the seawall bounding San Francisco Bay. Consequently, no additional soil remains to be sampled north of the excavation.

60. Comment: Section 4.7.4, Excavation B4417, Page 4-612: The extent of copper contamination at Excavation B4417 was not completely delineated. Copper was detected at 744 mg/kg (above its cleanup goal of 160 mg/kg) at a depth of 1.75 ft bgs, however, the sidewall confirmation samples surrounding it were all collected from a depth of 4 ft bgs. Therefore, it is unclear if the horizontal extent of contamination has been defined and if the remedial action objectives have been met. Please collect confirmation samples from a depth of 1.75 feet beyond the excavation boundaries to the northeast, southeast, southwest, and northwest to verify that contamination does not extend beyond the excavation boundaries.

Response: Excavation B4417 extended to 7 feet bgs during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of copper concentrations in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

61. Comment: Section 4.7.5, Excavation B4715, Figure B4715: It does not appear that the extent of arsenic (15.9 mg/kg) and manganese (2,540 mg/kg) contamination at Excavation B4715 was completely delineated. Both analytes were detected in the original IR sample at a depth of 6.25 ft bgs, however, none of the sidewall confirmation samples at this site are from this depth. The excavation side walls were sloped, so the excavation only extended 3 to 4 feet beyond this sample location to the east, northeast and northwest. It is unclear whether the remedial

action objectives have been met because the horizontal extent of contamination was not defined.

Response: This excavation extended below the target sample during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of contamination in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. No additional sampling is planned prior to a ROD amendment.

62. Comment: **Section 4.7.6, Excavation B4815, Page 4-621: The text indicates that Appendix A contains the analytical results for the screening and waste profile samples, but the analytical results for the nine soil screening and waste profile samples are missing from Appendix A. Please provide the missing analytical results in Appendix A.**

Response: Screening soil sample data for Excavation B4815 immediately follow the data for Excavation B4715 in [Appendix A](#); however, the bookmark indicating this location was inadvertently omitted. [Appendix A](#) will be revised accordingly.

63. Comment: **Section 4.7.7, Excavation EE-04C, Figure EE-04C: The extent of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene was not completely delineated. These contaminants were detected at 1.75 ft bgs in boring IR26B014 (0.43, 0.46, 0.41, and 0.57 mg/kg, respectively). Additionally, benzo(a)anthracene, and benzo(b)fluoranthene were detected at 1.25 ft bgs at Station IR26B022 (1.2 and 1.1 mg/kg, respectively). Similarly, the extent of motor oil range organics was not delineated; motor oil range organics were detected in samples from boring IR26B022 (6,000 mg/kg and IR26B014 (4,300 mg/kg) at depths of 1.25 and 1.75 ft bgs respectively. However, there were no delineation samples at these depths; the shallowest samples were collected at depths of 3.25, 3.5 and 3.75 feet. The sampling process does not meet the minimum requirements of the RDA because no samples were collected at depths less than 3.25 feet and the horizontal extent of contamination was not delineated northeast, east and southeast of IR26B022 or north, west, southwest and south of IR26B014. Therefore, it is probable that contamination extends beyond the excavation boundary and it is not possible to determine if the remedial action objectives were met because there is no data. Please extend the excavation northeast, east and southeast of IR26B022 and north, west, southwest and south of IR26B014 and collect**

confirmation samples from depths of 1.25 and 1.75 feet or collect sufficient delineation samples from depths of 1.25 and 1.75 feet to demonstrate that all of the contaminated soil has been removed. Also, please delete the statement on page 4-626 that “the RA at excavation EE-04C has been completed,” as this cannot be demonstrated with the available data.

Response: No samples were collected at EE-04C during either phase of the Parcel B RA. Data from all the exploratory excavations at Parcel B were considered during preparation of the RD. Only EE-02 and EE-05 were identified during the RD as requiring additional remediation. The Navy interpreted past approval of the RD and RDA as assent that the other exploratory excavations did not require additional remedial action. Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B. Also refer to the response to EPA General Comment 8.

64. Comment: Section 4.7.8, Excavation EE-05, Page 4-628 and Figure EE-05 A: The extent of lead contamination was not completely delineated at this excavation:

64a. Comment: Lead was detected at Stations EE0506 (646 mg/kg) and IR26B020 (233 mg/kg) at depths of 2 ft bgs and 1.75 ft bgs, respectively. However, confirmation samples were not collected from this depth to the south of these locations. No delineation or confirmation (sidewall) samples were collected south of IR26B020 at all; it appears that the excavation was simply extended an arbitrary distance beyond existing sampling locations, regardless of whether there were any detections. Also, it appears that the distance between sidewall samples EE0509 and EE09529 was about 60 feet. The sampling program does not appear to comply with the RDA. Please collect confirmation samples from 1.75 to 2 feet depth along the southern excavation boundary.

Response: Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Lead contamination was bounded along the southern sidewall of the original excavation at locations EE0509 and EE0520. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

64b. Comment: Lead was detected above its cleanup goal at Station EE0511 (2,090 mg/kg) at a depth of 3 ft bgs, but there are no confirmation samples to the west or northwest of this location at this depth. The original excavation extended about 3 feet north of this location; the closest new

excavation boundary is about 6 feet to the northwest. There are no delineation samples at a similar depth to the west or northwest at all nor are there confirmation (sidewall or bottom composite) samples (except a single sample collected from 5.25 feet). Please collect confirmation samples along the west and northwest excavation boundary in the vicinity of EE0511 at a depth of 3 feet.

Response: Lead contamination at location EE0511 is bounded to the north by samples from locations EE05N1A and -N1B. Sampling depths for stepout samples -N1A and -N1B were in accordance with specific depth intervals listed in the RDA. Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Samples were not collected to the west because sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

65. Comment: Section 4.7.8, Excavation EE-05, Page 4-628 and Figure EE-05 C: The extent of arsenic and mercury contamination was not completely delineated in this excavation:

65a. Comment: In the southwest corner of this excavation, mercury was detected in samples collected from Stations EE0507, EE0506, EE0505, and EE0504 at a depth of 2 ft bgs (at 7.5, 44, 4.5, and 2.4 mg/kg, respectively) but no confirmation samples were collected at this depth in the area surrounding these locations. Please collect confirmation samples at a depth of 2 feet along the western and southern boundaries of this excavation to confirm that contamination does not extend beyond the excavation boundary.

Response: Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Mercury contamination at the cited locations was bounded to the south at locations EE0509 and EE0520 and to the west at location EE0508. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

65b. Comment: The extent of mercury (134 mg/kg) and arsenic (180 mg/kg) above cleanup goals have not been delineated at the 3 foot depth west, north and northwest of EE0511. Arsenic and mercury were detected at concentrations that exceeded their cleanup goals, but no samples were collected to the west or northwest of this location. Please collect confirmation samples 3 foot depth west, north and northwest of EE0511.

Response: Arsenic and mercury contamination at location EE0511 is bounded to the north by samples from locations EE05N1A, -N1B, and -W2D. Sampling depths for stepout samples -N1A and -N1B were in accordance with specific depth intervals listed the RDA. EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Samples were not collected to the west because sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

65c. Comment: **The extent of mercury above cleanup goals was not delineated south of Station EE0503 (28 mg/kg) at a depth of 4 ft bgs. Please collect a confirmation sample at 4 feet south of EE0503 to confirm that contamination does not extend beyond the excavation boundary.**

Response: Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Mercury contamination at location EE0503 was bounded to the south at locations EE0509 and EE0520. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

65d. Comment: **The extent of mercury and arsenic along the southern excavation boundary were not completely delineated. Mercury was detected at depths of 3.00 to 3.25 ft bgs at Stations EE0519 (4.9 mg/kg), EE0510 (2.9 mg/kg), EE0514 (482 mg/kg), and EE0515 (9.1 mg/kg) and arsenic was detected at a depth of 3.00 ft bgs at Station EE0514 (213 mg/kg). However, confirmation samples were not collected along the southern edge of the excavation from an approximate depth of 3.00 ft bgs. This did not comply with the RDA, which required sampling at the original depth of contamination if the excavation had to be extended. Please collect confirmation samples south of these locations at a depth of 3 to 3.25 feet.**

Response: Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Mercury contamination at locations EE0510, EE0514, and EE0519 was bounded to the south at location EE0520. Mercury contamination at location EE0515 was bounded by stepout samples collected as the excavation expanded to the north. Arsenic contamination at location EE0514 was bounded to the west at location EE0516 and to the south at location EE0520. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

65e. Comment: Arsenic and mercury were detected above their cleanup goals (13.8 and 6.8 mg/kg) at a depth of 7.5 ft bgs at Station EE0517, however, confirmation samples were not collected at this depth to the south or southwest of this location. Please collect confirmation samples from a depth of 7.5 feet south of this location.

Response: Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Arsenic and mercury contamination at location EE0517 was bounded to the south at location EE0520 in the original excavation. Locations EE05S1A, -S1B, and -S1C provide further confirmation. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

65f. Comment: In the central part of the excavation, there is an area where the extent of mercury and arsenic have not been determined. There are no samples south of the following sample locations to bound the extent of contamination at the listed depths:

Location	Depth (ft)	Arsenic (mg/kg)	Mercury (mg/kg)
EE05E2E	5.75	538	374
EE05E5A	5.75	-	7.3
EE05E3E	5.75	-	2.7
EE05E6A	2.25	-	4
EE05E7A	2.25	71.4	60.8
EE05E	3.75	18.2	11.2

These locations are only about 6 to 13 feet from the southern edge of the excavation, but no samples were collected at comparable depths south of these locations to bound the extent of contamination. As a result, there is no way to determine if the excavation removed all of the contaminated soil. Since the excavation was extended beyond the original excavated area, the RDA required confirmation samples, which were not collected. Please collect confirmation samples from the listed depths south of each location to demonstrate that all contaminated soils were removed.

Response: Arsenic and mercury contamination at the cited locations is bounded to the south at locations EE05E2F, -E3F, -E4F, -E5F, and -E8A. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. The RDA specifies the following:

“The depth of each sample initially collected at a proposed location will be randomly selected from a depth near or below the depth where contamination was detected or from 1 foot bgs and the excavation floor. All subsequent stepout samples behind this location will be collected at about the same depth as the initial sample, approximately 5 feet behind the initial location.”

The locations listed in the comment are subsequent stepout locations and the bounding samples were collected at about the same depths as the cited samples. The Navy met the RDA sampling requirements for this excavation. No additional sampling is planned prior to a ROD amendment.

65g. Comment: It does not appear that arsenic has been delineated in the eastern portion of Excavation EE-05. Arsenic was detected in a bottom (10 foot) 5-point composite sample at Stations EE05BC21 (12.6 mg/kg) and EE05BC22 (14.6 mg/kg), but there is a line west of this area on Figure EE-05 C that is labeled the “eastern extent of arsenic.” It appears that arsenic was not analyzed in any other samples collected from this area (arsenic was only analyzed in bottom composite samples), but the presence of arsenic in the bottom composite samples suggests that arsenic may also be present at shallower depths and that there may not be a scientific basis for the “eastern extent of arsenic line.” Please explain why the Navy believes that arsenic does not extend east of the “eastern extent of arsenic line.” Also, please collect confirmation samples along the northern, eastern and southern edges of the eastern part of EE-05 to demonstrate that arsenic does not extend beyond the excavation boundary at shallower depths.

Response: Neither the RD nor the RDA require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. Such a change to the RDA would represent a significant departure from the approved sampling approach and would result in a large number of new samples at this and other completed excavations. No additional sampling is planned prior to a ROD amendment.

65h. Comment: Arsenic was detected in the western part of EE-05 at Stations EE05N1P (31 mg/kg) and EE05N2M (22 mg/kg) at a depth of 3.25 ft bgs above its cleanup goal, however, there were no confirmation samples at this same depth to the north of these locations. Please collect confirmation samples north of these locations at a depth of 3.25 feet.

Response: Arsenic contamination at the cited locations is bounded to the north at locations EE05N3M, -N2P, and -N3G. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. No additional sampling is planned prior to a ROD amendment.

66. Comment: Section 4.7.8, Excavation EE-05, Page 4-628 and Figure EE-05 D: The extent of chrysene and dibenz(a,h)anthracene at Station EE05E7A were not completely delineated. Chrysene (1.5 mg/kg) and dibenz(a,h)anthracene (1.4 mg/kg) were detected in a sample collected from a depth of 2.25 ft bgs, however, sampling to the south and southeast of this station was only done at depths greater than 4.25 feet. Please collect a confirmation sample from the 2.25 foot depth south of this location to demonstrate that contamination does not extend beyond the excavation boundary.

Response: Chrysene and dibenz(a,h)anthracene contamination at the cited locations is bounded to the south at locations EE05E4F and -E5F. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. No additional sampling is planned prior to a ROD amendment.

67. Comment: Section 4.7.8, Excavation EE-05, Page 4-628 and Figure EE-05 E: The extent of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene was not delineated in excavation EE-05:

67a. Comment: At Station EE0511 the extent of benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene (0.81, 0.87, 0.98 and 0.35 mg/kg, respectively) at the 3 foot depth was not determined. Confirmation samples were not collected to the west and northwest of this location at a comparable depth as required by the RDA, even though the excavation was extended beyond its original boundaries. Please collect confirmation samples west and northwest of this location at the 3 foot depth.

Response: PAH contamination at location EE0511 is bounded to the north by samples from locations EE05N1A and -N1B. Sampling depths for stepout samples -N1A and -N1B were in accordance with specific depth intervals listed in the RDA. No additional sampling is planned prior to a ROD amendment.

67b. Comment: The extent of benzo(a)pyrene (1.9 mg/kg) in the vicinity of Station EE05E1A was not delineated at 6.25 ft bgs. Similarly, in the vicinity of Station EE05E2A the extent of benzo(a)pyrene (1.6 mg/kg), benzo(a)anthracene (1.5 mg/kg), benzo(b)fluoranthene (2.2 mg/kg), and indeno(1,2,3-cd)pyrene (0.6 mg/kg) was not delineated at a depth of 6.25 ft bgs. Confirmation samples were not collected at similar depths to the south of these locations even though the excavation was extended. Please collect a confirmation sample along the excavation boundary south-southeast of these locations from a depth of 2.5 feet.

Response: PAH contamination at locations EE05E1A and -E2A is bounded to the south by samples from locations EE05E1B and -E1F. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. No additional sampling is planned prior to a ROD amendment.

67c. Comment: The extent of benzo(a)anthracene (15 mg/kg), benzo(a)pyrene (13 mg/kg), benzo(b)fluoranthene (9.9 mg/kg), benzo(k)fluoranthene (13 mg/kg), and indeno(1,2,3-cd)pyrene (5.7 mg/kg) near Station EE05E7A and benzo(b)fluoranthene (0.49 mg/kg) near Station EE05E6A were not delineated at a depth of 2.25 ft bgs. Confirmation samples were not collected along the adjacent southern excavation boundary at this depth even though the excavation was extended beyond the original boundary. The original confirmation samples did not delineate the apparent layer of contamination at 2.25 ft bgs. Please collect confirmation samples south of these two locations from a depth of 2.25 ft bgs.

Response: PAH contamination at the cited locations is bounded to the south at locations EE05E3F, -E4F, -E5F, and -E8A. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. No additional sampling is planned prior to a ROD amendment.

68. Comment: Section 4.7.8, Excavation EE-05, Page 4-628 and Figure EE-05 F: The extent of copper was not delineated:

68a. Comment: In the west, copper was detected in Station EE0511 (855 mg/kg) at a depth of 3 ft bgs, but confirmation samples were not collected west or northwest of this location at or near this depth. The excavation was extended beyond the original extent, and the closest boundary is about 6 feet from this station, but samples were not collected as required by the RA. Please collect confirmation samples west and northwest of this location from a depth of 3 feet.

Response: Copper contamination at location EE0511 is bounded to the north by samples from locations EE05N1A and -N1B. Sampling depths for stepout samples -N1A and -N1B were in accordance with specific depth intervals listed in the RDA. Excavation EE-05 was expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Samples were not collected to the west because sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. No additional sampling is planned prior to a ROD amendment.

68b. Comment: In the central part of the excavation, copper was detected at 3,070 mg/kg at 5.75 feet in EE05E2E and at 552 mg/kg at a depth of 2.25 feet in EE05E7A; these locations are close to the excavation boundary, but there are no confirmation samples to the south of these locations at similar depths. The excavation was extended, but confirmation samples were not collected at the same depth as the contamination. Please collect confirmation samples at the depth of the original contamination from the excavation boundary south of these locations.

Response: Copper contamination at the cited locations is bounded to the south at locations EE05E2F, -E3F, -E4F, -E5F, and -E8A; locations EE05E5A and -E6A provide additional confirmation. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. No additional sampling is planned prior to a ROD amendment.

69. Comment: Section 4.7.8, Excavation EE-05, Page 4-628 and Figure EE-05 G: The extent of zinc at 5.75 feet in EE05E2E (3,450 mg/kg) above the cleanup goal was not delineated to the south of this location even though the excavation was extended beyond the original boundaries. Please collect a confirmation sample from 5.75 feet along the excavation boundary south of this location.

Response: Zinc contamination at the cited locations is bounded to the south at locations EE05E2F, -E3F, -E4F, -E5F, and -E8A; locations EE05E5A and -E6A provide additional confirmation. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. No additional sampling is planned prior to a ROD amendment.

70. Comment: Table EE-05 SVOA, Sample Number EE05E2A1, Page 1: The text does not explain why the analytical results for sample number EE05E2A1 have detection limits that range from 16 mg/kg to 79 mg/kg; these detection limits are more than an order of magnitude greater than the cleanup goals for some analytes. Please explain in the text why this data was not rejected and why the detection limit is an order of magnitude greater than the cleanup goal in some cases.

Response: Dilutions caused by matrix interferences (especially fuel-related compounds) sometimes cause increased detection limits for PAHs, in spite of extra care using silica gel cleanup procedures. These dilutions, while they may make the data less useful, are not grounds for data rejection. Moreover, data from sample EE05E2A1 do not directly affect the EE-05 delineation; the excavation area is bounded without using the data from location EE05E2A1.

71. Comment: **Section 4.8.2, Excavation B3229, Page 4-744: It is unclear why cadmium was not included as a COPC for this excavation. Cadmium was detected above its cleanup goal at Station 3229S1B (Table 3229, page 3), however, the text does not indicate that this analyte was evaluated for inclusion as a COPCs. Please include this analyte as a COPC for this excavation and collect samples to delineate the extent of cadmium.**

Response: The Navy does not believe that additional sampling is warranted based on the concentration that only slightly exceeds the cleanup goal (3.6 versus the 3.5 mg/kg goal) and the obstructions to collecting samples (beneath the concrete floor inside Building 113 close to building support columns and interior walls). Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.

72. Comment: **Section 4.8.3, Excavation B3229A, Page 4-752: It is unclear why the detection of manganese at Station PA42B004 was not considered an exceedance. Manganese was detected at this location at a concentration of 1,450 mg/kg, which is slightly above the cleanup goal of 1,400 mg/kg but the text on page 4-752 indicates that “.....manganese concentrations did not exceed soil cleanup levels.” Please revise the text to state that manganese was detected above its cleanup goal of 1,400 mg/kg at Station PA42B004.**

Response: The cited sample from location PA42B004 does not exceed the soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the BCT during preparation of the May 2000 ESD (Navy 2000). Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.

73. Comment: **Section 4.9.1, Excavation 60-1, Page 4-755 and Figure 60-1 A: It is unclear why the excavation depth for Excavation 60-1 was only 3 ft bgs. Figure 60-1 A indicates that the sample at Station IR60B001 has been removed, however the detection of arsenic (11.7 mg/kg) at this location was at 6.25 ft bgs but the excavation was only to 3 ft bgs. No samples were collected at a depth of 6.25 feet to delineate the extent of**

contamination or even to confirm this detection. Please explain. Also, please revise the figure to indicate that the sample with arsenic was not removed.

Response: Excavation 60-1 was excavated to 3 feet bgs in accordance with the RD and RDA. The convention used on the CSR figures was that if any sample at a point location was removed, that location was marked as removed. It is correct that the 6.25-foot sample remains in place. Removed/not removed status is maintained by individual sample in the HPS database. Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.

74. Comment: **Section 4.9.2, Excavation 60-2, Page 4-764:** It is unclear why the text indicates that the results from the waste profile sample collected at this excavation were used to add cadmium and copper as COPCs when Appendix A, which contains the soil screening and waste profile sample results, appears to only contain soil screening data for Excavation 60-2. Further, cadmium is not included in the soil screening table. Please clarify in the text whether the soil screening results or waste profile results were used to add cadmium and copper as COPCs and provide the missing data, if necessary.

Response: The summary of COPCs table for Excavation 60-2 indicated that cadmium and copper were selected as COPCs based on soil screening sample results. This selection was based on information contained in the RD (see sheet 6 of the RD). However, these soil screening sample results are not available for inclusion in Appendix A. Waste profile data for Excavation 60-2 collected during 2000 were inadvertently omitted from [Appendix A](#) and will be included in the final report, but these data do not indicate cadmium and copper exceeded the soil cleanup level. Nevertheless, the excavation was bounded for both cadmium and copper.

75. Comment: **Figure B2030 and Table B2030:** There appears to be some discrepancies between Table B2030 and Figure B2030. For example, Figure B2030 shows one exceedance (9,700 mg/kg) of the Diesel Range Organics cleanup level at Station UT02B007 at a depth of 6.75 ft bgs. However, Table B2030 lists the only exceedance of the Diesel Range Organics cleanup level as 4,200 mg/kg, detected at Station UT02B007 at a depth of 4.75 ft bgs. Additionally, Figure B2030 shows only one sample at Station UT02B007. However, Table B2030 lists 5 samples at Station UT02B007 at 2 different depths. Also, Figure B2030 shows an exceedance of the Gasoline Range Organics cleanup level at Station UT02B007 (5,100 mg/kg), yet Table B2030 does not appear to present this result. Please resolve these discrepancies and show all samples on Figure B2030 that are listed in Table B2030.

Response: The discrepancies between the data table and figure for Excavation B2030 are acknowledged. However, none of the cited changes would affect the conclusion that soil cleanup levels were achieved for this excavation. The table and figure will be revised accordingly.

76. Comment: **Section 4.11.1, Excavation B2030, Page 4-79 and Figure B2030: Diesel and gasoline range organics were detected at a depth of 6.75 feet in a sample from Station UT02B007 but confirmation samples were not collected from a comparable depth along the eastern excavation boundary. Please explain why confirmation samples were not collected at a comparable depth.**

Response: This excavation extended below the target sample during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of contamination in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.

77. Comment: **Excavation B2030: It is unclear why the B2030 excavation was so large and why there were 60 confirmation, soil screening and waste profile samples. The data posted on Figure B2030 indicates that a small excavation and a few confirmation samples in the vicinity of boring UT02B007 would have been sufficient but the contractor excavated an in-place volume of 1,553 cubic yards. If there was other data that suggested that additional samples were necessary and that the large excavation was necessary, this data should have been presented. Please explain why 60 samples were collected and why 1,553 cubic yards were excavated. Also, please provide the supporting analytical data.**

Response: Excavation B2030 was expanded based on visual observations of staining in the sidewalls as excavation progressed. Samples were collected in accordance with the RD; the data table for Excavation B2030 provides the sample results.

78. Comment: **Section 4.12.1, Fuel Line A, Page 4-807 and Fuel Line A Figure B: The extent of copper contamination was not completely delineated at a depth of 4.25 ft bgs near Stations 4600B84 (232 mg/kg) and 4600B47 (265 mg/kg), however, because confirmation samples were not collected from a comparable depth. These were bottom composite samples and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate**

this contamination. Please collect confirmation samples northeast and southwest of these locations from a depth of 4.25 feet.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC31, 460BC32, and 460BC70. No additional sampling is planned prior to a ROD amendment.

79. Comment: **Section 4.12.1, Fuel Line A, Page 4-807 and Fuel Line A Figure C: The extent Aroclor-1260 was not completely delineated in the Fuel Line A excavation.**

79a. Comment: **The extent of Aroclor-1260 was not delineated at a depth of 7 ft bgs near Station 460BC72 (0.31 mg/kg). Although the RDA did not require sampling to determine horizontal extent when contamination was detected in a bottom composite sample, the samples in this vicinity were generally collected from much shallower or much deeper depths, so the extent of contamination was not delineated. Please collect samples from the 7 foot depth from the western, southern and eastern boundaries of the excavation in this area to demonstrate that contamination does not extend beyond the excavation boundaries.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the sample at location 460BC76. No additional sampling is planned prior to a ROD amendment.

79b. Comment: **The extent of Aroclor-1260 at Stations 4600B39 (0.47 mg/kg) and 4600B37 (0.46 mg/kg) at a depth of 5 ft bgs was not delineated. There were no delineation or confirmation samples collected from a similar depth in the area surrounding these bottom composite samples. Consequently, although this satisfied the RDA, which did not require investigating the horizontal extent for bottom composite sample exceedances, it is possible that contamination extends beyond the excavation boundaries. Please collect confirmation samples from the 5 foot depth east and west-northwest of these locations.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC33, 460BC34, and 460BC35. No additional sampling is planned prior to a ROD amendment.

80. Comment: Section 4.12.1, Fuel Line A, Page 4-807 and Fuel Line A Figure C: The extent of arsenic was not completely delineated in the Fuel Line A excavation area:

80a. Comment: The extent of arsenic near Stations 4600B84 (22.6 mg/kg) and 4600B47 (22.7 mg/kg) at a depth of 4 feet was not delineated. Confirmation samples surrounding these locations were not collected near this depth. As these were bottom composite samples, sampling for horizontal extent was not required by the RDA, but the extent of arsenic contamination at 4 feet has not been determined. Please collect confirmation samples at the 4 foot depth north and south of these locations.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC31, 460BC32, and 460BC70. No additional sampling is planned prior to a ROD amendment.

80b. Comment: The extent of arsenic at Stations 4600SS1 (18.8 mg/kg), 4600SN19 (430 mg/kg), and 4600SN1 (58.4 mg/kg) at a depth of 2.5 ft bgs was not delineated. Confirmation samples north and northeast of these locations were not collected from a comparable depth, which did not comply with the RDA, which required sampling at the same depth when the excavation was extended. Please collect samples from the 2.5 foot depth north and northeast of these locations to evaluate whether arsenic contamination extends beyond the excavation boundary.

Response: The cited samples were composite samples collected over a sidewall extending from the surface to 5 feet bgs. As composite samples, they do not represent a distinct depth horizon. Samples from locations 460N1R, 460N1BA, and 460N1CD bound arsenic contamination to the northeast. These stepout samples meet the requirements of the RDA. No additional sampling is planned prior to a ROD amendment.

81. Comment: Section 4.12.1, Fuel Line A, Page 4-807 and Fuel Line A Figures D and E: The extent of PAHs was not completely delineated in the Fuel Line A excavation:

81a. Comment: The extent of benzo(a)anthracene (0.52 mg/kg), benzo(a)pyrene (0.58 mg/kg), benzo(b)fluoranthene (0.79 mg/kg), and benzo(k)fluoranthene (0.45 mg/kg) at 4 ft bgs was not delineated near Station 4600B0Y, as there were no confirmation samples at this depth south, southwest or southeast of this bottom composite location. Horizontal delineation

was not required by the RDA, but the excavation boundary is only 5 ft from this location and the excavation may not have been sufficient to remove all of the contaminated soil. Please collect confirmation samples south, southwest and southeast of this location at 4 ft bgs.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC73, 460BC74, and 460BC75. No additional sampling is planned prior to a ROD amendment.

81b. Comment: **Similarly, the extent of indeno(1,2,3-cd)pyrene (0.43 mg/kg), benzo(a)anthracene (2.3 mg/kg), benzo(a)Pyrene (1.2 mg/kg), benzo(b)fluoranthene (1.4 mg/kg), and benzo(k)fluoranthene (1.0 mg/kg) near 460BC20; and benzo(a)pyrene (0.97 mg/kg), benzo(b)fluoranthene (0.85 mg/kg), benzo(k) fluoranthene (0.54 mg/kg), indeno(1,2,3-cd)pyrene (0.6 mg/kg) and dibenz(a,h)anthracene (2.1 mg/kg) near 460BC21 at a depth of 7 ft bgs were not delineated to the northeast or southwest of these locations. Please collect confirmation samples from the 7 foot depth northeast and southwest of these locations.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC73, 460BC74, and 460BC75. No additional sampling is planned prior to a ROD amendment.

81c. Comment: **Benzo(a)anthracene (0.41 mg/kg) and benzo(b) fluoranthene (0.41 mg/kg) at a depth of 4 ft bgs near Station 4600B0U were not delineated to the south, north, or northeast. Please collect samples from the 4 foot depth south, north and northeast of this station.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC25 and 460BC26. No additional sampling is planned prior to a ROD amendment.

81d. Comment: **The extent of benzo(a)anthracene (5 mg/kg) benzo(a)pyrene (4.4 mg/kg), benzo(b) fluoranthene (6.3 mg/kg) and benzo(k)fluoranthene (1.7 mg/kg) near 4600B47 at a depth of 4 ft bgs was not delineated to the south or southwest. This sample is near the southern boundary of the excavation so it is unclear if the excavation was sufficient to remediate these contaminants. Please collect a confirmation sample**

from a depth of 4 feet along the southern excavation boundary to ensure that PAH contamination does not extend beyond the excavation boundary.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the samples at locations 460BC31, 460BC32, and 460BC70. No additional sampling is planned prior to a ROD amendment.

81e. Comment: **The extent of benzo(a)anthracene (6.5 mg/kg), benzo(a)pyrene (4.2 mg/kg), benzo(b)fluoranthene (5.9 mg/kg), benzo(k)fluoranthene (4.4 mg/kg), chrysene (7.4 mg/kg) and indeno(1,2,3-cd)pyrene (0.75 mg/kg) was not delineated south, southeast or southwest of 4600B49 at the 4 foot depth. The excavation boundary is only about 6 feet from this location. Please extend the excavation and collect confirmation samples from the 4 foot depth or collect delineation samples south, southeast and southwest of this location to confirm that PAH contamination does not extend beyond the excavation boundary.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line A was bounded by the sample at location 460BC36. No additional sampling is planned prior to a ROD amendment.

82. Comment: **Table Fuel Line B: There are some discrepancies between Table Fuel Line B (the Table) and the Fuel Line B Figure I (the Figure). For example, on page 3 of the Table, the data indicates that manganese was detected at Station 4600B74 at a concentration of 3,020 mg/kg. However, this concentration is not bolded indicating that this detection is not considered an exceedance. This Station 4600B74 data is presented as an exceedance on Figure I. This type of discrepancy also occurs for Stations 4600SE34, 4600SW34, 460BC41, 460BC42, and 460S1AA. Please resolve these discrepancies by bolding the detected concentrations of manganese at each of these Stations in the Table.**

Response: The cited manganese concentrations should be presented in boldface type to indicate they exceed the soil cleanup level. The data table will be revised accordingly.

83. Comment: **Fuel Line B Figures:** It appears that excavation was done in the northeast corner of building 130, based on the 2000-2001 excavation boundary. Please clarify if and how excavation was done in the building in the text.

Response: Samples collected along the northeastern corner of Building 130 were collected beneath an overhanging roof, but outside the main exterior wall of the structure. The shaded building area shown on the figures includes this overhang.

84. Comment: **Section 4.12.2, Fuel Line B, Page 4-941 and Fuel Line B Figure B:** The extent of copper was not delineated near Station 4600B55 (266 mg/kg) at a depth of 4 ft bgs. Confirmation samples were not collected at this depth to the northeast or southwest of this location. Similarly, copper was detected at 3 feet at Station 4600SS11 (870 mg/kg), but confirmation samples were not collected to the west, south, or southeast of this location. The excavation was extended, so the RDA required collection of confirmation samples at the same depth as the original exceedance. Please collect confirmation samples at a depth of 4 feet northeast and southwest of 4600B55 and at the 3 foot depth west, south, or southeast of 4600SS11.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line B was bounded by the samples at locations 460BC40 and 460BC41. Sample 4600SS11 was a composite sample collected over a sidewall extending from the surface to 4 feet bgs. As a composite sample, it does not represent a distinct depth horizon. Samples from locations 460S1AA, 460S1CG, and 460S1AB bound copper contamination to the south and west. These stepout samples meet the requirements of the RDA. No additional sampling is planned prior to a ROD amendment.

85. Comment: **Section 4.12.2, Fuel Line B, Page 4-941 and Fuel Line B Figure D:** The extent of zinc at this site was not completely delineated near Station 4600SS11 (664 mg/kg) at a depth of 3 ft bgs. Confirmation samples were not collected to the south, southwest or west of this location. The excavation was extended, so confirmation samples should have been collected at this depth. Please collect confirmation samples at the 3 foot depth west, south, or southeast of 4600SS11.

Response: Sample 4600SS11 was a composite sample collected over a sidewall extending from the surface to 4 feet bgs. As a composite sample, it does not represent a distinct depth horizon. Samples from locations 460S1AA, 460S1CG, and 460S1AB bound zinc contamination to the south and west. These stepout samples meet the requirements of the RDA. No additional sampling is planned prior to a ROD amendment.

86. Comment: Section 4.12.2, Fuel Line B, Page 4-941 and Fuel Line B Figure F: The extent of benzo(a)anthracene, benzo(a)pyrene, benzo(b)-fluoranthene, and benzo(k)fluoranthene was not completely delineated in this excavation:

86a. Comment: The extent of benzo(a)anthracene (0.75 mg/kg), benzo(a)pyrene (0.5 mg/kg), benzo(b) fluoranthene (0.94 mg/kg), and benzo(k)fluoranthene (0.69 mg/kg) was not delineated to the north, northeast, south or southwest of Station 4600B55 at a depth of 4 ft bgs. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination. Please collect confirmation samples north, northeast, south and southwest of Station 4600B55 to confirm that contamination did not extend beyond the excavation boundaries.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line B was bounded by the samples at locations 460BC40 and 460BC41. No additional sampling is planned prior to a ROD amendment.

86b. Comment: The extent of benzo(a)anthracene (2.2 mg/kg), benzo(a)pyrene (1.4 mg/kg), benzo(b)fluoranthene (2.3 mg/kg), or benzo(k)fluoranthene (1.8) was not delineated near Station 4600B57 at a depth of 5 ft bgs. As a result, the extent of contamination was not delineated to the north, northeast, south or southwest. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination. Please collect confirmation samples from 5 ft bgs to the north, northeast, south or southwest of 4600B57.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line B was bounded by the samples at locations 460BC42 and 460BC43. No additional sampling is planned prior to a ROD amendment.

87. Comment: Fuel Line B Figure G: The extent of Aroclor-1260 (0.32 mg/kg) near Station 4600B53 at a depth of 4 ft bgs was not completely delineated to the northeast and southwest. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination as the excavation is only 7 or 8 feet wide. Please collect confirmation samples northeast and southwest of 4600B52 at the 4 foot depth to ensure that contamination does not extend beyond the excavation boundaries.

- Response:** The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line B was bounded by the samples at locations 460BC38 and 460BC39. No additional sampling is planned prior to a ROD amendment.
- 88. Comment:** **Fuel Line B Figure H: The extent of Diesel Range Organics was not delineated:**
- 88a. Comment:** **The extent of Diesel Range Organics (4,000 mg/kg) near Station 460N1AB at a depth of 9.75 ft bgs was not delineated along the northeastern excavation boundary. No delineation or confirmation samples at all were collected north or east of this excavation boundary location, which does not meet the requirements of the RDA. As a result, the extent of contamination beyond the excavation is unknown. Please extend the excavation and collect confirmation samples or delineate the extent of contamination in the vicinity of this sample location.**
- Response:** Additional samples were not collected because this area is planned to be investigated to address fuel-related contamination as part of the TPH program.
- 88b. Comment:** **Diesel Range Organics were detected in sidewall confirmation samples collected at Stations 460S1CJ (8,100 mg/kg) and 460S1CG (5,900 mg/kg) at depths of 9.25 ft bgs and 7.25 ft bgs, respectively. The excavation was extended beyond these locations, but neither confirmation samples nor delineation samples were collected to confirm that the contamination was remediated; this does not meet the requirements of the RDA. Please collect confirmation samples at the excavation boundary at depths of 9.25 and 7.25 feet in the vicinity of these sample locations.**
- Response:** Additional samples were not collected because this area is planned to be investigated to address fuel-related contamination as part of the TPH program.
- 89. Comment:** **Fuel Line B Figure I: The extent of manganese in this excavation was not completely delineated:**
- 89a. Comment:** **Manganese was detected in a sidewall sample collected at Station 460S1AA at a depth of 4.25 ft bgs (3,190 mg/kg), however, the extent of manganese was not delineated to the south. It appears that manganese contaminated soil may extend beneath building 130.**

Please collect a sample south of Station 460S1AA at a depth of 4.25 ft bgs.

Response: Although manganese concentrations observed in samples from this area of Fuel Line B were not specifically identified in the final manganese site proposal (Tetra Tech 2001a), the averaging protocol presented on Figure I is the same. Part of the intent of the manganese site proposal was to address the ongoing inability to delineate excavations to the 1,400-mg/kg cleanup level. The Navy will evaluate the most efficient means to characterize manganese concentrations that may extend beyond location 460S1AA. Discussions of ambient metals concentrations, including manganese, are part of the ongoing discussions for the TMSRA for Parcel B.

89b. Comment: Manganese was detected at Station 4600SN11 (1,530 mg/kg) at a depth of 3 ft bgs, however, there were no confirmation samples to the north at this depth. Two stepout excavations were done without collection of any sidewall delineation or confirmation samples. This violates the RDA, which indicates that samples should have been collected at the depth of the original contamination. Please explain why samples were not collected along the north side of the excavation and collect the required confirmation sample.

Response: The Navy will evaluate the most efficient means to characterize manganese concentrations that may extend beyond location 4600SN11. Discussions of ambient metals concentrations, including manganese, are part of the ongoing discussions for the TMSRA for Parcel B.

89c. Comment: The presence of manganese above the cleanup goal in samples from Stations 4600SW34, 4600B74, and 4600SE35 indicate that additional excavation should have been done. The weighted average concentration for “characterization area a,” in which these Stations lie, is 1,590 mg/kg, but the text on page 4-943 indicates that the “average manganese concentration for the segment B2 and B3 area was less than the soil cleanup level and additional area was not excavated.” Segments B2 and B3 do not match “characterization areas a and b,” so it is impossible to evaluate whether this statement is true. However, it appears that these stations are included in segment B2 which overlaps “characterization area a.” Please explain in the text why additional area was not excavated for segment B2 when the weighted average concentration was above the cleanup goal for manganese and delineate the extent of contamination in the vicinity of these stations.

Response: The Navy will evaluate the most efficient means to characterize manganese concentrations that may extend beyond the cited locations. Discussions of ambient metals concentrations, including manganese, are part of the ongoing discussions for the TMSRA for Parcel B.

90. Comment: **Appendix A, Waste Profile Data, Fuel Line C:** It is unclear why pentachlorophenol was not included as a COPC at this excavation while the analytical results from the waste profiling samples indicate that this analyte was detected at a concentration above its cleanup goal. The analytical results for the waste profile samples collected at Fuel Line C indicate on page 89 that pentachlorophenol was detected at a concentration of 5.6 mg/kg. Additionally, the RDA indicates that analytes detected above their cleanup goals in the soil screening or waste profile data should be added as COPCs at the appropriate excavation. Please provide the data for this compound or collect additional samples to verify that there is no contamination beyond the excavation boundaries.

Response: A data translation error occurred during report preparation that resulted in the loss of data qualifiers on some pages of the waste profile data table in [Appendix A](#). The cited analytical result should have included a “U” qualifier indicating that the analyte was not detected. The waste profile sample did not exceed soil cleanup levels.

91. Comment: **Section 4.12.3, Fuel Line C, Page 4-1007 and Figure C:** The extent of PAHs was not completely delineated for this excavation:

91a. Comment: The extent of benzo(a)anthracene (2 mg/kg), benzo(a)pyrene (2.2 mg/kg), benzo(b)fluoranthene (3.2 mg/kg), dibenz(a,h)anthracene (0.51 mg/kg), and indeno(1,2,3-cd)pyrene (1 mg/kg) was not completely delineated at a depth of 5 ft bgs near Station 4600B05. The excavation was extended beyond the original boundaries so the RDA required collection of confirmation samples at the original depth of contamination, but the only confirmation samples collected in this area were collected from a depth of 3 feet. Please collect confirmation samples from the 5 foot depth to the northwest and southeast of this location.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line C was bounded by the sample at location 460BC10. No additional sampling is planned prior to a ROD amendment.

91b. Comment: The extent of benzo(a)anthracene (0.64 mg/kg), benzo(a)pyrene (0.55 mg/kg), and benzo(b)fluoranthene (0.89 mg/kg) detected at a depth of 4 ft bgs at Station 4600B09 was not completely delineated. Because the horizontal extent of contamination to the north and west was not defined, it is not possible to determine if the remedial action objectives were met. Please collect confirmation samples to the north and west of this location from a depth of 4 feet.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line C was bounded by the samples at locations 460BC05 and 460BC06. No additional sampling is planned prior to a ROD amendment.

91c. Comment: The extent of benzo(a)anthracene (0.65 mg/kg), benzo(a)pyrene (0.41 mg/kg), benzo(b)fluoranthene (0.57 mg/kg), and benzo(k)fluoranthene (0.45 mg/kg) at 5 ft bgs at Station 4600B11 was not completely delineated. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Please collect a confirmation sample from the 5 foot depth northwest of 4600B11.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line C was bounded by the samples at locations 460BC03 and 460BC04. No additional sampling is planned prior to a ROD amendment.

92. Comment: Fuel Line C Figure D: The extent of manganese in this excavation was not completely delineated:

92a. Comment: Manganese (2,410 mg/kg) was not completely delineated near Station 460E1R at depth of 3.25 ft bgs. There were no confirmation or delineation samples to the south, east, northeast or north. As a result, the calculated weighted average does not truly represent the average level of manganese contamination. Please collect samples to delineate the extent of manganese contamination.

Response: The Navy will evaluate the most efficient means to characterize manganese concentrations that may extend beyond location 460E1R. Discussions of ambient metals concentrations, including manganese, are part of the ongoing discussions for the TMSRA for Parcel B.

92b. Comment: Manganese was detected in a bottom 5-point composite sample collected from Station 460BC09 (3,520 mg/kg) at a depth of 6 ft bgs. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Please collect a sample to the north and west.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. No additional sampling is planned prior to a ROD amendment.

92c. Comment: Manganese was detected at Station 2406B1 at a concentration of 28,600 mg/kg at a depth of 4.25 ft bgs. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear if the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Please collect confirmation samples to the north and west at the 4.25 foot depth.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Excavation 24-6 was bounded by the sample at location 2406BC1. No additional sampling is planned prior to a ROD amendment.

92d. Comment: Manganese was detected at Station 4600B07 (1,470 mg/kg) at a depth of 5 ft bgs near the western excavation boundary. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Also, this sample was close to 2406B1, suggesting that there may be a 0.75 to 1 foot (or more) thick layer of soil with high manganese content in the vicinity of these two sample locations. Please evaluate the extent of contamination between 4.25 and 5 ft bgs.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line C was bounded by the sample collected at 6 feet bgs at location 460BC08. No additional sampling is planned prior to a ROD amendment.

93. **Comment:** Section 4.12.4, Fuel Line F, Page 4-1065 and Fuel Line F Figure A: The extent of PAHs and zinc in the Fuel Line F excavation was not completely delineated:

93a. **Comment:** The extent of chrysene near Station 4600B35 (4.3 mg/kg) at the 3 foot depth was not completely delineated. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Please collect a confirmation sample from 3 ft bgs north and west of this station.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC16 and 460BC17. No additional sampling is planned prior to a ROD amendment.

93b. **Comment:** The extent of zinc at Stations 4600B15 (1,190 mg/kg) and 4600B29 (474 mg/kg) was not completely delineated at a depth of 3 ft bgs. The RDA did not require determination of horizontal extent for bottom composite samples, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north, west, south and east is undefined. Please collect confirmation samples to the north, west, south and east from a depth of 3 ft bgs.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC13 and 460BC14. No additional sampling is planned prior to a ROD amendment.

94. **Comment:** Section 4.12.4, Fuel Line F, Page 4-1065 and Fuel Line F Figure B: The extent of copper in the Fuel Line F excavation was not delineated:

94a. **Comment:** The extent of copper (331 mg/kg) in the F2 section of the Fuel Line F excavation was not delineated near Station 4600B31 at a depth of 7 ft bgs. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the east, south and west is undefined. Please collect a sample from 7 ft bgs to the east, south and west of 4600B31.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the sample at location 460BC11. No additional sampling is planned prior to a ROD amendment.

94b. Comment: **The extent of copper at Stations 4600SW11 (260 mg/kg) and 4600SE11 (417 mg/kg) in the F1 section of the Fuel Line F excavation at a depth of 2 ft bgs was not completely delineated. The RDA required step out sampling at the same depth, but this was not done. The extent of contamination to the east, southeast, west and northwest is not known. Please collect the required confirmation samples from the 2 foot depth to the east, southeast, west and northwest of 4600SW11 and 4600SE11.**

Response: Samples 4600SW11 and 4600SE11 were composite samples collected over sidewalls extending from the surface to 3 feet bgs. As composite samples, they do not represent a distinct depth horizon. Samples from locations 460W1AA, 460W1AB, and 460W1AC (north and west) and 460E1AT and 460E1AR (south and east) bound copper contamination in this area. These stepout samples meet the requirements of the RDA. No additional sampling is planned prior to a ROD amendment.

94c. Comment: **The extent of copper in the bottom 5-point composite samples collected from Stations 4600B35 (251 mg/kg), 4600B13 (257 mg/kg), 4600B15 (2,850 mg/kg), and 4600B29 (1,290 mg/kg) at a depth of 3 feet was not completely delineated. The RDA did not require determination of horizontal extent for bottom composite samples, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north, west, south and east is undefined. Further, all of the 3 foot depth bottom composite samples in the northern half of the F1 area had elevated concentrations of copper, suggesting the existence of a contaminated layer of soil at the 3 foot depth. The fact that all of the 3 foot bottom composite samples in this area were contaminated, and the fact that one sample exceeded the cleanup goal by more than a factor of 17 and another exceeded the goal by a factor of 8 clearly implied the existence of a contaminated layer of soil; under this scenario, step out sampling should have been done. Please do stepout sampling to delineate the extent of contamination at 3 feet and extend the excavation as necessary.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was

bounded by the samples at locations 460BC12, 460BC13, 460BC14, 460BC16, and 460BC17. Discrete bottom samples at locations 460BA51 and 460BA52 collected at 3.75 feet bgs indicated copper concentrations that were more than 10 times lower than the soil cleanup level. Observations made during excavation and sampling of this area did not reveal any distinct, obviously contaminated horizons. The RDA requires no special modifications to the sampling strategy based upon the extent that cleanup levels were exceeded. Stepout samples in segment F1 meet the requirements of the RDA. No additional sampling is planned prior to a ROD amendment.

94d. Comment: **The extent of copper near Stations 4600SE5 (865 mg/kg) and 4600SW5 (759 mg/kg) at the 2 foot depth was not completely delineated. The RDA required step out sampling at the depth of contamination in this case, but the excavation was extended and neither step out samples nor confirmation samples were collected at or near the 2 foot depth. The extent to the east, southeast, west and northwest is not delineated. Please extend the excavation and collect confirmation samples or delineate the extent of contamination at 2 feet east, southeast, west and northwest of these locations.**

Response: Samples 4600SE5 and 4600SW5 were composite samples collected over sidewalls extending from the surface to 3 feet bgs. As composite samples, they do not represent a distinct depth horizon. Samples from locations 460W1R, 460W1BS, 460W1S, and 460W1T (north and west) and 460E1AI, 460E1BS, 460E1AJ, and 460E1AK (south and east) bound copper contamination in this area. These stepout samples meet the requirements of the RDA. No additional sampling is planned prior to a ROD amendment.

95. Comment: **Fuel Line F Figure D: The extent of benzo(a)anthracene and benzo(a)pyrene at Stations 4600B35 (1.9, 0.81 mg/kg), 4600B33 (1.4, 2.3 mg/kg), 4600B13 (1.2, 0.86 mg/kg), and 4600B29 (0.61, 0.69 mg/kg) was not completely delineated at the 5 foot depth. The RDA did not require determination of horizontal extent for bottom composite samples, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north, west, south and east of these locations is undefined. Please delineate the extent of contamination to the north, west, south and east of these locations.**

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC12, 460BC13, 460BC14, 460BC15, 460BC16, and 460BC17. No additional sampling is planned prior to a ROD amendment.

96. Comment: Fuel Line F Figure E: The extent of benzo(b)fluoranthene in the five bottom 5-point composite samples collected from Stations 4600B35 (6.5 mg/kg), 4600B33 (2.4 mg/kg), 4600B13 (3.8 mg/kg), 4600B15 (1.2 mg/kg), and 4600B29 (1.2 mg/kg) at a depth of 3 ft bgs was not delineated. The RDA did not require determination of horizontal extent for bottom composite samples, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north, west, south and east of these locations is undefined and because, as mentioned in earlier comments, there is a layer of contaminated soil at the 3 foot depth. Please extend the excavation and collect confirmation samples from the 3 foot depth or delineate the extent of contamination and extend the excavation as necessary.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC12, 460BC13, 460BC14, 460BC15, 460BC16, and 460BC17. Observations made during excavation and sampling of this area did not reveal any distinct, obviously contaminated horizons. No additional sampling is planned prior to a ROD amendment.

97. Comment: Fuel Line F Figure F: The extent of benzo(k)fluoranthene (2.4 mg/kg) near Station 4600B35 at the 3 foot depth was not completely delineated. This was a bottom composite sample and the RDA did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the east, south and west is undefined. Please delineate the extent of contamination at the 3 foot depth and extend the excavation as necessary.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC16 and 460BC17. No additional sampling is planned prior to a ROD amendment.

98. Comment: Fuel Line F Figure G: The extent of indeno(1,2,3-cd)pyrene at the 3 foot depth near Stations 4600B35 (0.46 mg/kg), 4600B33 (0.67 mg/kg), 4600B13 (0.69 mg/kg), and 4600B29 (0.47 mg/kg) was not completely delineated. The RDA did not require determination of horizontal extent for bottom composite samples, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north, west, south and east of these

locations is undefined. Please delineate the extent of contamination at the 3 foot depth and extend the excavation as necessary.

Response: The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC12, 460BC13, 460BC14, 460BC15, 460BC16, and 460BC17. No additional sampling is planned prior to a ROD amendment.

99. Comment: **Fuel Line F Figure H: The extent of manganese at 1.5 ft bgs near Stations 4600SW17 (4,610 mg/kg) and 4600SE17 (2,820 mg/kg) and at 6.25 ft near 460BA56 (1,460 mg/kg) was not completely delineated at this excavation. The RDA required step out sampling south, southeast and east of these sidewall and near-sidewall locations, but stepout samples were not collected. Please collect the required stepout samples at 1.5 ft and 6.25 ft.**

Response: Although manganese concentrations observed in samples from Fuel Line F were not specifically identified in the final manganese site proposal ([Tetra Tech 2001a](#)), the averaging protocol presented on [Figure H](#) is the same. Part of the intent of the manganese site proposal was to address the ongoing inability to delineate excavations to the 1,400-mg/kg cleanup level. The Navy will evaluate the most efficient means to characterize manganese concentrations that may extend beyond cited locations. Discussions of ambient metals concentrations, including manganese, are part of the ongoing discussions for the TMSRA for Parcel B.

Minor Comments

1. Comment: **Section 4.0, Delineation Activities, Page 4-40: The text cites Table B3324 instead of Table B3422. Please correct this typographic error.**

Response: This typographical error will be corrected.

2. Comment: **Section 4.4.4, Excavation B4217, Figure B4217 B: It appears that shading the exceedance at Station 4217SWA was overlooked. Manganese was detected at Station 4217SWA at a concentration of 1,440 mg/kg at a depth of 3.25 ft bgs, but this entry is not shaded. Please revise this figure to represent the sample collected at Station 4217SWA as an exceedance.**

- Response:** Sample 4217SWA does not exceed the soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the BCT during preparation of the May 2000 ESD ([Navy 2000](#)).
3. **Comment:** **Section 4.6.3, Excavation 24-3, Page 4-338: The text references collection of ten soil screening and waste profile samples, but there is no waste profile sample data in Appendix A. Please resolve this discrepancy.**
- Response:** The terms “soil screening sample” and “waste profile sample” are used interchangeably within the text descriptions for each excavation.
4. **Comment:** **Table EE-05, Sample Number EE05BC15, Page 6 and Sample Number EE05BC23, Page 8: It appears some exceedances of the cleanup goal for manganese have been overlooked. Manganese was detected in sample number EE05BC15 at a concentration of 1,600 mg/kg and in EE05BC23 at a concentration of 3,550 mg/kg, but these numbers are not indicated by bold type. Please place these numbers in boldface type in Table EE-05.**
- Response:** The cited manganese concentrations should be presented in boldface type to indicate they exceed the soil cleanup level. The table will be revised accordingly.
5. **Comment:** **Section 4.12.2, Fuel Line B, Figure I: It appears that Station 4600SE34 has been incorrectly labeled on Figure I. Please revise the figure to read Station 4600SE34 instead of 4600SE35.**
- Response:** The label in the data box will be corrected.
6. **Comment:** **Section 4.12.2, Fuel Line B, Figure I: The sample location marker for Station 4600SN9 was shaded as an exceedance, but the concentration detected at this location was below the cleanup goal for manganese. Please revise the figure and correct this discrepancy.**
- Response:** This discrepancy will be corrected.
7. **Comment:** **Section 4.12.2, Fuel Line B, Figure I: It appears that shading an exceedance of the cleanup goal for manganese was overlooked. The concentration of manganese detected at Station 460BC43 is 1,430 mg/kg, which is greater than the cleanup goal of 1,400 mg/kg. Please revise the figure to indicate that the detected concentration of manganese at Station 460BC43 is an exceedance of the manganese cleanup goal.**

Response: Sample 460BC43 does not exceed the soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the BCT during preparation of the May 2000 ESD ([Navy 2000](#)).

8. **Comment:** **Table Fuel Line C, Page 20 and 24: It appears that bold face type was not used to indicate some exceedances of the manganese cleanup goal. Manganese was detected above its cleanup goal at Stations 460BC09, 460BC68, and 460E1R, however, the detected concentrations were not shown in bold type. Please revise the table to depict these concentrations as exceedances of the manganese cleanup goal by bolding them.**

Response: This discrepancy will be corrected.

9. **Comment:** **Fuel Line C Figure C: There appears to be a problem with the printing process for this figure. The lines connecting the analytical results to the Station markers do not match. Please revise this figure so that the text boxes are connected to the correct Station markers.**

Response: This figure will be revised so that leader lines correctly match station symbols.

10. **Comment:** **Table PAH Only: The data for samples PAH002 and PAH002Z are missing. Please provide the missing data.**

Response: The data table will be corrected accordingly.

11. **Comment:** **Figure PAH Sample Locations: PAH022 should be shaded red because detected concentrations exceeded the ESD 2000 goals. Please shade PAH022 red.**

Response: This discrepancy will be corrected.

RESPONSES TO EPA COMMENTS FROM DR. DANIEL STRALKA

General Comments

1. **Comment:** This is a large document that presents actions that have taken place for soils cleanup within Parcel B. The Navy's contractor did a significant amount of work compiling this data and trying to present the pertinent facts, however, there are still significant holes in the descriptions of what was done that does not allow the reader to reach conclusions on the completeness of the actions taken. Let's discuss.

Response: Comment noted. Additional discussions occurred at a meeting held August 19, 2003.

2. **Comment:** It is very useful to have all the data and text supplied on CD to facilitate the information management but the quality should be improved. For example, the chain of custody reports for the soil removals supplied in Appendix D, disposal class II are illegible. Also, the waste characterization reports in Appendix A is missing page 95 of 103.

Response: The best available copies were used for scanning the disposal manifests presented in Appendix D. Appendix A will be resubmitted to correct other errors on the waste profile reports, and the pagination will be rechecked.

3. **Comment:** Additional text should be added to Appendix A so the reader can understand what these waste characterization and screening samples represent, i.e. how was the sample collected, what was the volume. It appears that some are from stockpiles of removed soil, per the 1998-1999 operations but what of the 2000-2001 procedures? There also needs to be a key for the sample numbers presented in Appendix A and the station locations in the figures.

Response: Details related to the collection of waste profile and screening samples are presented in the construction work plan (IT 1999b). In general, one four-point composite sample was collected per every 2,000 cubic yards for stockpiles. Excavation screening samples were collected at a rate of one four-point composite sample per every 500 square feet of excavation bottom and one three-point composite sample per every 50 feet of excavation sidewall. The locations of waste profile and screening samples are not presented on the excavation figures.

4. **Comment:** Overall, the amount of data and spatial information presented is enormous but each site will need to be evaluated one on one to determine if it meets clean up criteria. This could best be done following the previous risk management review approach that was done on the other parcels so that the questions can be asked and answers documented in a timely fashion and decisions documented.

Response: Comment noted.

Specific Comments

1. **Comment:** Excavation 10-4: For those sites that have COCs of nickel and chromium, since the level of concern is correlated with the magnesium level, please include the magnesium level at the same locations.

Response: This information will be added to the appropriate excavation discussions.

2. **Comment:** Excavation B2422, figure C: The detection limits for PAHs is elevated, please supply the reader a way to check the actual data. The figures present a station number the screening data, Appendix A gives a sample number. How are these correlated?

Response: Assuming that the excavation referenced is B3422, PAH data are presented in the table following the excavation figures. In accordance with the RDA, resampling for PAHs was conducted only in cases where the detection limit exceeded 3 mg/kg. Soil screening and waste profile sample data presented in [Appendix A](#) are not posted on the excavation figures. The locations of soil screening and waste profile samples are not shown on the excavation figures because this additional information would clutter the figures to the point where they would be unusable. Screening soil and waste profile soil samples were collected only to guide waste disposal, not to provide any site delineation information. Moreover, these samples were not subjected to the same rigorous analytical and data validation methods as the confirmation samples and combining these samples with confirmation samples on the same figures would be misleading based on the differences in data quality.

3. **Comment:** Excavation B0146, figure A: Lead concentrations were in the shallow soils above 6 feet. The excavation confirmed that the bottom was clean. However, the samples on the west face had elevated lead at 3.25 feet. These were supposedly removed during excavation. How is the reader to know if that was the extent of contamination along the west face? There are no samples to the west of the removal nor sidewall confirmation samples. Why not?

- Response:** The west sidewall of Excavation B0146 coincides with the HPS property boundary. Samples were not collected off Navy property. The Navy has no plans to characterize chemical concentrations that may exist on off-site properties.
4. **Comment:** **Excavation 20-1. The text has boiler plate language that references Appendix A for waste characterization and screening results. This site has only screening results and a key is needed to determine where the screening sample comes from relative to the station numbers presented in the figures.**
- Response:** The locations of soil screening and waste profile samples are not shown on the excavation figures because this additional information would clutter the figures to the point where they would be unusable. Moreover, soil screening and waste profile samples were not subjected to the same rigorous analytical and data validation methods as the confirmation samples and combining these samples with confirmation samples on the same figures would be misleading based on the differences in data quality.
5. **Comment:** **Excavation 24-2. The text references waste profile samples, none could be located.**
- Response:** The terms “soil screening sample” and “waste profile sample” are used interchangeably within the text descriptions for each excavation. Data for Excavation 24-2 are found only in the soil screening data table in [Appendix A](#).
6. **Comment:** **Fuel Line B. The text and figures are not in agreement. The average manganese concentration is above the screening level according to Figure I for area a and the total area. However, there is not a problem with manganese in adjacent areas 24-8, 24-9, and Excavation 3916. Also there is still a problem from diesel in areas B2 and B3 according to Figure H.**
- Response:** Discussions of ambient metals, including manganese, are part of the ongoing evaluations for the TMSRA for Parcel B. Additional samples were not collected to delineate TPH extractable as diesel because this area is planned to be investigated to address fuel-related contamination.
7. **Comment:** **PAH samples. There is no data reported for sample PAH 002 nor 002Z. PAH 022 does exceed the screening criteria at 5.75 feet but is not presented appropriately in the figure.**
- Response:** These discrepancies will be corrected.

RESPONSES TO DTSC COMMENTS FROM MR. CHEIN KAO

General Comments

1. **Comment:** **Cleanup Goals. For clarity, all cleanup goals of the 1997 Parcel B Record of Decision (ROD) should be summarized in Section 2.**

Response: [Table 2-1](#) contains all the soil cleanup levels presented in the May 2000 ESD and lists all except two contained in the October 1997 ROD. There were minor refinements made to the list of chemicals between the 1997 ROD Table 8 and the 2000 ESD table based on the COPCs identified during the remedial design and the 1998 to 1999 remedial action. Bis(2-ethylhexyl)phthalate was added to the list, and Freon 113 and magnesium were deleted from the list. [Table 2-1](#) contains bis(2-ethylhexyl)phthalate which was added based on its detection in a soil screening sample. Freon 113 and magnesium were not identified as COPCs anywhere at Parcel B, so there was no need to include them in the May 2000 ESD chemical list.

There were several components of the 1997 ROD cleanup goals as indicated below.

- a. **The goal of the ROD was to reduce risks to future residents to an excess lifetime cancer risk (ELCR) of 10⁻⁶ and to a hazard index (HI) of 1 for non-cancer risks. (These two goals are referred to as “narrative goals”.)**
- b. **Chemical-specific cleanup goals were stipulated (Table 8 of the ROD).**
 - i. **For most compounds, chemical-specific goals were risk-based, primarily following United States Environmental Protection Agency’s (USEPA’s) methodology for 1995 residential preliminary goals (PRGs). California modified PRGs (CalMod PRGs) were used when more conservative. Chemical-specific goals (except for c and d below) were adjusted for produce uptake.**
 - ii. **A level of 221 mg/kg was stipulated for lead.**
 - iii. **For metals, if risk-based values were less than Hunters Point ambient levels (HPALs), HPALs were selected as cleanup goals.**
 - iv. **If risk-based cleanup goals were below analytical detection limits (DLs), DLs were selected as cleanup goals for some compounds-e.g., polynuclear aromatic compounds (PAHs) and other semi-volatile organic compounds (SVOCs).**

DTSC has interpreted the ROD to mean that the Navy has to meet both the narrative risk goals (ELCR =10⁻⁶ and HI = 1) and the chemical-specific goals.

Response: The Navy's interpretation of the ROD differs from DTSC's. The Navy's interpretation is that the intent of the descriptive goals is achieved by meeting the chemical-by-chemical cleanup levels. The ROD recognized that the descriptive goals (excess lifetime cancer risk = 10⁻⁶ and hazard index = 1) could not be met for chemicals that have analytical detection limits lower than the cleanup level corresponding to the descriptive goal. In these cases, the cleanup level was set at the detection limit. Acceptance of a cleanup level set at the detection limit recognizes that the descriptive goals cannot always be met. Furthermore, the RD clearly identified this interpretation. For example, the introduction (page 1-2) states "A remediation excavation will be considered to have met cleanup goals when the concentration of previously identified COPCs for each individual excavation is at, or below, the cleanup goal."

The 1997 ROD was subsequently changed by two explanations of significant differences (ESDs). In the first ESD, cleanup to ten feet below the ground surface (fbgs) was specified, replacing the former depth to the ground water surface. Depths below ten fbgs have not been investigated and an institutional control (IC) applies. In the second ESD (as the Navy notes in Section 2.2.2) chemical-specific goals were revised to include updated toxicological data and the nickel-cobalt regression curve was replaced by the nickel-magnesium regression curve.

This CSR report should demonstrate that the Navy has achieved all of the cleanup goals of the ROD and ESDs: This includes both narrative goals and chemical-specific goals.

Response: As noted above, the Navy's interpretation of the October 1997 ROD differs from DTSC's.

With respect to narrative goals, no demonstration is provided by the Navy in this CSR: the Navy intends to provide a risk assessment (RA) at a later date. The issue of narrative goals was addressed in Parcel B Human Health Risk Assessment Methodology Technical Memorandum (RATM), distributed by the Navy at the BCT meeting on January 14, 2003. The RATM was developed as a handout for a meeting of managers on February 4, 2003: the RATM will not be formally reviewed and commented on by DTSC. The preliminary risk assessments (RAs) presented by the Navy in the RATM and discussed on February 4 indicated that narrative goals have not been met over most of Parcel B with respect to the total risk assessment. The RATM contains both a total risk assessment (without an ambient screen) and a risk assessment with an ambient screen.

The RATM indicates that narrative goals have been achieved for only about 7% of residential areas (including residential areas without data) in the total risk assessment. However, this percentage may be high-biased and/or uncertain, since DTSC has identified several problems with the risk assessment data set and methodology (as discussed below). It is noted too that the total residential area is reduced in the RATM by about 35% (as compared to the ROD/ESD), because former residential areas are now presented as industrial areas, based on the City's refinement of the reuse plan.

DTSC is concerned about large areas without data in Parcel B. RATM figures show that no data exists for a large majority (about 70%) of the currently proposed residential areas. Areas without data can not be considered to be clean in RA. At the minimum, HPAL values should be assumed (and this may not be conservative) for areas without data. If HPAL values are assumed for areas without data, all areas without data in Parcel B would exceed narrative goals. DTSC interprets this to mean that, taken as a whole, the proposed residential area in Parcel B is contaminated such that it does not meet narrative goals with respect to total RA. Moreover, as discussed in meetings, "surgical" excision of smaller areas that do meet goals is highly impractical and is not supported by DTSC.

Response: Comments on the risk assessment methodology for Parcel B will be central to the discussions for the ongoing evaluations that are part of the TMSRA for Parcel B. However, the CSR is not intended to provide any discussion of risk assessment and the Navy will not address risk-related comments in this response to comments document.

With regard to chemical-specific goals, the Navy says that chemical-specific goals have been achieved for all sites included this CSR. Although significant work has been performed by the Navy, and many hotspots have been removed, DTSC does not agree that chemical-specific goals have been achieved for all sites in this CSR. DTSC's review of chemical-specific goals for each site is summarized in the attached table (Attachment A).

For completeness of the record, all current and former Parcel B sites are listed in Attachment A. COPCs identified in the CSR are indicated in column 1. DTSC comments regarding ESD chemical-specific goals are provided in column 2. Comments regarding completeness of characterization are provided (columns 2 and 3). Comments regarding adequacy and appropriateness of the data set with regards to risk assessment are also provided (column 4). For the sake of brevity, DTSC's comments in Attachment A are terse: they can be expanded upon request.

In addition to the ROD and ESD goals, a comparison to the October 2002 USEPA Preliminary Remedial Goals (PRGs) for residential use is provided in Attachment A (column 3). In Column 3, chemical analytical results from confirmation sampling, remedial investigation (RI), soil screening (SS), and waste characterization (W) were compared to the 2002 residential PRGs. The PRG used for Pb is the California Modified (CalMod) PRG which was calculated using DTSC's Leadsread model which includes produce uptake. In addition, for inorganics, chemical data were compared to draft residential PRGs adjusted for produce uptake ("PRGs adj") which were provided by the Navy on February 4, 2003. However, due to time constraints (i.e., the draft PRGs adj were received after CSR review was almost completed), the draft PRGs adj have not been reviewed and approved by DTSC. Moreover, the draft PRGs adj are being further revised by the Navy.

Response: Please refer to specific responses to the comments in [Attachment A](#).

It is expected that a ROD amendment will be developed for Parcel B in the near future. At that time, the issue of cleanup goals will be reopened, and revised cleanup goals (including chemical-specific goals) may be developed. 2002 residential PRGs (and PRGs adj for inorganics) were used for comparison here under the assumption that updated residential chemical-specific cleanup goals might be similar to 2002 residential PRGs and draft PRGs adj.

Discussions regarding a ROD amendment are ongoing. In the RATM, the Navy's risk assessment used industrial criteria for "open space" areas of the City's refined reuse plans. It has not been demonstrated that industrial criteria are appropriate for the intended "open-space" re-use. Criteria specific to the intended re-use should be developed: this would include recreational exposure scenarios. Similarly, although not included in the current ROD/ESD, ecological cleanup goals will be required in a future ROD amendment. Ecologically protective soil concentrations (EPSCs) for terrestrial habitats have been developed by the Parcel F team for six metals. For the convenience of the agencies with regard to future discussions, exceedances of EPSCs are noted in column 4 of Attachment A. Please note, however, that since EPSCs do not consider shoreline habitats and erosion to the Bay, EPSCs may not be the only ecological criteria of concern on Parcel B. Similarly, cleanup goals for protection of drinking water or groundwater resource have not been developed. Also, total petroleum hydrocarbon (TPH) criteria for the protection of human health have not been developed. TPH criteria are incorrectly applied in this CSR: hence, no comments are provided herein regarding the adequacy of the CSR with respect to TPH cleanup and investigation.

Response: The CSR is not intended to provide any discussion of risk assessment and the Navy will not address risk-related comments in this response to comments document. This includes development of recreational risk assessment criteria and ecological risk assessment concerns. (Nonetheless, Navy recommendations for recreational risk assessment criteria have been forwarded to the BCT in an e-mail dated October 14, 2003.) Groundwater use is prohibited by the ROD and cleanup goals for protection of drinking water or other use are not necessary. In addition, RWQCB has determined that the A-aquifer groundwater at HPS meets RWQCB's exemption criteria for a drinking water source. The Navy disagrees with the statement that TPH criteria were incorrectly applied. [Section 3.3](#) describes the TPH comparison criterion as “a screening value of 3,500 mg/kg for the sum of TPH purgeable as gasoline, TPH extractable as diesel, and TPH extractable as motor oil concentrations.”

2. **Comment:** **Evaluation of the CSR Data Set. The approach used in this CSR review was to consider: 1) whether each site was adequately characterized, 2) whether the methodologies of the remedial design documents were followed and 3) whether the data set is adequate or appropriate for risk assessment. General comments on these considerations are presented below and a detailed analysis for each site is presented in Attachment A. It is axiomatic that if the site is not adequately characterized, the risk assessment will be incomplete and risks may be under-represented.**

Due to the problems with the CSR data set (enumerated below), the RATM (and subsequent RAs) may underestimate total risks and cumulative risks. These problems are sometimes due to the sampling approaches of the remedial design (RD) documents. It is noted that the various RD confirmation sampling approaches were not designed specifically to collect a representative data set for risk assessment (RA), so it is not surprising that there are problems with the data set with respect to RA. Also, the RD approaches may have resulted in the extent of contamination not being determined for some locations and for some compounds (as discussed below). It is not clear what the relative importance of each of these points (below) is with respect to RA. It is noted, however, that uncertainty associated with RA results (and conclusions) is increased. (Since the RA data set was not included in the RATM, comments regarding the RA data set are couched in the subjunctive mood—e.g., “risks may be under-represented in the RA”, etc.).

Dr. Jim Polisini, of DTSC's Human and Ecological Risk Division (HERD), has reviewed these comments.

- a. **Areas Without Data.** About 70% of the residential grids have no data (as noted previously). The condition of such areas and the risks is not determined: such areas cannot be assumed to be clean.

Response: As a summary of the remedial action, the CSR is not intended to re-evaluate areas not identified during the RD to have excess risk requiring remediation. Discussion of risk across all of Parcel B will be part of the ongoing evaluations for the TMSRA for Parcel B.

b. **Not all Sites Included.** The CSR is really a partial CSR, since not all sites have been included. Nonetheless, in the RATM, residential and industrial risks are presented for areas not included in this CSR (Figure A-1). Obviously, sites for which data has not been provided cannot be assessed with respect to meeting ESD goals, or to the extent of contamination, or to the adequacy of the data set for risk assessment.

Response: A future addendum to the CSR will contain the remaining excavation sites.

c. **Site Conceptual Model.** The RD sampling design assumed a spill-type model, and an “investigation by excavation” approach to cleanup. Data collected recently at Parcel B indicates that these design assumptions are not adequate at some locations. For many areas, the spill-type model appears to be combined with contamination in heterogeneous fill. For such sites, the “investigation by excavation” and stepout approaches of the spill-type model were not fully successful.

Response: The RDA identifies the need to re-evaluate the site conceptual model in cases where four stepouts have not bounded contamination at an excavation. This occurred at some IR-07 excavations. The evaluation of these areas is part of the ongoing discussions for the TMSRA for Parcel B.

d. **Chemical of Potential Concern (COPC).** The RD approach was essentially an “investigation by excavation” approach and many sites were identified based on a single RI sampling location. This resulted in early selection/elimination of COPCs before site characterization—which is problematic, especially for sites that do not fit the “spill-type” model. That is, a COPC was identified for a site only if the chemical-specific ROD or ESD goal for that compound was exceeded at the site (often at a single RI location). Other compounds cannot be fully represented in the RA, since sufficient data does not exist. For example, if multiple compounds (e.g., PAHs) were present at less than 10⁻⁶ ELCR in RI samples, they were not identified as COPCs, not investigated or analyzed for, and not added to cumulative risks. Many COPCs identified in Table 8 of the ROD/ESD (i.e., CSR Table 2-1) are not represented at all in the CSR or the RATM.

Response: COPCs were selected during the RD based on chemicals identified during the RI/feasibility study (FS) to cause unacceptable risk. Recharacterization of Parcel B was not the goal of the RD and RA; rather, the RD focused on the specific chemicals at each area that created risk.

Also, the list of COPCs in the CSR (CSR Table 2-1) is not exactly the same as the COPC list in the RATM. Several COPCs were included in the ESD but are not included in the RATM, including (and this list is not complete) carbon tetrachloride, N-nitroso-di-N-propylamine, pentachlorophenol (PCP), and vinyl chloride. Several COPCs were added to the RATM, including (and this list is not complete) acetone, 1,1-dichloroethene (1,1-DCE), dieldrin, eldrin, and various BHCs. The Navy should summarize and explain these discrepancies. In any case, elimination of COPCs from the ESD list is not appropriate. What were the criteria for adding new COPCs?

Response: The CSR is not intended to provide any discussion of risk assessment. Discussion of risk across all of Parcel B will be part of the ongoing evaluations for the TMSRA for Parcel B.

e. COPCs and Stepouts. At each stepout, only chemicals of potential concern (COPCs) that exceeded the chemical-specific goals in the previous step were analyzed for. This presents a potential problem for risk assessment in that some areas were sampled for a limited subset of COPCs. Consequently, cumulative risks may be under-represented.

Also, final excavation outlines (including depths) are not defined (in confirmation samples) with respect to all the COPCs encountered in the excavation. This problem can be “fixed” somewhat by including data from excavated samples in the RA: the last-collected data from confirmation sample(s) (or RI sample(s)) for each compound should be included.

Response: The process of eliminating COPCs during successive stepouts was in accordance with the RD and RDA. Discussions of how to best use the data for risk assessment will be part of the ongoing evaluations for the TMSRA for Parcel B.

f. Coalescing Sites. In some cases, COPCs for coalescing sites were not sampled for at site boundaries (e.g., Pb and Zn at 18-1 and B0146), or data for coalescing sites is not provided (e.g., 18-1 and 18-2). In such cases, it could not be determined if all appropriate COPCs were identified and sampled for.

Response: Merged excavations are unique situations that must be evaluated individually. For the merger of Excavations 18-1 and B0146, no soil was available to sample because Excavation 18-1 was completed to

10 feet bgs. Metals were not identified as COPCs at Excavation 18-1 and the characterization provided by the soil borings at Excavation 18-1 are considered sufficient to indicate lead and zinc were not concerns. The merger of Excavations 18-1 and 18-2 can only be adequately addressed after the data for Excavation 18-2 are presented in the CSR addendum.

g. Excavated samples not included in RATM. At many locations (in particular 2000-2001 excavations), confirmation samples (including bottom samples from 98-99 and 00-01) have been excavated. Since excavated samples were not included in the RATM calculations, residual risks for many compounds may be under-represented.

An example: at IR21-1 and 21-3 (which are coalescing excavations), all confirmation samples except two (2301W1A and 0231SSA) have been removed. So, only two locations and only two COPCs (copper at 47.7 mg/kg and zinc at 67.9 and 44.2 mg/kg) are represented in the RATM. For the other (removed) confirmation samples, residual risks for COPCs were not represented in the RATM. These COPCs include Aroclor 1260, benzo(a)pyrene (“bap”), benzo(a)anthracene (“baa”), benzo(b)fluoranthene (“bbf”), indeno(c,d)pyrene (“icdp”), as well as copper (Cu) and zinc (Zn). Similarly, COPCs in RI samples which have been excavated may not be represented in RAs.

Response: Comments on the risk assessment methodology for Parcel B will be central to the discussions for the TMSRA for Parcel B; however, comments on risk assessment are outside the scope of the CSR.

h. Exceedances in Bottom Samples (“Bs”).

- For some excavations with exceedances in Bs, no sidewall samples are provided: EE05 is an example of this.
- Exceedances in Bs at 10 fbs may indicate that sidewalls are in exceedance. This was observed at some 2000-01 excavations, for which discrete confirmation samples were collected at random depths which sometimes were some distance above 10 fbs.
- Exceedances in 5-pt composite bottom samples (“Bs”) taken at 10 fbs are not included in the RA and are not uncommon. At some excavations, these Bs are the only samples which include all the COPCs.

Response: Neither the RD nor the RDA require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. Such a change to the RDA would represent a significant departure from the approved sampling approach and would

result in a large number of new samples at many completed excavations. Comments on the use of bottom composite samples collected at 10 feet bgs will be addressed during the evaluations for the TMSRA for Parcel B.

- i. Composite Samples and Criteria.** For Bs and for 1999-2000 sidewall samples, excavation was stopped (according to the rules) and considered completed when stepout samples did not exceed criteria. Since composites represent an average over sidewalls or bottoms, exceedances of criteria (based on a point-by-point comparison to the ESD goals) may still exist where excavations have stopped. This is especially of concern where the composite values are close to criteria. Several manganese (Mn) locations have this characteristic.

Response: The cited use of composite samples was in accordance with the RD and RDA.

- j. RI samples and Updated Criteria.** All data, but RI samples in particular, have not all been screened for exceedances of ESD criteria and more recent risk-based criteria. Consequently, not all ESD COPCs have been identified and the extent of contamination based on 2002 PRGs adj has generally not been determined.

Response: COPCs were selected during the RD based on chemicals identified during the RI/FS to cause unacceptable risk. Recharacterization of Parcel B was not the goal of the RD and RA.

- k. Analysis for a Subset of Method Analytes.** At many sites, the laboratory was instructed to analyze for and report on a limited subset of method analytes. For example, if the COPCs which exceeded cleanup goals at a single RI location were bap and bkf, only these two compounds were requested in SVOC analyses and the lab reported only the results for these two compounds (even if multiple other PAHs were present and/or close to the goals). Similarly, often a single Aroclor (usually Aroclor 1260) is the only polychlorinated biphenyl (PCB) analyzed for, even though multiple Aroclors were present in RI or W samples.

Metals provide yet another example. Metal associations exist. For example, copper, lead (Pb) and zinc are often associated, as are nickel (Ni), cobalt (Co) and chromium (Cr). Iron (Fe) above risk-based levels is common. But since the complete metals scan was not requested, there is a potential deficiency with respect to the cumulative and total risks for PRGs adj and for ecological risks—which may be lower than ESD goals. Also, there are few analyses for hexavalent chromium (CrVI)--even though machine and plating shops were operated in Parcel B and waste oil was transported and disposed.

Response: Analysis for a limited set of analytes was in accordance with the RD and RDA.

- l. Polychlorinated Biphenyls (PCBs).** With respect to PCBs, the chemical-specific goal (0.21 mg/kg) of the ESD is expressed in terms of total PCBs—that is, the summation of all individual congeners. In the CSR, however, the goal is mistakenly applied to individual congeners, and so, for many locations, only certain congeners were investigated and sampled for (e.g., Aroclor 1260). Consequently, it can not be determined if the ESD goal for PCBs has been met. In some cases, multiple congeners were measured during the remedial investigation (RI) or during waste (W) characterization: however, the extent of all Aroclors has not been determined. In Attachment A, for the sake of brevity, this problem is not pointed out for all possible locations where it may exist.

Response: The Navy disagrees with this interpretation of the soil cleanup goals for PCBs. The 0.21 mg/kg cleanup goal applies to individual Aroclors, not to a summation of all Aroclors. The presentation of soil cleanup goals in Table 8 of the 1997 ROD clearly lists Aroclors-1242, -1254, and -1260 with individual cleanup goals (0.016 mg/kg). Although the cleanup goal was revised to 0.21 mg/kg and the cleanup goals for individual Aroclors were combined into one entry for PCBs in the 2000 ESD, there was never any intent that the cleanup goal would apply to a summation of individual Aroclors. The Navy added a note to Table 2-1 to clarify that the cleanup goal for PCBs applies individually to Aroclors-1242, -1254, and -1260.

- m. Hunters Point Ambient Levels (HPALs) Screened Out.** For four metals, HPALs were used as chemical-specific goals in the ROD and ESDs. HPALs exceed risk-based values for several metals (e.g., arsenic (As), manganese (Mn), and nickel (Ni, at some locations)). Therefore, for some metals, exceedances of risk-based values were not identified for cleanup in the ROD and ESDs. It is expected that these metals (As, Mn, Ni) will be primary risk drivers in the total risk assessment. For example, As commonly exceeds the 2002 Residential PRG of 0.39 mg/kg: the HPAL for As is 11 mg/kg.

Also, HPALs were not adjusted for produce uptake. For example, the PRG adj for Mn is about 420 mg/kg, whereas the HPAL is 1,400 mg/kg. Therefore, exceedances of risk-based criteria adjusted for produce uptake were not identified for Mn (and Cd, Ni, and cyanide) and the extent of contamination based on risk-based values has not been determined.

Response: Discussions of ambient metals are part of the ongoing evaluations for the TMSRA for Parcel B. HPALs represent a characterization of conditions at HPS and are in no way related to human uptake or exposure. Consequently, a revision of HPALs for produce uptake would not be appropriate.

- n. **Point-by-Point HPALs.** For three metals (Ni, Cr, Co) regression curves were used to determine point-by-point HPALs. As a result, concentrations left in place can vary over orders of magnitude. As with other HPALs, no adjustment was made to point-by-point HPALs for produce uptake in the ROD and ESD. Therefore, all exceedances of risk-based levels (including produce uptake) were not identified for cleanup and the extent of contamination has not been determined. Because of resource constraints, the Navy's point-by-point regressions were assumed correct in these comments.

Response: HPALs represent a characterization of conditions at HPS and are in no way related to human uptake or exposure. Consequently, a revision of HPALs for produce uptake would not be appropriate.

- o. **Manganese (Mn).** Pursuant to a revision of the RD, Mn was treated differently from other metals. For Mn, in lieu of point-by-point comparisons with the HPAL, the excavation was stopped if the arithmetical average for all Mn samples (within 2,500 feet²) was less than the HPAL of 1,400 mg/kg. Please clarify whether excavated (or not) Mn samples were used in calculating the Mn averages: Also, were bottom samples at 10 fbg's used? See Fuel Line B (FLB) Figure I and Figure B3914 for an interesting illustration of some concerns regarding Mn averaging. In some cases, stepouts were not completed prior to calculating the Mn average: that is, the extent of Mn was not fully determined.

Response: Details of the average manganese calculation protocol are contained in the final manganese site proposal ([Tetra Tech 2001a](#)) and December 21, 2001, final evaluation of ambient manganese conditions ([Tetra Tech 2001b](#)). Only samples remaining in place (that is, not removed) were used in the average manganese calculations. Excavation bottom samples collected at 10 feet bgs were used in the calculations. The points of interest mentioned in the comment for Fuel Line B and Excavation B3914 are not clear. The reason for implementing the averaging approach was precisely because the extent of manganese concentrations exceeding the cleanup goal could not be identified by stepouts.

p. **Detection Limits (DLs)**

- DLs were set as chemical-specific goals for some compounds (e.g., PAHs and other SVOCs). For such compounds, the extent of contamination based on risk-based criteria adjusted for produce uptake has not been determined. For example, the DL for n-nitroso-di-n-propylamine is often greater than the PRG of 0.069 mg/kg and the draft PRG adj of 0.00017 mg/kg. Another example: DLs for Cd sometimes exceed the PRGs adj of 0.095 mg/kg. And, the DL for mercury (Hg) is always greater than the PRG of zero.
- In some cases, compounds were not identified as COPCs or stepouts were not advanced for confirmation samples when DLs exceeded chemical-specific ESD goals. This was not uncommon for polynuclear aromatic hydrocarbons (PAHs) and for some semi-volatile organic compounds—in particular n-nitroso-di-n-propylamine and pentachlorophenol (PCP). For the sake of brevity, each instance is not noted in column 2 of Attachment A: a list can be provided upon request. Exceedances of DLs for 2002 PRGs or PRGs adj, however, are noted in column 3.
- $\frac{1}{2}$ DL should be used in RA, whenever the DL is equal to or greater than risk-based goals (i.e., 2002 PRGs and draft PRGs adj).

Response: Comments on the risk assessment methodology for Parcel B will be central to the discussions for the ongoing evaluations for the TMSRA for Parcel B; however, comments on risk assessment are outside the scope of the CSR. In accordance with the RDA, resampling for PAHs was conducted only in cases where the detection limit exceeded 3 mg/kg.

q. **Backfill.** Chemical analytical results from backfill should be incorporated in the RA.

Response: Chemical analytical results for backfill material, where available, will be added to [Appendix C](#), but will not be incorporated into the risk assessment that will be part of the TMSRA for Parcel B.

r. **Aluminum (Al).** Al was sometimes identified as a COPC, although the goals were not exceeded (e.g., B3718). What is/was the criteria for identifying Al as a COPC? For the sake of brevity, Al concentrations close to the 2002 PRGs were not included in Attachment A.

Response: Aluminum was identified during the RD as a COPC at five excavations discussed in the CSR (42-1, B3229A, B3718, B4217, and B4519). Maximum aluminum concentrations in the RI borings located at these excavations ranged from 24,000 to 29,700 mg/kg. No excavation confirmation samples exceeded the aluminum cleanup goal (74,000 mg/kg).

s. **Asbestos.** Asbestos was analyzed for at a few locations only. The concentrations exceeded hazardous waste levels (1 %) at some of these locations (e.g., 3 % at B2915). The extent of asbestos on Parcel B has not been determined. How will risks associated with asbestos be evaluated?

Response: Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.

t. **Lead-Based Paint (LBP).** LBP was not investigated for. How will risks associated with LBP be evaluated?

Response: Lead was identified during the RD as a COPC at eight excavations discussed in the CSR (10-5, 20-3, B0146, B3324, B3422, B4018, B4818, and EE-05). General issues associated with lead-based paint will be addressed during property transfer discussions.

u. **Nutrients.** “Nutrients” were screened out. For example, iron (Fe) commonly exceeds the 2002 residential PRG of 23,000 mg/kg, but Fe was not identified as a COPC. Fe was not investigated or included in the RA. The extent of Fe contamination has not been determined.

Response: Iron was not identified in the Parcel B ROD as a substance requiring cleanup.

v. **Fuel Lines.** Screening samples (SSs) for fuel lines (FLs: A, B, C and F) were usually combined and SS sampling locations were not identified on figures. As a result it was not possible to evaluate whether additional COPCs exist for fuel lines at any specific location. It was also not possible to evaluate whether SS results were comparable to sampling results shown on figures. Similarly, waste profiling results (Ws) were combined for FLs, and so Ws cannot be fully evaluated with respect to additional COPCs. FLs comprise a large portion of excavated sites, so the fact that SSs and Ws for FLs cannot be fully evaluated for additional COPCs is noteworthy.

Response: The locations of soil screening and waste profile samples are not shown on the excavation figures because this additional information would clutter the figures to the point where they would be unusable. Moreover, soil screening and waste profile samples were not subjected to the same rigorous analytical and data validation methods as the confirmation samples and combining these samples with confirmation samples on the same figures would be misleading based on the differences in data quality.

w. **Buildings.** Buildings occupy a sizable portion of Parcel B. For some buildings, sampling is scant or non-existent: so, some areas under buildings are not fully characterized.

Response: Recharacterization of Parcel B was not the goal of the RD and RA.

x. **Buffer Zones.** Buffer zones should be considered between residential and other exposure areas. Buffer zones are generally recommended by HERD and will be included in post-removal risk assessments for other parcels.

Response: Comments on risk assessment are outside the scope of the CSR.

y. **Other Criteria.** Residential cleanup goals only were included in the ROD/ESD. As discussed above in Comment 1, other criteria will be required for ROD amendment, including recreational, ecological (terrestrial and shoreline habitats), Bay protection (soil migration and groundwater protection). Comments herein are confined to residential use only: for other as-yet-undefined criteria, the adequacy of the data set cannot be evaluated and the extent of contamination based on criteria other than residential may not be determined.

Response: The CSR is not intended to provide any discussion of risk assessment, including development of recreational risk assessment criteria and ecological risk assessment concerns.

z. **Site Histories** should be provided for each excavation. In particular, include site conditions that instigated the original RI sampling. For example, identify whether the sample was collected at a stain, pit, or sump.

Response: The replication of information already presented in previous reports (for example, the RI and FS reports) would make the CSR unwieldy. The CSR does not document the characterization of Parcel B, but rather specific remedial actions taken at previously identified locations.

1. **Comment:** **Data Presentation**

- a. **Spider Maps.** The Navy provided spider maps showing exceedances of ESD COPCs for all sites in the CSR. The spider maps were very useful for evaluating the data, especially the data for large or complex sites.

Response: Comment acknowledged.

- b. **QA/QC.** A summary and evaluation of the quality assurance/quality control (QA/QC) reports for all the data collected should be included in the text of the report.

Response: [Appendix F](#) of the CSR provides the quality control summary report.

- c. **Sample Results Tables.**

- **Sample results tables should show all compounds detected at the site and in the site vicinity, including sampling locations outside the “site boundary” noted on figures.**

Response: Data tables list all results for confirmation samples collected at each excavation. However, results for adjacent excavations are presented on the data tables associated with those other excavations. Duplication of results could lead to additional errors and confusion in using the data. Data collected during the RI are not reproduced in the CSR.

- **Sampling results for depths greater than 10 fbgs should be included if the sample represents an interval that includes 10 fbgs. For example, if samples were collected at 6.75 fbgs and 11.25 fbgs, then the sample collected at 11.25 fbgs represents a portion of the interval above 10 fbgs, and so it should be included on the table (and figures).**

Response: This interpretation varies from the process used throughout the RD and RA. Data from samples collected deeper than 10 feet bgs were not evaluated for excavation delineation. Discussion of the use of these deeper samples will continue as part of evaluations for the TMSRA for Parcel B.

- **All results for a sample should be presented on successive pages of the table. For example, for B3114, SVOC results for 3144BOA are presented on page 1 of Table B3114 for SVOCs from benzo(a)anthracene to N-nitrosodiphenylamine; however, results for SVOCs from naphthalene to toluene are not presented until page 6. The results for naphthalene to toluene should be on page 2.**

Response: The data tables were prepared using queries from the HPS electronic database and represent the most efficient means of extracting this large volume of data from the database and presenting it in the CSR.

d. Other Compounds. All COPCs (Table 8 of the ROD) detected at each excavation should be identified (not just COPCs that exceed chemical-specific goals). Contaminants which are not included on Table 8 should also be identified for each site, including tentatively identified compounds (TICs). Historic data should be included.

Response: Data tables and figures present all data from confirmation samples for all COPCs at each excavation. The objective of the CSR is to document cleanup compared to soil cleanup goals. The addition of data for chemicals that do not have cleanup goals would not provide useful information since there would be no means to evaluate those data. In general, the analytical laboratories provided results only for the requested COPCs and additional data (such as tentatively identified compounds) were not provided. The volume of historic data is far too large to include in the CSR. (Note that the term COPCs applies to specific chemicals at individual excavations. For example, Table 8 of the ROD lists the cleanup goals for all chemicals, but the COPCs at Excavation B0146 are only lead and zinc.)

e. Historic Data. Data collected during the remedial investigation (RI) and exploratory excavations (EEs) should be posted on figures and included in data tables. Data should be posted for all chemicals of potential concern (COPCs: Table 8 of the ROD), including COPCs that do not exceed ROD/ESD chemical-specific goals.

Response: Data collected during the RI and EEs are posted on the figures for each excavation, but these data are not included in the data tables. Data tables and figures present all data from confirmation samples for all COPCs at each excavation.

f. Backfill. Chemical analytical results should be included on the backfill material used for each excavation. DTSC's Information Advisory, Clean Imported Fill Material can be found at: http://www.dtsc.ca.gov/PolicyAndProcedures/Schools/SMP_FS_Clean_fill-Schools.pdf. Although this information advisory is located in the schools section of the website, please note that it also applies to residential areas.

Response: Chemical analytical results for backfill material, where available, will be added to [Appendix C](#), but will not be incorporated into the risk assessment that will be part of the TMSRA for Parcel B.

g. Waste Characterization Results (“Ws”). Ws did indicate additional COPCs for some excavations. However, Ws are not provided for all excavations. As a result, it is not possible to determine whether all COPCs have been identified at many locations.

Response: Waste profile soil samples were collected only to guide waste disposal, not to provide any site delineation information. [Appendix A](#) contains all available waste profile data. Waste profile samples were not collected at every excavation; in some cases, confirmation sample data were used to provide information for disposal.

h. Screening Sampling Results (“SSs”). SSs are provided for some sites in Appendix A. Since the locations of the SSs are not given, it is not known whether exceedances in SSs have been removed. Also, it is not possible to evaluate how the excavation progressed. Screening sampling results (SSs) were provided for several sites which could not be found in the CSR, including A-1, EE0208, B1127. Please identify the locations of these sites (as requested on Attachment A).

Response: The locations of soil screening samples are not shown on the excavation figures because this additional information would clutter the figures to the point where they would be unusable. Moreover, soil screening samples were not subjected to the same rigorous analytical and data validation methods as the confirmation samples and combining these samples with confirmation samples on the same figures would be misleading based on the differences in data quality. The intention behind including these other data was to have all the screening soil and waste profile sample data in one report. Future addenda could, then, merely refer back to this report. Excavation A-1 is part of Parcel C and, therefore, not included in the CSR. Location EE0208 is part of Excavation EE-02 located in IR-23. The area originally termed B1127 became Excavation B1227. Soil screening samples from B1127 apply to Excavation B1227. Excavation B1227 is located in IR-07 and will be included in the CSR addendum.

i. Manganese (Mn).

- **Supplemental documents on Mn provided by the Navy (see bibliography) have not been approved by DTSC.**

Response: Comment acknowledged. Discussions of ambient metals concentrations, including manganese, are part of the ongoing evaluations for the TMSRA for Parcel B.

- **It is noted that Mn was not an analyte for waste characterization (“W” in table below) and usually not included as an analyte for soil screening (“SS” in table below). So no additional information is available on Mn distribution from Ws and SSs for many locations.**

Response: Screening soil and waste profile soil samples were collected to provide rough initial information and to guide waste disposal, not to provide any site delineation information. Screening soil samples were analyzed for excavation-specific COPCs. COPCs, including manganese, were selected during the RD based on chemicals identified during the RI/FS to cause unacceptable risk. Recharacterization of Parcel B was not the goal of the RD and RA.

j. Detection Limits (DLs). On figures and tables, DLs that exceed goals should be indicated as exceedances (e.g., PAHs in B3422, 18-1, 18-4). DLs, especially high DLs, should be discussed in the text for all sites. DLs should be provided for all results, including waste and screening samples.

Response: Detection limit information is provided in the data tables and figures for all excavations. Detection limit information is not relevant for soil screening and waste profile samples because these samples were not used for excavation delineation. The Navy disagrees with the statement that samples with no detections but with a detection limit exceeding a soil cleanup level should be posted on figures with the same symbols as samples with detected concentrations exceeding cleanup levels. PAH detection limits that were greater than the soil cleanup level were not investigated unless the detection limit exceeded 3 mg/kg. This was in accordance with Appendix 6 of the RDA and was based on the fact that the gas chromatography/mass spectrometry method used in the CLP SVOA can typically report qualitatively reliable (though quantitatively estimated) results about 10 times lower than the CRQL.

k. Summary of COPCs Tables. The Navy regards (Section 4.1) the first three columns of the data summary tables as “mutually exclusive” in that only one category (“Human Health Risk Assessment (HHRA)” or “waste profile sample” or “field observation”) was checked for each COPC. These categories should not be considered to be mutually exclusive. All categories that apply should be checked, as each category provides different information regarding the validity of the site conceptual model.

Response: All categories that apply have been checked. There were no instances where a check in more than one column would be appropriate.

l. Waste Characterization (W) and Soil Screening (SS) Results. The text “boilerplate” language refers the reader to the appendices for W and SS for every site: this language should only be used when there actually are W and SS results for a site. Otherwise, it is misleading.

Response: Reference to the soil screening and waste profile sample data presented in [Appendix A](#) is contained only in the sections where those data are available. Please identify sections where a reference is made to [Appendix A](#), but no data are presented there.

m. Excavated Composite Samples. For sites with excavations in both 98-99 and 00-01, composite confirmation samples are inconsistently designated as “excavated” or “not excavated” on figures when a *portion* of the wall was excavated in 00-01. What is the appropriate way to treat such samples? How were they used in the RA? For example, on Figure B2414A, 2414SWB is shown as excavated but 2414SWA is not. However, both samples represent the entire NE sidewall, half of which was excavated. On the opposite SE wall, both composite samples (2414SEA and B) are shown as not excavated, although a portion of the wall was excavated. Another example: with respect to Mn averaging, 3914SEA is shown as not excavated on Figure B3914 but as excavated Figure FLB I. Other sites with portions of walls excavated include: B3422, B3622, 18-1, B4217, 23-2.

Response: The designation of sidewall composite samples as removed or not was made on a case-by-case basis. The selection was generally based on the fraction of the sidewall that was removed. In cases that were not clear, the more conservative (protective) choice was made (that is, samples were identified as not removed). At Excavation B2414, the shape of the actual 2000 to 2001 excavation greatly influenced the selection of removed or not removed status. Location 2414SWB represents the deeper (greater than 7-foot portion) of the 1998 to 1999 excavation and the majority of this deep section was excavated in 2000 to 2001 so location 2414SWB was marked removed. The sample collected at location 2414SWB did not exceed soil cleanup levels, so whether it is removed or not is not relevant to the final delineation. The intent of the comment related to location B3914SEA is not clear because this location is not shown on [Figure I](#) for Fuel Line B. In all the other cited examples where portions of a sidewall represented by a composite sample were excavated, these samples were designated as not removed—the more conservative selection.

n. COPC Summary Table Titles. In the CSR tables summarizing COPCs for each site, columns should specify the cleanup goals that apply--not the date of the excavation. For example, “Delineated 2000 to 2001 RA” should say “Delineated to May 2000 ESD Chemical-Specific Cleanup Goals”.

Response: This interpretation is correct; however, space limitations in the tables will not allow for such a long title. An explanation will be added to [Section 4.1](#), Using the Excavation Summaries, to more accurately describe the table header.

- o. Units. Soil sampling results should be reported on all tables consistently--in mg/kg. For example, soil screening results are in mg/kg, but waste profile results are in ug/kg. Also, the same units should be used for all compounds on a table. For example, on waste profiling tables, the column heading notes that units are ug/kg, but a footnote reports that metals and TRPH are given in mg/kg. Such mixing of units is inadvisable.**

Response: Units of mg/kg were used consistently on all the data tables associated with the excavations. Units were mixed only on the waste profile data table in [Appendix A](#) because that was the format supplied in hard copy from the RA contractor's laboratory. These data are not available for simple database manipulation, and, while there may be some potential for confusion, the use of units is clearly described in the table footnotes. Waste profile soil samples were collected only to guide waste disposal, not to provide any site delineation information. The secondary role these data play in the CSR does not justify the additional effort needed to align the units on this table.

- p. Laboratory Reports. Lab reports (including QA/QC reports) for analytical results should be included. Analytical methods used for each step out should be summarized. A table should be provided summarizing analytical methods and analytes for each method. The table should note that, in general, all method analytes were not analyzed for at sampling locations.**

Response: Inclusion of laboratory reports would add tens of thousands of pages to the CSR at significant expense. The Navy does not consider the addition of laboratory reports to be a justifiable expense. Specific laboratory reports can be provided on request, as appropriate. Analytical methods are discussed in Sections B4 and B5 of the quality assurance project plan contained in the RDA.

- q. Chain of Custody Forms (COCs). Due to resource constraints, COCs were not reviewed.**

Response: Comment acknowledged. Note, however, that retrieval of chain-of-custody (COC) forms from files, digitization and scanning, and inclusion of COC forms and laboratory login sheets in the CSR were undertaken specifically in response to DTSC requests (see comment 10 of Attachment C in the responses to comments on the RDA).

- r. Topography. Excavation contours should be provided for all sites.**

Response: Excavation contours are provided at all sites. Excavations completed during 2000 and 2001 had vertical sidewalls and, therefore, have no excavation contours. Please provide specific examples.

- s. **Title: Partial Construction Summary Report.** Since a significant number of sites (28) are not included and since the sites excluded represent a sizable portion of the area of Parcel B, the title of this CSR should be changed to reflect that it is a construction summary report for a portion of Parcel B, or a partial construction summary report.

Response: The text clearly identifies that all excavations were not included. No change is proposed.

t. **Figures**

- **All sampling locations should be shown on figures, including sampling locations for compounds that are not identified as COPCs at a site. For example, at B0146, volatile organic compound (VOC) results are provided on tables for four locations (146B02, SE2, SN2, SW2) that are not shown on B0146 figures. Results for locations that are not identified cannot be fully evaluated.**

Response: All confirmation sample results were posted on figures. Posting sample results for chemicals that are not COPCs or that do not exceed soil cleanup levels would not add value to the analysis in the CSR. The data tables provided with each excavation are sufficient for the presentation of this supplemental information. At Excavation B0146, all the cited results are less than the soil cleanup levels.

- **Results for coalescing and overlapping sites should be shown on figures for both sites. Otherwise, site figures may misrepresent site contamination—Figures for B2915 and FLA exemplify this problem.**

Response: All data used in the delineation analysis are posted on the appropriate figure. No additional data are required on the figure for Excavation B2915 to illustrate that this excavation met cleanup goals.

- **All exceedances of Mn (i.e., all concentrations greater than 1,400 mg/kg) should be indicated in red on figures.**

Response: Locations that have sample results exceeding soil cleanup levels are shown in red on the excavation figures. Please cite specific examples.

- **Figures should display data for adjacent and coalescing sites.**

Response: All data used in the delineation analysis are posted on the appropriate figure.

- **Figures have purple lines which designate “Delineated Extent of Chemicals Shown”. However, exceedances (especially in bottom samples) are shown outside the purple lines for some locations (e.g., EE05 figures): that is, the lines are not drawn to enclose all exceedances. These lines have not been reviewed for accuracy.**

Response: Bottom composite samples collected at 10 feet bgs do not affect the delineation of an excavation. The cited example at EE-05 involves bottom composite samples. The text in [Section 4.0](#) will be adjusted to clarify the intent of the purple/magenta line indicating an excavation delineation.

- u. **Table 4-1. Where is Table 4-1 (data qualifiers) located? It is not at the end of Section 4.0, as indicated in Section 4.0.**

Response: [Table 4-1](#) is presented on pages 4-3 and 4-4.

Specific Comments (Attachment A Table)

See [Attachment A](#) table.

RESPONSES TO RWQCB COMMENTS FROM MS. JULIE MENACK

General Comments

1. **Comment:** In this document, the Navy has compared the concentrations of CERCLA contaminants against the ESD criteria and petroleum concentrations against criteria found in the “Final Parcel B Corrective Action Plan, January 10, 2001 (CAP). Board staff’s major comment on this document is that the intent of the ESD criteria and the CAP criteria differ. This should be clarified in the revised report. Specifically, in Section 2.2.1, the subject report states that the 1998 ESD Document “revised the selected remedy to require excavation of contaminated soils to a 10^{-6} cancer risk (residential) or to a maximum depth of 10 feet below the ground surface, to ensure the remedy is protective of human health in both the short and long term”. This is in contrast with the total TPH goal in the CAP, which is not protective of human health, but is protective of groundwater. If human health is of concern, it may be necessary to develop additional criteria. This should be clearly stated in the report.

Further, as stated in Board staff’s November 12, 2002 letter to the City of San Francisco, “it is Board staff’s intent to reopen the CAP if any future use of the property differs from the uses addressed in the approved CAP. Therefore, the criteria used in the subject document will not result in an unrestricted reuse scenario. It is our

understanding that there have indeed been discussions of potentially reopening the approved CAP. This is because criteria provided in the CAP for petroleum cleanup do not actually address the unrestricted use issue nor was it defined in the CAP. As we have pointed out previously, any future use of the property that differs from the uses addressed in the approved CAP must be established and agreed upon between the City and the Navy before being brought to Board staff for input as to the appropriate cleanup criteria.”

Response: Additional clarification that the total total petroleum hydrocarbons (TPH) cleanup goal does not directly apply to protection of human health will be added to appropriate sections of the text.

2. **Comment:** The CAP states that “Any soils found to have TTPH [total TPH] concentrations in excess of 3,500 milligrams per kilogram (mg/kg) will be removed”. It appears that the Navy has incorrectly applied this criteria in the subject document. For each excavation, instead of evaluating the summed total of TPH as motor oil (TPH-mo), TPH as diesel (TPH-d), and TPH as gasoline (TPH-g), each individual analysis or TPH-mo, TPH-d, and TPH-g was compared with the 3,500 criteria. This has resulted in an inference that fewer samples exceed the TPH criteria than actually do. Both the tables and figures in this report should be revised to provide TTPH detected at each location. Board staff will attempt to point out a few of these locations in these comments; however, the Navy should reevaluate the data with the TPH values totaled to determine where the 3,500 mg/kg criteria is exceeded.

Response: All excavations that had TPH as a COPC were reviewed to confirm the total TPH evaluation criterion was correctly applied. Samples collected from fuel line areas in 1998 to 1999 were identified separately (that is, with unique sample names) depending on whether analysis was for TPH purgeables or TPH extractables. In these cases, two samples with unique names represent a single location. An automated process to compare sample concentrations to the total TPH cleanup goal was used to identify locations where samples exceeded the cleanup goal, and this sample collocation was not accounted for. In addition to the revisions listed below, changes will be made to Fuel Line C where locations 4600B80 and 4600B81, together, exceed the total TPH cleanup goal. Note, however, that this change at Fuel Line C does not affect the delineation.

A few of these locations are:

2a In Excavation 2408, sampling locations 2408W02A, 2408FLB2, 2408W2A, and 2408BC2

Response: Symbols for locations 2408W2A, -FLB2, and -BC2 will be shown in red on the revised figure. Nevertheless, none of these changes affects the delineation for Excavation 24-8.

2b In excavation IR26, sampling locations IR26B022, IR26B015, and IR26B014

Response: These soil borings, located at Excavation EE-04C, are already labeled as exceeding the total TPH cleanup goal.

2c In the Fuel Line F excavation, location 4600B31

Response: The sample at location 4600B31 did not exceed the total TPH cleanup goal. However, TPH analyses were divided between location 4600B31 (diesel and motor oil) and location 4600B32 (gasoline). Together, these two samples would exceed the total TPH cleanup goal and the symbol for this location will be revised to reflect this exceedance. Note, however, that these samples were removed when the excavation was deepened to 10 feet bgs.

2d The figures that illustrate exceedances of chemicals of potential concern in the numerous sections of the subject report where TPH was a chemical of concern reference the “ESD 2000 Goal” as the criteria that the data is being evaluated against. It is Board staff’s understanding that the ESD 2000 Goals were for CERCLA contaminants and not for TPH. As stated above, the 3,500 mg/kg TTPH goal was presented in the CAP. Therefore, the title and legend of each TPH figure should be revised to reflect that the TTPH data is being compared against the goal provided in the CAP.

Response: The text will be modified to clarify that the source of the total TPH cleanup goal was the corrective action plan, and not the 2000 ESD. However, this revision would require modification of more than 20 figures that would not, otherwise, require any changes. Consequently, the Navy does not propose to change any figures in response to this comment, except those that require modification for other purposes.

- **Section 3.1 states that screening criteria of 100 mg/kg TPH-g and 1,000 mg/kg TPH-d and TPH-mo were used to identify where samples should be collected. The lateral and vertical extent of the individual constituents, as well as TTPH was not defined in several areas. A few examples of locations where TPH-g, TPH-d, or TPH-mo exceeded these screening criteria and the extent of these constituents was not defined are provided below. The Navy should identify all such locations and provide an explanation of why the lateral and vertical extent of hydrocarbons was not defined at these locations where the screening criteria were exceeded:**

Response: The TPH screening criteria discussed in [Section 3.1](#) applied only to activities conducted during the 1996 and 1997 exploratory excavations. As [Sections 3.2 and 3.3](#) discuss, other TPH screening criteria were used for other excavation phases. Individual examples are addressed separately, below.

- **In excavation IR2330, location IR 233015.**

Response: The cited location is not clear. If the intended location is boring IR23B015, the samples collected at this boring did not exceed the total TPH cleanup goal of 3,500 mg/kg.

- **In excavation PA24, location PA24B004**

Response: At Excavation 24-2, none of the four samples collected from 10 feet bgs or less from boring PA24B004 exceeded the total TPH cleanup goal of 3,500 mg/kg.

- **Fuel Line A, locations 460B67, 460BC34, 460BC31, 460BC32, 460BC34.**

Response: Samples collected from locations 4600B67, 460BC31, 460BC32, and 460BC34 did not exceed the total TPH cleanup goal of 3,500 mg/kg.

- **Fuel Line B: locations 460N1AC, 460BC40 and 4600SE19. In this area, it appears that concentrations above 3,500 mg/kg TPH was detected at depths between 7.75 and 10 feet bgs. There were many locations in this excavation where samples were not collected at this depth. Therefore, the extent of impacted soil above both the screening criteria and 3,500 mg/kg has not been defined.**

Response: The area near location 460N1AB is planned to be investigated to address fuel-related contamination. The intent of the comment regarding location 4600SE19 is not clear because none of the samples in that area exceeded the total TPH cleanup goal of 3,500 mg/kg.

- **Fuel Line C: Similar to Fuel Line B, most of the detections above 3,500 mg/kg were detected at depths between 7.75 and 10 feet bgs. As there were many locations in this excavation where samples were not collected at this depth, the extent of impacted soil exceeding both the screening criteria and 3,500 mg/kg has not been defined.**

Response: Please cite specific examples. At Fuel Line C, only the samples at location 4600B78 (and collocated 4600B79) exceeded the total TPH cleanup goal. These samples were collected at 10 feet bgs and are bounded by clean sidewall samples.

- **Fuel Line F: The lateral and vertical extent of TTPH was not defined in 4600SE9, and at 4600B41.**

Response: The intent of the comment regarding location 4600SE9 is not clear because the samples at this location do not exceed the total TPH cleanup goal of 3,500 mg/kg. The symbol at location 4600B41 (and collocated 4600BC31, -32, and -42) should indicate that TPH concentrations exceeded the total TPH cleanup goal because TPH purgeable as gasoline was detected at 3,000 mg/kg (location 4600BC32) and TPH extractable as diesel was detected at 2,200 mg/kg (location 4600BC31). Note, however, these samples were removed when the excavation was deepened to 10 feet bgs.

Specific Comments

1. **Comment:** **Section 2.0: This section should contain an explanation of the CAP goal of 3,500 mg/kg TTPH as it is not explained clearly in any portion of the subject report.**

Response: Further explanation of the total TPH cleanup goal of 3,500 mg/kg will be added to [Section 3.3](#) where it is currently discussed. [Section 2.0](#) discusses only the ROD and ESDs; fuel-related cleanup and the total TPH cleanup goal are not related to the Comprehensive Environmental Response, Compensation, and Liability Act-based discussion in [Section 2.0](#).

2. **Comment:** **Table 2.1, This table should be revised to include the TTPH goal of 3,500 mg/kg.**

Response: The footnotes of [Table 2-1](#) will be expanded to include the total TPH cleanup goal of 3,500 mg/kg and a brief explanation.

3. **Comment:** **Section 3.3: This text states that “commingled fuel-related compounds were compared to a screening value of 3,500 mg/kg for the sum of TPH purgeable as gasoline, TPH extractable as diesel, and TPH extractable as motor oil concentrations”. This statement is accurate; however, as stated above, this screening level was not applied properly in any excavation area. Also, as stated in the above comments, a more thorough explanation of the rationale for this criteria should be provided in this report.**

Response: Please refer to the response to the above comments.

4. **Comment:** **Section 4.1: The general tips for understanding the figures should be revised to explain that the TTPH criteria were derived from the CAP and are not the 2000 ESD cleanup levels.**

Response: [Section 4.1](#) will be modified accordingly.

REFERENCES

- IT Corporation (IT). 1999a. "Completion Report, Exploratory Excavations, Hunters Point Naval Shipyard, San Francisco, California." June.
- IT. 1999b. "Work Plan, Remedial Action for Parcel B, Hunters Point Shipyard, San Francisco, California." Revision 9. July.
- Tetra Tech EM Inc. (Tetra Tech). 2001a. "Final Manganese Site Proposal, Parcel B, Hunters Point Shipyard, San Francisco, California." September 11.
- Tetra Tech. 2001b. "Final Evaluation of Ambient Manganese Conditions, Hunters Point Shipyard, San Francisco, California." December 21.
- U.S. Department of the Navy. 2000. "Final Explanation of Significant Differences, Parcel B, Hunters Point Shipyard, San Francisco, California." May 4.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT

Note: DTSC comments presented in columns 1-4; EPA comments in columns 5 and 6. Responses are in bold-face text and follow each comment in the next row. Empty cells indicate no comments. All concentrations are in mg/kg. Maximum values are cited. Linear dimensions are in feet. Depths are in feet below the ground surface (feet bgs).

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
General		Comparison to cleanup goals other than those presented in the May 2000 ESD is beyond the scope of the CSR. These evaluations may be included in discussion of the technical memorandum to support a ROD amendment (TMSRA). Consequently, no responses are provided for comments listed in this column.	Risk assessment comments are beyond the scope of the CSR. These comments will be discussed during evaluations for the TMSRA for Parcel B. Therefore, no responses are provided for comments related to risk assessment.		
IR-06			IR-06 (included in Parcel B in the RI) is now in Parcel C.		
Response:	IR-06 is part of Parcel C.				
IR-07					
7-1	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³ Shoreline complications ³		
7-2	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
7-3	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³ Shoreline complications ³		
7-4	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
7-5	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³ Shoreline complications ³		
B0536	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B0628	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B0632	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B0636	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B0933	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B1036	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B1128	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B1132	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B1227	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B1324	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
B1422	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Differing subsurface fill conditions ³		
Response:	Excavations at IR-07 will be included in a future addendum to the report.				
IR-10					
10-1	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Undergoing SVE ³		
Response:	This excavation will be included in a future addendum to the report.				

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-10 (Continued)					
10-2	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Undergoing SVE ³		
Response:	This excavation will be included in a future addendum to the report.				
10-3			10-3 (included in Parcel B in RI) is now in Parcel C.		
Response:	Excavation 10-3 is part of Parcel C.				
10-4 Ni	Yes for Ni. No for SVOC DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B008: As (6.4), Fe (55,600), Ni (2,440) > 2002 PRGs. DLs > 2002 PRGs: bap, daha, N-nitroso-di-N-propylamine (0.39). Close to or > PRGs adj: Cd (DL 1.1), Co (123), cyanide (DL 0.35), Ni (2,240), N-nitroso-di-N-propylamine, Mn (1,070), Zn (178).	10-4 was never opened and was not investigated beyond single RI sample. <u>RA.</u> Compounds in column 3 may be under-represented in the RA since they were not identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM and so were not considered in the RATM despite elevated DLs. Zn (178), Ni (2,440) > EPSCs.		
Response:	SVOCs were not COPCs at this excavation. SVOCs were not identified as risk drivers during the RD; therefore, no SVOCs were selected as COPCs. The CSR is a summary of the remedial actions taken at areas identified during the RD to have excess risk and is not intended to re-evaluate data and previous risk assessments.		Comment noted.		
10-5 As, Cu, Pb, Mn	Yes for As, Cu, Mn. Mn: Extent determined, Ave < HPAL. No for SVOC DLs. Pb: Extent of shallow (1.25 feet bgs) contamination by Pb south of IR10B009 is not determined since confirmation samples were all deeper.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B009 for As (8.6), Fe (46,500), Hg (0.23), Ni (2,220), Mn (1,620) > 2002 PRGs. For Pb, see column 2. DLs > 2002 PRGs: Hg (0.27); bap, bbf, daha, N-nitroso-di-N-propylamine (0.69). Close to or > PRGs adj: Cd (DL 1.1), Co (116), Mn (1,620), Ni, N-nitroso-di-N-propylamine, (2,220), Zn (226).	<u>RA.</u> Compounds (except As, Cu, Mn) in column 3 may be under-represented in RA since they were not identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (226) > EPSC.	Lead - 777 mg/kg at 1.25 feet	No confirmation samples to south, southeast, or east at 1.25 feet. Only excavated 2 feet beyond exceedance to southwest.
Response:	SVOCs were not COPCs at Excavation 10-5. Sample depths for Pb complied with the RDA.		Risk assessment only; no response.	Response presented under "EPA Comments" column	Excavation 10-5 appears to have been mislocated approximately 7 feet north of the ideal location. However, considering the uniformly low concentrations of COPCs found in all the samples at this excavation, it is unlikely that any significant contamination was overlooked.
B2725	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Undergoing SVE ³		
Response:	This excavation will be included in a future version of the report.				
B2727 Mn	Yes for Mn. Extent determined. Ave < HPAL. No for SVOC DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at PA50TA01: As (11), Fe (66,500), Mn (1,920) > 2002 PRGs. DL > 2002 PRGs: Hg (0.27); bap, bbf, daha, N-nitroso-di-N-propylamine (0.69). Close to or > PRGs adj Mn (1,920), Ni (978), N-nitroso-di-N-propylamine.	<u>RA.</u> Compounds (except Mn) in column 3 may be under-represented in RA since they were not identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (124) > EPSC.		
Response:	SVOCs were not COPCs at this excavation.		Risk assessment only; no response.		
B2925 As, TPH-g, TPH-d	Yes for As. No for Mn. Mn (1,430) should have been identified as a COPC, since it is > ESD goal (1,400). Extent of Mn has not been determined. No for SVOCs DLs. TPH-g and TPH-d were not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B021 (and in confirmation samples for As) for As (4.2), Fe (45,500), Hg (0.36) > 2002 PRGs. Mn (1,430), Ni (1,430) close to 2002 PRGs (1,800, 1,600). DLs > PRGs: bap, bbf, daha, N-nitroso-di-N-propylamine (0.38). Close to or > PRGs adj: Cd (DL 1.1), Mn (1,430), Ni (1,430), N-nitroso-di-N-propylamine.	<u>RA.</u> RI sample was excavated, all other As samples are still present and available for inclusion in RA. Compounds (except As) in column 3 may be under-represented in RA since they were not identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,430), Zn (71.5) close to EPSCs (1,941, 113).		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-10 (Continued)					
Response:	Mn was not a COPC. COPCs were selected during the RD based chemicals identified during the RI/FS to cause unacceptable risk. Recharacterization of Parcel B was not the goal of the RD and RA; rather, the RD focused on the specific chemicals at each area that created risk. SVOCs were not COPCs at Excavation B2925.		Risk assessment only; no response.		
B2926 benzene, 1,1-DCE, bap, bbf, phthal, chry, TPH-g	COPCs in column 1 did not exceed ESD goals at single RI sample, except for SVOCs DLs. TPH-g was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B010: As (8.9), Fe (34,200), Hg (0.47) > 2002 PRGs. Mn (1,110), Ni (1,250) close to PRGs (1,800, 1,600). DLs > 2002 PRGs: bap, bbf, daha, N-nitroso-di-N-propylamine (0.39). Close to or > PRGs adj: Cd (DL 1.0), cyanide (DL 0.31), Mn (1,110), Ni (1,250), N-nitroso-di-N-propylamine.	Site was never opened. RA. RI sample remains in place and is available for inclusion in RA, so COPCs in column 1 should be represented in RA. Compounds in column 3 may be under-represented in RA since they have not all been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).		
Response:	SVOC detection limits were within the accepted range (less than 3 mg/kg).		Risk assessment only; no response.		
B3125 baa, bbf, chry	No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B018: As (5.4), Fe (36,700), Hg (0.07), Ni (1,660) > 2002 PRG. DLs > 2002 PRGs: bbf (0.36), bap, daha, N-nitroso-di-N-propylamine (0.37). Close to or > PRGs adj: Cd (DL 0.99), Mn (748), Ni (1,660), N-nitroso-di-N-propylamine.	RA. RI sample excavated, all other confirmation samples remain in place and are available for inclusion in RA, so bap, bbf, and chry should be represented in RA. Compounds in column 3 (except for bap, bbf) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,660) close to EPSC (1,941).		
Response:	SVOC detection limits were within the accepted range (less than 3 mg/kg).		Risk assessment only; no response.		
B3324 Pb	Excavation and extent sufficient for Pb. Very small excavation. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B034: As (2.7), Fe (40,800), Hg (0.16), Ni (1,770) > 2002 PRGs. DLs > 2002 PRGs: bap, bbf, daha, N-nitroso-di-N-propylamine (0.44). Close to or > PRGs adj: Mn (904), Ni (1,770), N-nitroso-di-N-propylamine, Sb (5.9), Zn (259).	No CrVI or cyanide data for this electroplating location. RA. RI sample and some confirmation samples were excavated so Pb may be under-represented in RA. Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (259) > EPSC (113). Ni close (1,770) to EPSC (1,941).	Lead - 333 and 420 mg/kg at 3.75 feet	Appears to be a layer of lead-contaminated soil at 3.75 feet. Extent of contamination not delineated to the northeast and southwest.
Response:	SVOCs were not COPCs at this excavation.		Electroplating activities occurred in the northwest corner of Building 123—distant from the location of B3324.	Response presented under “EPA Comments” column	Exact correlation between the depth of a sample exceeding the soil cleanup level and a step-out bounding sample is not required by the RDA. Likewise, the RDA does not require that the stepout horizontal location be exactly in line at exactly 5 feet from the exceedance location. The Navy met the RDA sampling requirements for this excavation. This is a very small excavation (delineated extent about 7 feet by 12 feet by 6.5 feet deep). It is unlikely that significant contamination extends between the closely spaced (horizontally and vertically) samples delineating this area.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-10 (Continued)					
B3422 Aroclor-1260, bap, bbf, bkf, Cu, daha, icdp, Pb, TPH-d	Extent and excavation sufficient for Cu except. No for Aroclor-1260. Aroclor-1260 (0.22) exceeded the ESD goal (0.21) on the NE wall. No for Pb. Pb (330) was identified as COPC in W, and sampled for in subsequent excavation on the NE wall. However, extent not defined on other three walls. No for PAHs. Extent not defined for bap (1.5), bbf (1.5), bkf (1.5), daha (1.5), icdp (1.5) on NE wall. For these confirmation samples, DLs are greater than ESD goals and PRGs. Various PCBs (not just Aroclor-1260), PCP, and N-nitroso-di-N-propylamine should have been identified as COPCs, since their concentrations in W exceeded ESD goals. In W, the total of various Aroclors was 4.68. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No for: As (9.2 in RI), Fe (49,900 in RI), Hg (0.58 in W), Ni (1,640), Pb (330 in W), TCE (0.190 > 2002 PRG .053 in RI), total of various PCBs (4.68 in W) > 2002 PRGs. DLs > 2002 PRGs: bap, bbf, daha, ni-nitroso-di-n-p (2.0); bkf, icdp (1.5), PCP (9.6). PCBs, PAHs > 2002 PRGs at > 10 feet bgs. Close to or > PRG adj: Cd (DL 0.91), cyanide (DL 0.34), Mn (894), N-nitroso-di-N-propylamine.	RA. RI sample (IR10B004) and 00-01 confirmation samples were all removed so COPCs in column 1 (Aroclor -1260, bap, bbf, bkf, Cu, daha, icdp, Pb) may be under-represented in RA (especially in NE). Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (133) > EPSC (113). Se (1.2), Ni (1,640) close to EPSCs (1.95, 1,941). The Navy's letter 1/24/03 says that chlordane was identified in W. Although alpha (0.0011)- and gamma (0.0011)-chlordane were measured in W results provided, 2002 PRGs (1.6 and 1.6) were not exceeded. (Gamma-chlordane was close to the more stringent 1997 ROD goal of 0.0017.) If other data exist, it should be provided. Figure B3422B: Exceedances (9 high DLs) are not indicated as such on this figure.	Aroclor-1260 - 2.7 mg/kg at 2.25 feet. Benzo(a)anthracene	No samples collected at or near the 2.25 foot depth near 3422N1C to the east or southeast. Benzo(a)anthracene was detected at 1.2 mg/kg in the waste profile sample, but was not a COPC.
Response	Please identify the location where Aroclor-1260 exceeded the cleanup goal. Pb was added as a COPC based on a waste profile sample collected from material removed during the 2000 to 2001 RA. The extent of Pb contamination in the 2000 to 2001 excavation was bounded. Pb was not a COPC in the original excavation. SVOC detection limits were within the accepted range (less than 3 mg/kg). Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.		Chlordane was not an issue at this excavation. Only Aroclor-1260 and Pb were added at this excavation as a result of exceedances in the waste profile sample. The mention of chlordane in the letter dated January 24, 2003, was a typographical error. Nondetects that exceed cleanup goals are not considered exceedances. Resampling for PAHs was not conducted unless the detection limits exceeded 3 mg/kg.	Response presented under "EPA Comments" column	The step-out sample at location 3422N2C bounds contamination identified at location 3422N1C. Location 3422N1D is not a stepout from 3422N1C, but rather was collected to characterize the new eastern sidewall created as the excavation stepped north. The Navy met the RDA sampling requirements for this excavation. Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.
B3423 1,2-DCA	Mn (1,520) exceeded 2000 ESD goal but was not identified as a COPC. This sample was collected at 11.25 feet bgs but shallower samples were also close (1,260 at 2.25) and no samples were collected between 4.75 (725) and 11.25 (1,520) feet bgs, so the 11.25 sample represents a portion of the interval < 10 feet bgs. No for SVOCs DLs. CrVI, cyanide were not analyzed for at this electroplating location.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B033: As (6.2), Fe (34,000), Hg (0.18), Mn (1,520) > 2002 PRGs. DLs > 2002 PRGs: bap, bbf, daha, ni-nitroso-di-n-p (0.40). Close to or > PRGs adj: Mn (1,520), Ni (568), N-nitroso-di-N-propylamine.	B3423 was never opened. The single COPC (DCA 0.041) does not exceed 2000 ESD or 2002 PRGs. RA. Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (73.1) close to EPSC (113).		
Response:	Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process. SVOCs were not COPCs at this excavation. Electroplating activities occurred in the northwest corner of Building 123—distant from the location of B3423.		Risk assessment only; no response.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-10 (Continued)					
B3425 Be, Mn	Extent and excavation sufficient for Be. Mn: extent determined and Mn average < HPAL. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B019 and in confirmation samples for: As (6.1), Fe (38,900), Hg (0.19), Mn (2,040), Ni (1,730) > 2002 PRGs. DLs > 2002 PRGs: As (5.0); bap, bbf, daha, ni-nitroso-di-n-p (0.38). Close to or > PRGs adj: Cd (1.0 DL), Mn (2,040), Ni (1,730), N-nitroso-di-N-propylamine.	RA. Original RI location was excavated. All confirmation samples remain in place, so Be and Mn can be included in RA. Compounds in column 3 (except Mn) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (79.3) close to EPSC (113).		
Response:	SVOCs were not COPCs at this excavation.		Risk assessment only; no response.		
B3622 Aroclor-1260, Mn, TPH-d	Aroclor-1260: extent determined and excavation sufficient. Mn: extent determined and Mn Ave < HPAL. TPH-d was not reviewed. Compounds exceeding ESD goals in W, which were not identified as COPCs include: baa, bap, bbf, bbf, daha, N-nitroso-di-N-propylamine, PCP, and various Aroclors. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B005 and in W: As (8.4 in RI), Fe (37,500 in RI), total Aroclors (0.39 in W), baa (1.1 in W), bap (1.1 in W), bbf (1.1 in W), bkf (1.1 in W), daha (1.1 in W), Hg (0.38 in W), N-nitroso-di-N-propylamine (1.1 in W), N-nitrosodiphenylamine (1.1 in W), PCP (5.6 in W) > 2002 PRGs DLs > 2002 PRGs: Hg (0.05); bap, bbf, daha, ni-nitroso-di-n-p (0.39). Ni close (1,570) to PRG (1,600). Close to or > PRGs adj: Cd (0.95 DL), cyanide (0.30 DL), Mn (2,230), Ni (1,570), N-nitroso-di-N-propylamine.	RA. Confirmation samples remain in place so Aroclor-1260 and Mn can be included in RA. Compounds in column 3 (except Mn) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,570), Zn (65.5) close to EPSCs (1,941, 113). Figure B3622C. 3622SWB should be shown as removed.	Benzo(a)anthracene -1.1 mg/kg, benzo(a)pyrene - 1.1 mg/kg, benzo(b)fluoranthene (1.1 mg/kg), benzo(k)fluoranthene (1.1 mg/kg), dibenz(a, h)anthracene (1.1 mg/kg), indeno(1, 2, 3 - cd)pyrene (1.1 mg/kg), and pentachlorophenol (5.6 mg/kg)	Analytes above cleanup goals were detected in the waste profile sample, but were not COPCs. The extent of these compounds in soil is not known, so it is not known if the excavation was sufficient for remediation. It is unclear if analytical data for these compounds exists, or if the lab only reported the compounds that were COPCs.
Response:	Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels. SVOCs were not COPCs at this excavation.		Location 3622SWB will be shown as removed on Figure B3622C.		
B3623 Aroclor-1260	Single RI sample analyzed for Aroclors only. Aroclor-1260 does not exceed ESD in single RI sample. Aroclor-1242 (0.30) exceeds ESD and 2002 PRGs, but Aroclor-1242 was not identified as a COPC and is not shown on Figure B3623. Extent not determined for Aroclor-1242. ESD goals are stated in terms of <u>total</u> PCBs: hence all Aroclors should be analytes. In fact, it seems like a full suite of analytes (and CrVI and cyanide) would be appropriate for a site inside an electroplating shop.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at PA51SS05: Aroclor-1242 (0.30) and total Aroclors (0.30) > 2002 PRGs. Unknown for other compounds.	RA. Single RI sample remains in place so that Aroclor-1260 may be included in RA. However, only Aroclors were analyzed for, so other (unknown) compounds may be under-represented in RA.		
Response:	Nondetects that exceed cleanup goals are not considered exceedances. The PCB cleanup goals for Aroclors in the 2000 ESD apply individually to each Aroclor, not to any combination of Aroclors. PCB clean goals were originally listed separately in Table 8 of the 1997 ROD and were combined into one row in the 2000 ESD for convenience only. Electroplating activities occurred in the northwest corner of Building 123—distant from the location of B3623.		Risk assessment only; no response.		
B3625 Be	Extent and excavation sufficient for Be. No post-RI data on other compounds. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. No at IR10B020: Fe (44,800), Hg (0.15), Ni (1,750) > 2002 PRGs. DLs > 2002 PRGs: As (3.5); bap, bbf, daha, ni-nitroso-di-n-p (0.40). Close to or > PRGs adj: Cd (1.0 DL), Mn (930), Ni (1,750), N-nitroso-di-N-propylamine.	RA. Confirmation samples for Be remain so Be can be included in RA. Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,750), Zn (104) close to EPSC (1,941, 113).		
Response:	SVOCs were not COPCs at this excavation.		Risk assessment only; no response.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-18					
<p>18-1 baa, bap, bbf, bkf, Be, chry</p>	<p>Extent determined and excavation sufficient for baa, bap, bbf, Be, bkf, chry. Mn (2,370) should have been identified as a COPC: extent not determined for Mn. Bs were collected at 6 feet bgs or less. Bs not taken at deepest hole at 10 feet bgs. Why was deepest hole excavated? What compound(s) were chased? No for SVOCs DLs.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. RI samples: IR18B011, 14, 31, 32, 37, 38. As (8.2 in B014), Cu (in 18-4), Fe (52,700 in B037), Hg (0.76 in B011, 2.3 in 18-4 in W), Mn (2,370 in B014), Ni (2,000 in SS), Pb and Zn (in B0146) > 2002 PRGs Cd (1.2 in W), Ni (1,230 in B037), Pb (140 in SS), Zn (241 in B014) close to PRGs (1.7, 150, 1,600, 150, 370). DLs > 2002 PRGs: N-nitroso-di-N-propylamine (0.77 in B014). Close to or > PRGs adj: Cd (1.2 in W), Ni (2,000 in SS), Mn (2,370 in B014), N-nitroso-di-N-propylamine.</p>	<p><u>Coalescing Sites</u> B0146. COPCs in adjacent B0146 (Pb and Zn) not analyzed for at SW boundary. Extent of Pb and Zn not delineated at boundary between sites. Elevated Pb (140) in (SS 18-1) and Zn (241 in 18-1 at B014) also suggest that Pb and Zn may be COPCs for 18-1. 18-4. Cu in adjacent 18-4 was not analyzed for at E boundary. Extent of Cu not determined in 18-1 (and 18-4) because Cu was identified in W but was only sampled for in subsequent excavation in the E portion of the site. Hg may also be a concern (see 18-4). 18-2 and B0241. No information is presented on coalescing site 18-2 (NE of 18-1) and adjacent site B0241 so it cannot be determined if COPCs in 18-2 and B0241 have been analyzed for in 18-1. RA. RI samples and confirmation samples were excavated in NE so baa, bap, bbf, bkf, Be, chry may be under-represented in the NE area in the RA. Across the rest of the large excavation, confirmation samples remain in place, so baa, bap, bbf, bkf, Be, chry can be included in RA. Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (241 in B014), Ni (2,000 in SS) > EPSCs (113, 1,941). Ni (1,230 in B037) close to EPSC (1,941).</p>	<p>0181SN6 - benzo(a)anthracene (0.6 mg/kg), benzo(a)pyrene (0.36 mg/kg), and benzo(b)fluoranthene (0.92 mg/kg)</p>	<p>Detection at 8 feet bgs, confirmation samples collected at depths of 4.25 and 9.75 feet bgs, excavated about 7.5 feet beyond sample location.</p>
Response:	<p>Risk from remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B. Samples were collected from the 10-foot-deep portion of this excavation at location 0181B17. This deeper part of Excavation 18-1 was excavated to remove concentrations of baa, bap, and bbf that exceeded cleanup goals. SVOC detection limits were within the accepted range (less than 3 mg/kg).</p>		<p>B0146. Excavation B0146 expanded north into Excavation 18-1. However, since 18-1 had already been excavated and backfilled, there was no native soil in place to sample for Pb and Zn. Data from the closest boring (IR18B037), located about 30 feet north of Excavation B0146, did not indicate any Pb or Zn concentrations exceeding cleanup goals. Concentrations of both metals were low at this boring; Pb ranged from 4.8 to 5.4 mg/kg and Zn ranged from 47.3 to 61.4 in four samples. Except Be, metals were not COPCs at Excavation 18-1. 18-4. There was no need to evaluate Excavation 18-1 for Cu because the Cu exceedance at 18-4 was in a waste profile sample collected from soil removed from the northeastern corner of 18-4 in an area not adjoining 18-1. Hg was not a COPC for either 18-1 or 18-4. 18-2. Excavation 18-1 did not join 18-2 when the bottom composite samples were collected for 18-1. When Excavation 18-2 joined 18-1, the bottom composite samples for 18-2 were analyzed for the joined set of COPCs for both excavations. B0241. Excavation B0241 did not join 18-1 and there is no reason to consider joined sets of COPCs for bottom composite samples.</p>	<p>Response presented under "EPA Comments" column</p>	<p>The sample at location 0181SN6 was a composite sample collected during the 1998 to 1999 phase of the remedial action at Excavation 18-1. Because the sidewall sample was a composite sample, the symbol location does not represent an actual sampling location, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.</p>
18-2					
Response:	<p>This excavation will be included in a future addendum to the report.</p>		<p>This excavation will be included in a future addendum to the report.</p>		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-18 (Continued)					
18-3					
Response:	This excavation will be included in a future addendum to the report.		This excavation will be included in a future addendum to the report.		
18-4 Aroclor-1254, Aroclor-1260 baa, bap, bbf, bkf, Cu, chrys, daha, icdp	Extent and excavation sufficient for Aroclor-1254, Aroclor-1260, baa, bap, bbf, bkf, chry, daha, icdp. However, at 1804F1B, multiple (5) analyses are shown at 6 feet bgs. Only one set had high DLs (11). What is the explanation for the multiple analyses? No for Hg. Hg (2.2) was measured in W very close to 2000 ESD (2.3) and greater than 2002 PRG (zero). Hg should have been identified as a COPC. Extent not determined for Hg. No for Cu, Pb, Zn. Cu (230) was identified in W. Cu was included as COPC but only in the last stepout on NE. In the NE area, one bottom sample (BC2) was analyzed for Aroclor-1260, Cu, Pb, Zn and TPH-e. However, BC2 represents only a fraction of the total excavation. Therefore, the extent of Cu, Pb, and Zn has not been determined. Mn and Ni. The extent of Mn and Ni in 18-1 has not been determined: and, it has not been determined if Mn and Ni extend into 18-4. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.7 in W), Cu (230 in W), Hg (2.2 in W), Mn (in 18-1), Ni (in 18-1), Pb (160 in W) > 2002 PRGs. DLs > 2002 PRGs: bap and daha (0.19 in confirmation samples), N-nitroso-di-N-propylamine (1.8) and PCP (4.4) in RI: IR18B026. Close to or > PRGs adj: Cd (0.23 in W), Zn (140 in W), Mn (357), Ni (242), N-nitroso-di-N-propylamine.	<u>Coalescing Sites</u> 18-1. COPCs in 18-1 were all analyzed for in 18-4 except Be (and the extent of Be is determined in 18-1). It has not been determined if B0146 metals (Pb and Zn) continue first into 18-1 and then into 18-4. However, the presence of Pb and Zn in 18-4 (Pb at 160 in W and Zn at 140 in W) indicates that Pb (and perhaps Zn) should be COPCs for 18-4. Similarly, the extent of Mn and Ni in 18-1 has not been determined: and, it has not been determined if Mn and Ni extend into 18-4. <u>RA</u> . Confirmation samples remain in place, so Aroclor-1254, Aroclor-1260, baa, bap, bbf, bkf, Cu, chry, daha, icdp can be included in the RA except that E sidewall samples (00-01 excavation) have been removed. RI sample was excavated. Other compounds in column 3 may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (140) > EPSC (113). Where is 1804NG1A (listed on COC 16)?	IR18B026 - 6.25 feet bgs Benzo(a)anthracene (10 mg/kg), benzo(a)pyrene (8.6 mg/kg), benzo(b)fluoranthene (8.7 mg/kg), benzo(k)fluoranthene (2.9 mg/kg), chrysene (12 mg/kg), dibenz(a,h)anthracene (1.2 mg/kg), and indeno(1,2,3 - cd)pyrene (4 mg/kg)	The detected concentrations of benzo(a) anthracene, benzo(a)pyrene, and benzo(b) fluoranthene are 26 to 27 times the cleanup goal. No samples were collected at the 6.25 foot depth to the south or south-west. The excavation extended about 15 feet beyond this boring to the south-southwest, but there are no confirmation samples near the 6.25 foot depth (confirmation samples were collected at 4 and 8.25 feet) to help evaluate if the excavation was sufficient. Also, these same PAHs were detected at the 6 foot depth in excavation 18-1 (0181B13), which adjoins excavation 18-4.
Response:	Two samples were collected at location 1804F1B. The second sample was collected to address the high detection limits for PAHs that occurred in the first sample. The initial high detection limits resulted from a laboratory error (not applying the silica gel cleanup preparation step required for low PAH detection limits). Hg did not exceed the cleanup goal. Results that were close to or equal to the cleanup goal did not result in the addition of new COPCs. Only samples that exceeded the cleanup goals were considered for additional evaluation. The available excavation walls were bounded for Cu at locations 1804S2A, -F1B, and -S1B as well as the excavation bottom at -BC2. Cu was added as a COPC based on a waste profile sample. No soil remained to characterize the excavation interior. Pb and Zn were added to the analytical suite for the bottom composite sample based on the joining of Excavation B0146. Characterization of the sidewalls of 18-4 for Pb and Zn was not required by the RDA. Mn and Ni were not COPCs at Excavation 18-1 or 18-4. Except for location 1804F1B discussed above, SVOC detection limits were within the accepted range (less than 3 mg/kg).		Pb and Zn were added to the analytical suite for the bottom composite sample based on the joining of Excavation B0146. Characterization of the sidewalls of 18-4 for Pb and Zn was not required by the RDA. The waste profile sample for 18-4 did not exceed the cleanup goals for Pb or Zn. Mn and Ni were not COPCs at Excavation 18-1 or 18-4. Risk from any remaining concentrations will be evaluated as part of the TMSRA for Parcel B. The COC form containing sample 1804NG1A was inadvertently included with Excavation 18-4. Sample 1804NG1A was collected at Excavation 18-2 and was incorrectly named on the COC form.	Response presented under "EPA Comments" column	All the cited PAH compounds were delineated and excavated during the 1998 to 1999 phase of remedial action at Excavation 18-4. The composite samples collected from the sidewalls surrounding soil boring IR18B026 all indicated COPC concentrations less than the soil cleanup levels. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.
B0136			Differing subsurface fill conditions ³		
Response:	This excavation will be included in a future addendum to the report.		This excavation will be included in a future addendum to the report.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-18 (Continued)					
B0146 Pb, Zn	No for Pb and Zn. Extent not determined for Pb and Zn to the NW (2,050 and 4460 at 0146W1A) on the property boundary and to the N (1100 and 1300 at 0146N3A: at 18-1 boundary). Extent to the NW is an adjacency issue on the non-Navy property boundary. Extent not determined for Mn and Ni in coalescing 18-1 and at boundary between 18-1 and B0146.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.7), Hg (0.4), Mn (in 18-1), Ni (in 18-1), Pb (2,050), Zn (4,460) > 2002 PRGs. Close to or > PRGs adj: Ni (250 in W), Hg (0.4), Pb (2,050 at W1A), Zn (4460 at W1A).	Pb and Zn discovered by field observation: what is source for Pb and Zn? Why were other compounds (including other metals) not sampled for based on field observation? Since waste oil was known to be disposed of at the property boundary, a full suite of analytes would seem warranted. There are no RI samples. Why was B0146 originally identified as a site? What were the original COPCs? <u>Coalescing Sites</u> 18-1. COPCs (baa, bap, bbf, Be, bkf, chry) in adjacent 18-1 were not sampled for in B0146 except in bottom samples: however, the extent of these COPCs was determined at the B0146/18-1 boundary. The extent of Mn and Ni in 18-1 has not been determined: therefore it has not been determined in Mn and Ni extend from 18-1 into B0146. <u>RA</u> . Confirmation samples (except for Bs at 6 feet bgs) were excavated, so Pb and Zn may be under-represented in the RA. Given the very high concentrations in confirmation samples, this is especially significant. Other compounds in column 3 may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Pb (2,020), Zn (4,460) > EPSCs (440, 113).	0146N3A, 0146N2A, 0146W1B, 0146N1A, and 0146W1A. Lead concentrations ranged from 452 to 2,050 mg/kg and zinc concentrations ranged from 544 to 4,460 mg/kg.	The extent of lead and zinc contamination has not been determined to the west and northwest. It is likely that lead and zinc contamination extend off-site beyond the parcel boundary. Also, the extent of contamination on the southwestern edge has not been determined. The hillside is steeply sloped, so samples collected upslope (to the southwest) do not represent the same depth as the samples collected further north. The excavation was extended 2 to 10 feet beyond the delineated area, but no confirmation samples were collected.
Response:	The Navy has no plans to characterize chemical concentrations that may exist on off-site properties. Excavation B0146 expanded north into Excavation 18-1. However, since 18-1 had already been excavated and backfilled, there was no native soil in place to sample for Pb and Zn. Data from the closest boring (IR18B037), located about 30 north of Excavation B0146, did not indicate any Pb or Zn concentrations exceeding cleanup goals. Mn and Ni were not COPCs at Excavation B0146 or 18-1.		During the excavation at 18-1, paint cans were observed on the hillside above the excavation. The cans were excavated and samples collected and analyzed for Cu, Pb, Zn, VOCs, TPH-g, TPH-d, and TPH-mo. Only Pb and Zn exceeded cleanup goals and became COPCs. Bottom composite samples also were analyzed for full suites of PAHs and SVOCs based on joining of B0146 with Excavations 18-1 and 18-2. Mn and Ni were not COPCs at Excavation B0146 or 18-1.	Response presented under "EPA Comments" column	The conceptual model for the area of Excavation B0146 was that of a blanket laid over the steep hillside. It is the depth below ground surface, not the absolute sample elevation, that is important in characterizing this sloping area. Samples were collected at consistent depths below ground surface throughout the excavation area. The southwestern portion of the excavation is bounded by samples 0146W1C, 0146S2A, 0146S3B, and 0146S3C. It is not clear what areas appear to need additional delineation.
B0241			Differing subsurface fill conditions ³		
Response:	This excavation will be included in a future addendum to the report.				
B0337			Differing subsurface fill conditions ³		
Response:	This excavation will be included in a future addendum to the report.				
B0638			Differing subsurface fill conditions ³		
Response:	This excavation will be included in a future addendum to the report.				
B1138			Differing subsurface fill conditions ³		
Response:	This excavation will be included in a future addendum to the report.				

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-20					
20-1 As, Cu, Mn	Extent not determined for Mn. Mn not stepped down in bottom sample (1,420 in BOA at 3 feet bgs). Also, additional sidewall samples are needed for Mn at 3050 NE and NW of SWB (under Building 156). Three Mn averages were all < HPAL (but extent not determined). Mn may extend into B4219. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.8 in confirmation sample), Fe (57,900 in B003), Hg (0.16 in B002), Mn (3050 in confirmation sample) > 2002 PRGs Pb (118 in S001), Ni (1,460 in B003) close to 2002 PRG (150, 1,600). DLs > 2002 PRGs: PAHs (e.g., bap, daha at 0.43) and N-nitroso-di-N-propylamine (0.43) in RI. Close to or > PRGs adj: Ag (9.2 in S001), Ba (1560 in B003), Cd (DL 1.3 in B002), cyanide (DL.66), Hg (0.16), Mn (3,050 in confirmation samples), Ni (1,460 in B003), N-nitroso-di-N-propylamine (DL 0.43 in B002), Pb (118 in S001), Zn (304 in S001).	<u>RA</u> . All confirmation samples remain in place so As, Cu can be included in RA. Compounds in column 3 (except As) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). <u>Adjacent Site B4219</u> . Mn may extend into B4219. Zn (304 in S001) > EPSC. Ni (1,460 in B003) close to EPSC (1,941). Figure 20-1B. IR20S001 should be shown on the figure.		
Response:	Sample 0201B0A does not exceed the Mn soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the BCT during preparation of the May 2000 ESD. Although no samples were collected inside Building 156, the number and depths of stepout samples met the RDA requirements. SVOCs were not COPCs at this excavation.		Assumption that Mn contamination may extend to Excavation B4219 is speculative. Mn was not analyzed at boring IR20S001 so this location was not shown on Figure 20-1B.		
20-2 Aroclor-1260, Hg	Extent determined and excavation sufficient for Aroclor-1260. Other Aroclors in W > goals. Other Aroclors in SS < goals. Other Aroclors should have been identified as COPCs. Extent of other Aroclors and total Aroclors is not determined. Extent not determined for Hg. No sidewalls for Hg (6.2) NE of B005. Extent not determined for SVOCs, Mn (see last column). One small but deep hole was excavated but not sampled in the middle of 20-2 near B005. (Or, is it a high spot?—can't tell because topographic contours are not labeled.) If it is a hole, what compound(s) were chased there? How was the extent of contamination determined? If it is a high spot, please explain. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.0 in B005), various Aroclors (4.65 in W), SVOCs (baa, bap, bkf, daha, N-nitroso-di-N-propylamine 0.37 to 0.57 in W), Fe (40,900), Hg (no NE sidewalls), Mn (1,430 in B4420) > 2002 PRGs. Mn (1,350 in B005, 1,430 in B4420), Pb (82.4), PCP (2.8), Sb (5.7) close to 2002 PRG (1,600, 150, 3, 10). DLs > 2002 PRGs: cyanide (0.61), SVOCs (baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosophenylamine to 4.0), PCP to 9.8. Close to or > PRGs adj: Cd (1.2 DL), cyanide (DL 0.61), Mn (1,350 in B005), Ni (460), N-nitroso-di-N-propylamine and N-nitrosophenylamine (4.0 DLs), Zn (219 in B005).	<u>Coalescing Site B4420</u> . Extent of Hg not determined at boundary between 20-2 and B4420. Mn (1,430 > HPAL) and SVOCs (baa, bap, bkf, daha, nitroso-di-n-p at 0.37 to 0.57) exceedances in W (and in RI) indicate that Mn and SVOCs should have been identified as COPCs in 20-2 and B4420. <u>RA</u> . Many sidewall confirmation samples were excavated, so Aroclor-1260 may be underrepresented in RA. Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (219) > EPSC (113).		
Response:	No other Aroclors exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Composite samples 0202SNA, -SNB, -SNC, and -SND characterize the entire sidewall northeast of boring IR20B005. These samples did not exceed the cleanup goal for Hg. SVOCs were not COPCs at this excavation. The cited area is a high point that represents a storm drain catchment basin that was not removed during excavation.		Composite samples 0202SNA, -SNB, -SNC, and -SND characterize the entire sidewall northeast of boring IR20B005. These samples did not exceed the cleanup goal for Hg. The Mn concentration of 1,430 mg/kg at boring IR20B004 does not exceed the soil cleanup level based on two-significant-figure evaluation. This value was much lower than the Mn cleanup level (2,300 mg/kg) in place when COPCs were selected. Mn was not analyzed in the waste profile sample. No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-20 (Continued)					
20-3 Aroclor-1260, Pb	Extent and excavation sufficient for Aroclor-1260 and Pb. Mn (2,370 in RI) should have been identified as a COPC. Extent of Mn is not determined. No for CrVI, SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (8.6 in B016), Fe (30,800 in B016), Hg (0.55 in B016), Mn (2,370 in B016), Ni (1,900 in B016) > 2002 PRGs. Pb (73.5 in B016) close to 2002 PRGs (150). DLs > 2002 PRGs: CrVI (4), SVOCs (baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine 0.38). Close to or > PRGs adj: Mn (2,370), Ni (1,900), N-nitroso-di-N-propylamine (0.38 DL).	RA. Confirmation samples remain in place, so Aroclor-1260 and Pb can be included in RA. Single RI sample was excavated: so other compounds below may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (113) = EPSC Ni (1,900) close to EPSC (1,941) The text and table indicate that Aroclor-1260 was identified as a COPC in W. However, no W results are provided.		
Response:	Risk from any remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B. Cr VI and SVOCs were not COPCs at this excavation		Waste profile data are not available; however, all confirmation samples were less than the cleanup goal for Aroclor-1260.		
B4217 Al, Mn, TPH-g, TPH-d	Extent and excavation sufficient for Al. No for Mn. Extent of Mn has not been determined. No stepout on NW wall (1,440 at SWA). No stepouts on NE wall (NE of 1940 at SEA) and on SW wall (3,400 at E1D). Depth of Mn has not been determined: no bottom sample for Mn has been collected in the 00-01 excavation. Figure B4217B says that the Mn average is < HPAL: however, if E1A (Mn at 9,530) is included as a "bottom" sample, Mn average is > HPAL. No for Cd (5 in 06A). Cd should have been identified as a COPC. No for SVOCs DLs. TPH-g, TPH-d were not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.3 in 06A), Cd (5 in 06A), Fe (40,600 in 06A), Hg (0.26 in 06A), Mn (3,400 in E1D) > 2002 PRGs. Ni (1,170) close to PRG (1,600). DLs > 2002 PRGs: As (5.9), SVOCs (baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosodiphenylamine at 12, and PCP at 38). Close to or > PRGs adj: Cd (5 in 06A), Mn (3,400 in E1D), Ni (1,170 in 06A), N-nitroso-di-N-propylamine and N-nitrosodiphenylamine 12 DL).	RA. Some confirmation samples were excavated so Al and Mn may be under-represented in RA. Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. Cd (5) > EPSC (4.19). Ni (1,170), Zn (69.3) close to EPSC (1,941, 113).		
Response:	Sample 4217SWA does not exceed the Mn soil cleanup level based on two-significant-figure evaluation so no stepout was necessary. Location 4217E1C bounds the exceedance at location -SEA. No samples were required on the newly created sidewall north of location SEA based on the RDA requirements. Stepouts south of location -E1D were not completed because the weighted average Mn concentration was less than 1,400 mg/kg for this excavation. The excavation was expanded specifically to remove location -E1A so that value was not included in the average Mn calculation. A new bottom composite sample was not required by the RDA because the total area of the enlarged excavation (466 sq ft) was less than 500 sq ft and a suitable, clean bottom composite sample (4217B0A) already existed for Mn. Cd was not identified as a COPC. Three samples at boring IR20MW06A collected at depths of 2.25, 4.25, and 6.75 feet bgs were all nondetect for Cd. The cited sample was collected at 11.75 feet bgs and below the depth of concern (10 feet bgs) used to select COPCs. SVOCs were not COPCs at this excavation.		Risk assessment only; no response.		
B4219 Ni	Mn (1,470) > 2000 ESD. Mn should have been identified as a COPC. Mn average is > HPAL.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below (all data from IR20MW01A). As (5.3), Fe (35,100), Hg (0.06) > 2002 PRGs. Mn (1,470) close to 2002 PRG (1,600). DLs > 2002 PRGs: Sb (7.4), SVOCs (0.42). Close to or > PRGs adj: Cd (DL 1.2), cyanide (DL 0.64), Mn (1,470 in 01A), Ni (401), N-nitroso-di-N-propylamine (0.42 DL).	B4219 was never opened. Only Ni was identified as COPC: Ni does not exceed ESD goal or 2002 PRG. <u>Adjacent Site 20-1</u> . The single RI location for B4219 is inside Building 156, about 10 feet from 20-1. The extent of Mn at 20-1 has not been determined (3,050 at SWA) and likely extends to B4219. <u>RA</u> . Single RI location still in place so all compounds in column 3 can be included in RA.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-20 (Continued)					
Response:	The cited value was much lower than the Mn cleanup level (2,300 mg/kg) in place when COPCs were selected. An average Mn concentration was not calculated at this excavation. However, an average of the two available samples (507 and 1,470) would yield a concentration of 988, which is less than the Mn cleanup goal.		Assumption that Mn contamination may extend to Excavation 20-1 is speculative.		
B4419 Aroclor-1260, Cu, Zn, phthal	Extent determined and excavation sufficient for Aroclor-1260, Cu, Zn, and phthal. CrVI (1.1) > ESD goal (0.96), so CrVI should have been identified as a COPC. Extent not determined. No for SVOC DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below (all data from 11A). As (4.4), Fe (37,500) > 2002 PRGs. Mn (1,060) close to PRG (1,600). DLs > 2002 PRGs: Hg (0.18), SVOCs (0.42). Close to or > PRGs adj: Cu (150), Mn (1,060), Ni (589), N-nitroso-di-N-propylamine (0.42 DL), Zn (275).	RA. Confirmation samples remain in place so Aroclor-1260, Cu, Zn, and phthal can be included in the RA. Single RI location removed. Compounds in column 3 (all data from IR20MW11A) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (275 in 11A) > EPSC (113). The COPC summary table says that Cu and Zn were identified in W or SS. However, no metals results were provided in W or SS.		
Response:	Cr VI was not identified as a COPC for this excavation. Risk from any remaining Cr VI concentrations will be evaluated as part of the TMSRA for Parcel B. The detection limits for phthal (0.38 to 0.39 mg/kg) were much less than the cleanup goal (27 mg/kg). No other SVOC confirmation sample data exist for this excavation.		Waste profile data are not available; however, all confirmation samples were less than the cleanup goals for Cu and Zn.		
B4420 Aroclor-1260	Extent determined and excavation complete for Aroclor-1260. But other Aroclors in W > goals, and total Aroclors was 4.65. Other Aroclors should have been identified as COPCs. Other Aroclors were analyzed for at only one confirmation location (1C). Extent not determined for other Aroclors. Extent not determined for SVOCs, Hg, Mn (see last column). No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.6 in B004), total Aroclors (4.65 in W), Fe (46,000 in B004), Hg (0.96 in W), various SVOCs (baa, bap, bbf, daha, N-nitroso-di-N-propylamine at 0.37 to 0.57 in W) > 2002 PRGs Mn (1,430), PCP (2.8), Sb (5.7) close to 2002 PRGs (1,600, 31, 3.0). DLs > 2002 PRGs: cyanide (0.62), SVOCs (baa, bap, bbf, bbf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosophenylamine to 4.4), PCP to 11. Close to or > PRGs adj: cyanide (DL 0.62 in B004), Mn (1,430 in B004), Ni (850 in B004), Sb (5.7 in W), N-nitroso-di-N-propylamine (0.37 DL in W).	<u>Coalescing Site 20-2</u> . Extent of Hg not determined at boundary between 20-2 and B4420. Mn (1,430 > HPAL) and SVOCs (baa, bap, bbf, daha, nitroso-di-n-p at 0.37 to 0.57) exceedances in W (and in RI) indicate that Mn and SVOCs should have been identified as COPCs in 20-2 and B4420. RA. Many sidewall confirmation samples were excavated, so Aroclor-1260 may be underrepresented in RA. Compounds in column 3 may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (85 in B004) close to EPSC (113)		
Response:	No other Aroclors exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. SVOCs were not COPCs for this excavation.		Composite samples 0202SNA, -SNB, -SNC, and -SND characterize the entire sidewall northeast of boring IR20B005. These samples did not exceed the cleanup goal for Hg. The Mn concentration of 1,430 mg/kg at boring IR20B004 does not exceed the soil cleanup level based on two-significant-figure evaluation. This value was much lower than the Mn cleanup level (2,300 mg/kg) in place when COPCs were selected. Mn was not analyzed in the waste profile sample. No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. No SVOCs exceeded cleanup goals in RI samples.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-20 (Continued)					
B4519 Al, Aroclor-1260, Mn	Extent determined and excavated for Aroclor-1260, Al, and Mn in B4519. Aroclor-1260 up to 14 was measured in confirmation samples (at SWA): other Aroclors were not sampled for. The extent of total Aroclors has not been determined. No for SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (7.5), Fe (48,900), Hg (0.14), Mn (1,310 in SEA) >2002 PRGs. Ba (2,170), Ni (1,420), Sb (9 at 16.75 feet bgs) close to 2002 PRGs (2700, 1,600, 10). DLs >2002 PRGs: Sb (7.5), SVOCs (baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.41). Close to or > PRGs adj: Cd (1.2 DL, 2.4 at 16.25 feet bgs in B012), cyanide (0.62 DL), Mn (1,310 in confirmation sample SEA), Ni (1,420), N-nitroso-di-N-propylamine (0.41 DL), Sb (7.3 DL and 9 at 16.25 feet bgs).	RA. Aroclor-1260 confirmation samples and one Mn confirmation sample were excavated for 00-01, so Aroclor-1260 and Mn may be under-represented in RA. Compounds in column 3 (all data from IR20B012, except Mn) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,420), Zn (73.8) close to EPSCs (1,941, 113).		
Response:	Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. SVOCs were not COPCs for this excavation.		Risk assessment only; no response.		
IR-23					
23-1 Aroclor-1260, Cu, TPH-g, TPH-d, Zn	Extent and excavation sufficient for Aroclor-1260, Cu and Zn. No for SVOCs DLs. TPH-g and TPH-d were not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (3.4), Cu (1,370), Fe (39,200), Hg (0.81), Zn (423) > 2002 PRGs. Aroclor-1260 (0.19) close to 2002 PRG. DLs > 2002 PRGs: Aroclors (1221 at 0.75, 1260 at 0.35 at 1.75 feet bgs), SVOCs (baa, bap, bbf, bkf, chr, daha, icdp, N-nitroso-di-N-propylamine, and N-nitrosodiphenylamine at 11, PCP at 27-- at 1.75 feet bgs). Close to or > PRGs adj: Cu (163 in confirmation sample SWA), Mn (949), Ni (1,260), Pb (83.1), N-nitroso-di-N-propylamine, and N-nitrosodiphenylamine (11 DLs), Zn (106 in confirmation sample SWA).	98-99 bottom samples were collected at 6 feet bgs. Why was 23-1 excavated to 10 feet bgs in 00-01? A surficial or very shallow contamination is suggested by the high exceedances for Cu and Zn and the elevated DLs for Aroclors and SVOCs at 1.75 feet bgs. Confirmation samples (for Cu and Zn) were collected at 3.5 (composites SEA, SSA, SWA) and 4.25 feet bgs (discrete W1A). Additional surficial sampling may be warranted. <u>Coalescing Sites</u> <u>23-3</u> . 23-1 was not analyzed for all COPCs in coalescing 23-3: PAHs were not sampled for in 23-1. Extent of these compounds in 23-1 is not fully determined. For example, DLs for PAHs (1.9) in a confirmation sample (S1W at 9.25 feet bgs) located between 23-1 and 23-3 are > ESD goals and 2002 PRGs: in addition, the high concentrations of PAHs in S1s in 23-3 (bap at 8.5) may further suggest that PAHs may extend into 23-1. <u>FLF</u> . 23-1 was not analyzed for all COPCs in coalescing FLF: As, Be, Mn, and PAHs were not sampled for in 23-1. However, the nearest FLF F3 samples (about 20 feet distant from 23-1) meet ESD goals. <u>RA</u> . RI and confirmation samples (except 2 sidewalls) were excavated. So Aroclor-1260, Cu and Zn may be under-represented in RA. Compounds in column 3 (all data from IR23B015, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (106 in confirmation sample SWA) close to EPSC (113). Figures should be revised to show that FLF abuts 23-1 and 23-3 on their NW sidewalls (adjacent to Building 146, former saltwater pumphouse—as shown on figures for FLF).	IR23B015 – Copper (1370 mg/kg) and zinc (423 mg/kg) at 1.75 feet. Also, Benzo(a)anthracene (1.6 mg/kg), benzo(a)pyrene (1.6 mg/kg), benzo(b)fluoranthene (1.6 mg/kg), benzo(k)fluoranthene (1.6 mg/kg), <input type="checkbox"/> ibenz(a, h)anthracene (1.6 mg/kg), indeno(1, 2, 3 – cd)pyrene (1.6 mg/kg), and pentachlorophenol (7.9 mg/kg) were detected in waste profile sample, but were not added to COPC list.	No samples were collected at or near the 1.75 foot depth in the excavation area. The closest sampled depth was 3.5 feet. These PAHs and pentachlorophenol were detected in the waste profile sample were not added to the COPC list. As a result, the extent of SVOC contamination was not determined and it is not known if the excavation was sufficient to remediate this contamination.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-23 (Continued))					
Response:	SVOCs were not COPCs for this excavation (also refer to 23-3).		Excavation 23-1 was deepened to 10 feet bgs in conjunction with deepening of 23-3 (to address PAH exceedances at 7 feet bgs). Composite confirmation samples characterized the full range of depths. Remaining concentrations of PAHs in this area will be evaluated as part of the TMSRA for Parcel B. PAH detection limits were within the acceptable range (less than 3 mg/kg). All COPCs at Fuel Line F were less than cleanup goals for the northern end of the fuel line near Excavations 23-1 and 23-3. Appropriate corrections will be made to the figures.	Response presented under "EPA Comments" column	Excavation area 23-1 was excavated in accordance with the RD (see drawings on sheets 5 and 7). The samples that exceeded cleanup goals for Cu and Zn at boring IR23B015 were bounded horizontally and vertically by samples at locations 0231SSA and 0231SSW. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.
23-2 Be, Mn	Yes for Be. Extent and excavation of Be sufficient. Extent of Mn has not been determined. All "N" samples should have been sampled down to at least 7 feet bgs. Also, additional stepouts are needed (to a depth of at least 7 feet bgs) N and NW of 2B3 and SW of N1B. Mn average is < HPAL (but extent not determined). No For SVOCs DLs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (10.1), Fe (46,600), Mn (2,980 in confirmation sample N1B) > 2002 PRGs. DLs > 2002 PRG: Hg (0.17), SVOCs (e.g., baa, bap, bkf, daha, ni-nitroso-di-n-p, N-nitrosodiphenylamine at 3.9, PCP at 19). Close to or > PRGs adj: Cd (1.4 in confirmation sample BC1), Mn (2,980 in confirmation sample N1B), Ni (585), ni-nitroso-di-n-p and N-nitrosodiphenylamine (3.9 DLs).	RA. All confirmation samples (except one sidewall for Be) are still in place, so Be and Mn can be included in RA (except that the extent has not been determined for Mn). Compounds in column 3 (all data from IR07B017, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (73.3) close to EPSC (113).		
Response:	Stepouts north of location 2302B3 were not completed because the weighted average Mn concentration was less than 1,400 mg/kg for this excavation. SVOCs were not COPCs for this excavation.		Risk assessment only; no response.		
23-3 Aroclor-1260, baa, bap, bbf, bkf, Cu, icdp, TPH-g, TPH-d	Extent of PAHs is not determined. DLs for PAHs (1.9 in S1W at 9.25 feet bgs) located between 23-1 and 23-3 are > ESD goals and 2002 PRGs: in addition, the high concentrations of PAHs in Ss in 23-3 (bap at 8.5) may further suggest that PAHs may extend into 23-1. Also, DLs exceed ESD goals on other sidewalls. Other SVOCs > ESD goals in W should have been identified as COPCs (e.g., N-nitroso-di-N-propylamine (1.1), PCP (7.9): similarly, total Aroclors (0.56 in W) exceeded the ESD goal for total Aroclors. TPH-g and TPH-d were not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (3.3 in W), Cu (447), Fe (57,100), Hg (2 in W), Ni (1,610), N-nitroso-di-N-propylamine (1.1 in W), PCP (7.9 in W), total Aroclors (0.56 in W) > 2002 PRGs. Aroclor-1260 (0.19), Mn (966), Zn (244) close to 2002 PRGs. DLs > 2002 PRGs: SVOCs (ba, bap, bbf, bkf, daha, icdp at 1.9 in confirmation sample S1B, N-nitroso-di-N-propylamine at 0.41). Close to or > PRGs adj: Cu (105 in confirmation sample BOA), Mn (966), Ni (1,610), N-nitroso-di-N-propylamine (1.1 in W), N-nitrosodiphenylamine (1.6 in W), Zn (244).	<u>Coalescing Site 23-1</u> . Extent of PAHs from 23-3 is not determined in the direction of 23-1, as discussed in column 2. RA. Sidewall confirmation samples were excavated. So Aroclor-1260, Cu, and PAHs (baa, bap, bbf, bkf, icdp) may be under-represented in RA. Compounds in column 3 (all data from IR23MW14A, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (244) > EPSC (113). Ni (1,610) close to EPSC (1,941).	Copper (447 mg/kg), benzo(a)anthracene (0.69 mg/kg), benzo(a)pyrene (0.88 mg/kg), benzo(b)fluoranthene (1.5 mg/kg), benzo(k)fluoranthene (0.54 mg/kg), and indeno(1, 2, 3 - cd)pyrene (0.54 mg/kg)	These analytes were detected at the 1.75 foot depth but were not delineated at the near boring IR23MW14A. The excavation extended 5 to 10 feet beyond this boring, but the only sampling was done at the 4 and 8.25 foot depths.
Response:	PAH detection limits were within the acceptable range (less than 3 mg/kg). No other SVOCs or Aroclors exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		See previous responses.	Response presented under "EPA Comments" column	All the cited compounds were delineated and excavated during the 1998 to 1999 phase of remedial action at Excavation 23-3. The composite samples collected from the sidewalls surrounding soil boring IR23MW14A all indicated COPC concentrations less than the soil cleanup levels. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-23 (Continued)					
B1525 Be, Mn, bap	Extent and excavation sufficient for Be, Mn, and bap.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.5), Fe (28,900), Mn (1,030 in confirmation sample SEA), Hg (0.09) > 2002 PRGs. DLs > 2002 PRG: SVOCs (e.g., baa, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.36). Close to or > PRGs adj: Cd (0.66), Cu (143), Mn (1,030 in confirmation sample SEA), N-nitroso-di-N-propylamine (0.36 DL).	RA. All confirmation samples remain in place, so Be, Mn and bap can be included in RA. Compounds in column 3 (all data from PA23SS05, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (183) > EPSC (113).		
Response:	Comment acknowledged.		Risk assessment only; no response.		
B2127 baa, bap, bbf, bkf	B2127 was identified as a site because the single RI sample had high DLs (12) for baa, bap, bbf, bkf. Extent and excavation sufficient for baa, bap, bkf and bbf. However, other SVOCs with DLs > ESD goals were not identified as COPCs (e.g., chry, daha, icdp, N-nitrosodiphenylamine, N-nitroso-di-N-propylamine at 12, and PCP at 30): extent of these compounds has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.2), Fe (35,300), Hg (0.66) > 2002 PRGs. Ni (1,600 in SS) = 2002 PRG. DLs > 2002 PRGs: SVOCs (e.g., chry, daha, icdp, N-nitrosodiphenylamine, N-nitroso-di-N-propylamine at 12, PCP at 30). Close to or > PRGs adj: Mn (869 DL), Ni (1,600 in SS), N-nitrosodiphenylamine and N-nitroso-di-N-propylamine (12), Sb (5.9 DL).	RA. All confirmation samples remain in place, so baa, bap, bbf, bkf can be included in RA. RI sample excavated. Compounds in column 3 (all data from PA50TA07) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,600) close to EPSC (1,941).		
Response:	High PAH detection limits at location PA50TA07 were considered during the evaluation of high PAH detection limits presented in the RDA. No further action was recommended. Data for baa, bap, bbf, and bkf all indicate only very minor estimated detections and provide no reason to expect that other PAHs exceed cleanup goals.		Risk assessment only; no response.		
EE-01			EE 01 (located in IR 23) was not included in the CSR, so it cannot be determined if extent of contamination or excavation is sufficient.		
Response:	Information on EE-01 will be added to the CSR.				
EE-02 Aroclor-1260, baa, bap, bbf, chrys	Extent determined and excavation sufficient for Aroclor-1260, baa, bap, bbf, and chrys. bbf (0.83 in B010) and icdp (1.1) should have been identified as COPCs. Extent of bkf and icdp has not been determined. Other SVOC DLs exceeded ESD goals (e.g., daha and N-nitroso-di-N-propylamine at 0.71 in B010): these should have been identified as COPCs. Extent of all SVOCs has not been determined. Mn (2,050 in SS07) > ESD goals: Mn should have been identified as a COPC. Extent of Mn has not been determined. Vanadium (V: 1960 in SS07) > ESD goal (450). V should have been identified as a COPC. Extent is significant, from at least IR23B010 (1960) to PA23SS06 (956). Extent of V has not been determined. Be (3.2 in SS06) was a COPC for the EE, and should be carried along as a COPC in the CSR. No information was provided regarding Be.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.8 in SS06), Fe (40,700 in B009), Hg (0.15 in B010), Ni (1,760 in B008), V (1,960 in SS07, 956 in B010), bkf (0.83 in B010), icdp (1.1 in B010) > 2002 PRGs. DLs > 2002 PRGs: Aroclors (0.35 to 0.71), SVOCs (e.g., daha and N-nitroso-di-N-propylamine at 0.71 in B010). Mn (1,360 in B010), Pb (64 in SS06) close to 2002 PRG (1,600, 150). Close to or > 2002 PRGs adj: Cd (0.79 in B011), Mn (1,360 in B010), Ni (1,760 in B008), N-nitroso-di-N-propylamine (0.71 in B010), Sb (7.5 DL in B011).	RA. Confirmation samples have been removed (on NE wall): so, Aroclor-1260, baa, bap, bbf, chry may be under-represented in RA. Compounds in column 3 (all data from RI samples as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (132 in SS06) > EPSC (113). Ni (1,760 in B008), Se (1.DL in B010) close to EPSCs (1,941), (1.95). Building 119 should be indicated on the figures.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-23 (Continued)					
EE-02 Aroclor-1260, baa, bap, bbf, chrys (Continued)	Aroclor-1260 was identified as a COPC because the DL was > ESD goal. DLs for other Aroclors were > ESD in B010. Other Aroclors were analyzed for in one sample only (N1E). Extent of total Aroclors has not been determined.	(see above)	(see above)		
Response:	<p>Bbf and icdp were bounded during the original (1996) excavation and sampling activities. These data will be added to the CSR.</p> <p>Other SVOCs were not identified as risk drivers nor, therefore, as COPCs at this excavation. Location PA23SS07 is within EE-05, not EE-02. Mn was a COPC at EE-05 and PA23SS07 was bounded in that excavation.</p> <p>V was measured at 1,960 mg/kg in sample PA23SS06 and 956 mg/kg in a sample from boring IR23B010 at EE-02 and was bounded during the original excavation and sampling activities. These data will be added to the CSR.</p> <p>Be was bounded during the original excavation and sampling activities. These data will be added to the CSR.</p> <p>Aroclor-1260 was bounded during the original excavation and sampling activities with acceptable detection limits. Aroclor-1260 only slightly exceeded cleanup goals in other samples at EE-02; there is no reason to suspect high levels of other Aroclors.</p>		<p>Building 119 has been demolished and will not be added to the EE-02 figures but will be removed from Figure 1-2.</p>		
EE-03			EE 03 (located in IR 23) was not included in the CSR, so it cannot be determined if extent of contamination or excavation is sufficient.		
Response:	Information on EE-03 will be added to the CSR.				
IR-24					
24-1 As, Mn, TPH-d	Extent determined and excavation sufficient for As. For Mn, extent not determined. Stepouts not completed to W and E and Bs (B3), and N corner needs more samples. Mn total average (1,382) is less than but very close to HPAL (1,400) (but extent needs to be determined before calculating averages). SVOCs DLs were > ESD goals: extent of SVOCs has not been determined. TPH-d was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (6 in confirmation sample 34A), Fe (55,000), Mn (2,640 in confirmation sample W2A), Hg (0.35) > 2002 PRGs. Ni (1,380) close to 2002 PRG (1,600). DLs > 2002 PRGs: SVOCs (e.g., baa, bbf, bkf, daha, N-nitroso-di-N-propylamine at 12, PCP at 29). Close to or > PRGs adj: Cu (148), Mn (2,640 in confirmation sample W2A), Ni (1,360), N-nitroso-di-N-propylamine and N-nitrosodiphenylamine at 12.	<p><u>RA</u>. Confirmation samples remain in place so As and Mn can be included in RA (except that extent of Mn has not been determined. Compounds in column 3 (all data from PA24B003, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Chrysotile asbestos was measured > hazardous waste levels (5% at 11.75 feet bgs, which includes a portion of the interval from 6.25 to 11.75 feet bgs). Extent of asbestos not determined. Zn (192) > EPSC (113).</p>		
Response:	<p>Stepouts were not completed because the weighted average Mn concentration was less than 1,400 mg/kg for this excavation.</p> <p>SVOCs were not COPCs for this excavation.</p>		<p>Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process.</p> <p>Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.</p>		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
24-2 Aroclor-1260	<p>Extent determined and excavation sufficient for Aroclor-1260. However, W results indicate that other Aroclors should have been included as COPCs. Confirmation bottom samples BC1 and BC2 (at 4 feet bgs) were analyzed for other Aroclors and were < ESD goals. But sidewalls were not analyzed for other Aroclors.</p> <p>VOCs DLs (15 in B004) indicate that the extent of VOCs near 10 feet bgs has not been determined. Confirmation samples were shallow (at 4 feet bgs): deeper contamination is indicated but no deeper samples were collected. Since VOC contamination at 10 feet bgs may impact the RA, further investigation may be prudent.</p> <p>SVOCs Ds (e.g., daha at 3.6 in B005) and SVOCs results in W (e.g., daha at 1.1) indicate that the extent of SVOCs has not been determined.</p> <p>Two confirmation samples (BC1 and BC2) were analyzed for SVOCs and all were < ESD goals, except for DLS > ESD goals. However, the whole excavation has not been investigated.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p>As (7.3), baa (1.1 in W), bap (0.17 in W), bkf (1.1 in W), daha (1.1 in W), Fe (43,600), Hg (0.73 in W), N-nitroso-di-N-propylamine (0.74), PCP (5.6), total Aroclors (0.33) > 2002 PRGs.</p> <p>DLs > 2002 PRGs: VOCs (15 at 11.75 feet bgs), SVOCs (e.g., baa, bbf, bkf, daha, N-nitroso-di-N-propylamine, N-nitrosodiphenylamine at 3.6, PCP at 9 at 2.25 feet bgs). Mn (1,050) close to 2002 PRG (1,600).</p> <p>Close to or > PRGs adj: Mn (1,050), Ni (682), N-nitroso-di-N-propylamine and N-nitrosodiphenylamine (3.6 DL), PCP (9 DL).</p>	<p>Chrysotile asbestos (2%) is > hazardous waste levels. Extent of asbestos is not determined.</p> <p><u>Coalescing/Adjacent Sites</u></p> <p><u>B3114.</u> Extent of PAHs in B3114 has not been determined at 24-2. Extent of TPH at about 10 feet bgs in B3114 and 24-2 has not been determined.</p> <p><u>FLA.</u> 24-2 was not analyzed for various COPCs in FLA, including PAHs and metals (e.g., Cu, Zn, Hg, Mn): the nearest FLA samples (shallow samples only) are < ESD goals for PAHs and metals (e.g., Cu, Zn, Hg, Mn). However, TPH in 24-2 and B3114 at 10 feet bgs may extend into FLA.</p> <p><u>RA.</u> Confirmation samples were excavated so Aroclor-1260 may be under-represented in RA. Compounds in column 3 (all data from PA24B004, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Results for "PA24B004" at 9.75 feet bgs are provided on Table 24-2: TPH-g, TPH-d, and TPH-mo were measured at 120, 1,500, 47 and BTEX compounds were ND at DL of 0.005. If this is a new sample (as indicated by the sampling date), then CSR sample naming conventions should be used. In the RI report, results are provided for PA24B004 at 9.25 feet bgs and 11.75 feet bgs (no deeper samples). At 11.75, TPH-g is 920 and TPH-d is 4,800. The extent of TPH has not been determined.</p>		
Response	<p>No other Aroclors exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process.</p> <p>VOC detection limits for samples collected at 2.25, 4.25, 6.75, and 9.25 feet bgs at location PA24B004 were all within acceptable ranges. SVOCs were not COPCs for this excavation. No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Locations 2402BC1 and -BC2 included analysis for SVOCs based on adjoining Excavation B3114. Detection limits for SVOCs were within acceptable ranges.</p>		<p>Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.</p> <p>PAHs in the eastern sidewall of Excavation B3114 were bounded at location 3114E2A. Excavation 24-2 extended deeper than B3114; consequently, no soil was available to sample (except in the area of location 3114E1A) as a stepout from B3114. TPH was not a COPC at Excavation 24-2. However, additional investigation in this area is planned as part of the TPH program.</p> <p>Excavation 24-2 did not join the excavation for Fuel Line A and, therefore, the COPCs for bottom composite samples at 24-2 were not analyzed for the cited additional chemicals. Samples collected at 2.25, 4.25, 6.75, and 9.25 feet bgs at location PA24B004 did not exceed cleanup goals for PAHs and metals.</p> <p>The cited sample was collected as part of the TPH CAP and followed the naming convention in the CAP. Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process.</p>		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
24-3 Aroclor-1260	Single analyte (Aroclor-1260) only for most confirmation samples. High Aroclor-1260 in RI sample (26) is highest in vicinity, including FLA area. Extent and excavation sufficient for Aroclor-1260. No for SVOCs and total Aroclors. Two confirmation samples (S2A and BC1) were analyzed for total Aroclors and BC2 was analyzed for 17 PAHs and all were < ESD goals: however, the whole excavation has not been investigated.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.7), Fe (40,200), Hg (0.43), SVOCs in W (e.g., baa, bap, bbf, bkf, daha, and icdp at 2.2; N-nitroso-di-N-propylamine at 1.4; PCP at 11), total Aroclors (0.72 in W) > 2002 PRGs Ni close (1,490), Pb close (89.7 at 1.75) to 2002 PRGs. DLs > 2002 PRGs: Aroclors (0.38 to 0.77), SVOCs (e.g., baa, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.77). Close to or > PRGs adj: Mn (821), Ni (1,490), Pb (89.7)	<u>Coalescing Site</u> <u>FLA</u> . 24-3 was not sampled for all COPCs in FLA. The nearest FLA samples (460W1A and B) meet ESD goals. These FLA samples might be considered to represent boundary between FLA and 24-3. However, given the high levels in W, there is still concern regarding other compounds (in column 3) in 24-3. <u>RA</u> . Most confirmation samples were excavated, so Aroclor-1260 may be under-represented in RA. Total Aroclors are also under-represented. Compounds in column 3 (all data from IR46B017, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,490) close to EPSCs (1,941, 1.95). Very high anomalous Se (71.4) > EPSC (1.95) at 16.75 feet bgs.	Benzo(a)anthracene (2.2 mg/kg), benzo(a)pyrene (2.2 mg/kg), benzo(b)fluoranthene (2.2 mg/kg), benzo(k)fluoranthene (2.2 mg/kg), dibenz(a, h) anthracene (2.2 mg/kg), indeno(1,2,3-cd)pyrene (2.2 mg/kg), and pentachlorophenol (11.0 mg/kg)	Detected in waste profile sample but not added as COPCs. Extent of contamination not known. Unclear whether excavation was sufficient to remediate these analytes because no sampling was done for them.
Response:	SVOCs were not COPCs for this excavation. PAHs were analyzed at bottom composite sample 2403BC2 based on adjoining excavation for Fuel Line A. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		PAHs were analyzed at bottom composite sample 2403BC2 based on adjoining excavation for Fuel Line A. Other than Aroclor-1260, no chemicals exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers.	Response presented under “EPA Comments” column	Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.
24-4 Aroclor-1242, Aroclor-1260, baa, bap, bbf, bkf	Extent and excavation sufficient for Aroclor-1242 and Aroclor-1260. Extent not determined for baa, bap, bbf and bkf: need stepouts where PAH DLs (e.g., 0.54 in S1B) were > ESD goals. Also, daha in W and DLs for daha and icdp in B023 and in confirmation samples were > ESD goals. daha and icdp should have been identified as COPCs. No for other SVOCs (N-nitroso-di-N-propylamine at 0.37 in W and at .38 in B023, and PCP at 2.8 in W), which were not included as COPCs: extent not determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.0), daha (0.57), Fe (40,700), Hg (0.21 in W), N-nitroso-di-N-propylamine (0.37 in W) > 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine at .38 in RI and at 0.54 in confirmation samples). Close to or > PRGs adj: Cd (0.69), Mn (990), Ni (974), N-nitroso-di-N-propylamine (0.38).	<u>RA</u> . Some confirmation samples were excavated so Aroclor-1242, Aroclor-1260, baa, bap, bbf, and bkf may be under-represented in RA. Compounds in column 3 (all data from IR51B023, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (67.8) close to EPSC (113).		
Response:	Detection limits for PAHs were within the acceptable range (less than 3 mg/kg). No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers.		Risk assessment only; no response.		
24-5 Mn	Extent and excavation sufficient for Mn. Extent not determined for SVOCs: DLs (e.g., baa, bap, bkf, daha, N-nitroso-di-N-propylamine, N-nitrosodiphenylamine at 2.0, PCP at 4.9) were > ESD goals yet SVOCs were not identified as COPCs. The SVOC exceedances are at 11.75 feet bgs but the results represent a portion of the interval from 6.75 to 11.75 feet bgs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (8.0), Fe (49,200) > 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., baa, bbf, bkf, daha, N-nitroso-di-N-propylamine, N-nitrosodiphenylamine at 2.0, PCP at 4.9). Close to or > PRGs adj: Mn (971 in confirmation sample SSA), Ni (1,040), Sb (13.2 DL).	<u>RA</u> . Confirmation samples remain in place so Mn can be included in RA. Compounds in column 3 (all data from IR46B027, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (80) close to EPSC (113). Results for “IR46B027” at 9.75 feet bgs are provided on Table 24-2: TPH-g, TPH-d, and TPH-mo were measured at 48, 1,500, 200 and BTEX compounds were ND at DL of 0.007. If this is a new sample (as indicated by the sampling date), then CSR sample-naming conventions should be used. In the RI report, results are provided for IR46B027 at 11.75 feet bgs. At 11.75, results were .06 (DL), 6,500, and 17,000 (DL). The extent of TPH has not been determined.	IR46B027 manganese (4780 mg/kg) 1.75 feet.	Boring in northeast corner of excavation; no delineation to northeast or east.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
Response:	SVOCs were not COPCs for this excavation. Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process.		The cited sample was collected as part of the TPH CAP and followed the naming convention in the CAP. Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process.	Response presented under "EPA Comments" column	Excavation 24-5 appears to have been mislocated approximately 7 feet west of the ideal location. However, considering the uniformly low concentrations of COPCs found in all the samples at this excavation, it is unlikely that any significant contamination was overlooked.
24-6 As, Ba, Be, Cu, Mn	Extent and excavation sufficient for As, Ba, Be, and Cu. With respect to Cu, the whole NW wall of 24-6 (not just W1C) should have been stepped out for Cu, and additional sidewall confirmation samples collected. However, nearest FLC samples (FLC Figure A) fill this gap. Extent of Mn has not been determined. Very high Mn (i.e., 28,600 and 14,000) samples were excavated. However, Mn clearly extends into coalescing site FLC. It is not appropriate to show one interpretation of Mn distribution in 24-6 and another interpretation for Mn distribution in FLC when both areas overlap. The complete data set is should be shown on both figures. That is, Figure 24-6 represents that the extent of Mn has been determined: however, this is not true for the whole area surrounding and including 24-6. For example, BA26 has not been stepped down and E1R has not been stepped out and the 98-99 excavation should have been at least 3.75 feet deep (i.e., to 1,400 in B009). The extent of SVOCs has not been determined. SVOCs were > ESD goals in W and SVOC DLs were > ESD goals in B009 and confirmation sample BC2. Various SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosodiphenylamine, PCP) should have been identified as COPCs: extent of SVOCs has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (8.5 in SNA), Cu (141 in N2B), Fe (47,000), Hg (1.3 in W), Mn (14,100), PAHs (baa, bap, bbf, bkf, daha, icdp: 1.1 in W), N-nitroso-di-N-propylamine (0.74 in W), N-nitrosodiphenylamine (1.1 in W), PCP (5.6 in W) > 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at .42). Close to or > PRGs adj: Cu (141 in N2B), Hg (0.83), Mn (1,290 in W1A), Ni (627).	<u>Coalescing Site</u> <u>FLC</u> . Extent of Mn has not been determined for the FLC/24-6 area, as discussed in column 2. 24-6 was not investigated for PAHs and Aroclors, which are COPCs in FLC: in nearest FLC samples, ESD goals were met for these compounds. <u>RA</u> . Many confirmation samples have been excavated so As, Ba, Be, Cu and Mn may be under-represented in the RA. Compounds in column 3 (all data from IR20B009, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (121) > EPSC (113). 2406B2 is shown as excavated on Figure 24-6 C but as not excavated on FLC Figure D.	Benzo(a)anthracene (1.1 mg/kg), benzo(a)pyrene (1.1 mg/kg), benzo(b)fluoranthene (1.1 mg/kg), benzo(k)fluoranthene (1.1 mg/kg), dibenz(a, h)anthracene (1.1 mg/kg), indeno(1,2,3-cd)pyrene (1.1 mg/kg), and pentachlorophenol (5.6 mg/kg)	Detected in waste profile samples, but compounds were not added to COPC list, so the extent of contamination is unknown. It is also unclear if the excavation was sufficient because confirmation samples were not analyzed for these compounds.
Response:	Data presentations for adjoining excavations, especially those adjacent to fuel lines, were prepared on a case-by-case basis to produce comprehensible figures. The Fuel Line C excavation was deepened to remove location 460BA26. The Fuel Line C excavation was not expanded outward from location 460E1R because the average Mn concentration was less than 1,400 mg/kg. Location 460B09 did not exceed the Mn cleanup goal. SVOCs were not COPCs at this excavation (except bottom composite samples included analysis for PAHs because 24-6 joined Fuel Line C). No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers.		Bottom composite samples were analyzed for PAHs and Aroclor-1260 because Excavation 24-6 joined Fuel Line C. Location 2406B2 is not shown on Fuel Line C Figure D. Locations 2406BC1 and -BC2 will be shown as remaining in place on figures for 24-6.	Response presented under "EPA Comments" column	Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.
24-7	Response: Excavation 24-7 will be included in appropriate documents associated with Parcel C.				

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
24-8 As, baa, bap, Be, Cu, Mn, TPH-d	<p>Extent and excavation sufficient for As, Be, and Cu.</p> <p>Extent not determined for baa and bap: sidewall samples were not collected NW of FL4 and sidewall and bottom samples were not collected near B022 which had DLs (0.39) > ESD goals. Similarly, the extent has not been determined for other SVOCs with DLs > ESD goals (e.g., at FL1 and B022). Other SVOCs with elevated DLs should have been identified as COPCs for 24-8 (e.g., bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine).</p> <p>Extent not determined for Mn. Mn was measured at 7,170 (> ESD goal of 1,400) at 11.25 feet bgs in IR46B022 (the original RI sample). This sample at 11.75 feet bgs includes a portion of the interval from 6.75 feet bgs (where Mn was 13,700) to 10 feet bgs. Therefore the 98-99 excavation should have extended to 10 feet bgs (the 00-01 excavation did go to 10 feet bgs). Also, stepouts have not been completed to SW and SE. TPH-d was not reviewed.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p>As (5.8 in E1E), Fe (47,400), Hg (0.10), Mn (4,310 in S3B), Ni (1,920) > 2002 PRGs.</p> <p>DLs > 2002 PRGs: baa and bap (in FLC to .22, in confirmation samples to.39), VOCs (FL1), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.39).</p> <p>Close to or > PRGs adj: Cu (78.9 in S2A), Mn (4,310 in S3B), Ni (1,920), Sb (5.3), V (123).</p>	<p><u>Coalescing Site</u></p> <p><u>FLC.</u> Some (but not all) FLC results (samples with “FL” in the sample name) are shown on 24-8 figures: all samples should be shown (e.g., E44, E45, B82, etc.). Similarly, some “FL” samples are not shown on FLC Figure C. This style of data presentation is confusing and it makes data interpretation difficult.</p> <p>With respect to PAHs (baa, bap, bbf, bkf, chry, daha, icdp) and other SVOCs (e.g., N-nitroso-di-N-propylamine), “FL” samples and 24-8 samples in the 24-8 area do not meet ESD goals for DLs (e.g., FL1, B022). Since stepouts have not been performed at locations of DL exceedances, the extent of contamination has not been determined for various SVOCs.</p> <p>24-8 was not analyzed for some COPCs in FLC, including: Aroclor-1260 and Zn: the nearest FLC samples meet ESD goals for Aroclor-1260 and Zn.</p> <p>For TPH-d, the extent was not determined in FLC and 24-8 at and below 10 feet bgs (e.g., 9,800 at 10.25 feet bgs in FL3). For TPH-g, the extent was not determined in FLC and so TPH-g may extend into 24-8. TPH-g was not included as a COPC for 24-8 (but some confirmation samples were analyzed for TPH-g).</p> <p><u>RA.</u> Many confirmation samples were excavated, so As, Be, Cu, Mn, baa, and bap may be under-represented in RA. Compounds in column 3 (all data from IR46B022, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Ni (1,920), Zn (74.5) close to EPSCs (1,941, 113).</p> <p>The text says that baa and bap were discovered in W, but no W is provided for 24-8.</p> <p>Results for B022 at 11.75 should be posted on Figure 24-8E.</p>		
Response:	<p>The area northwest of 24-8 was excavated as part of Fuel Line C and no soil was available to sample. Results from samples collected at Fuel Line C did not indicate PAH contamination in this portion of the fuel line. PAH detection limits were within the acceptable range (less than 3 mg/kg) at location IR46B022. Other SVOC detection limits are within acceptable ranges, especially considering matrix interference effects from TPH in these samples.</p> <p>Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process. Stepouts were not completed for Mn because the average concentration was less than 1,400 mg/kg.</p>		<p>Data presentations for adjoining excavations, especially those adjacent to fuel lines, were prepared on a case-by-case basis to produce understandable figures. Samples collected at 24-8 containing the designation “FL” were collected to support delineation of fuel-related compounds, not as part of work to support Fuel Line C.</p> <p>SVOC and PAH detection limits are within acceptable ranges.</p> <p>Aroclor-1260 and Zn were bounded in the 1998 to 1999 excavation of Fuel Line C. These analytes did not extend to the part of Fuel Line C that merged with 24-8, so there was no need to delineate these compounds at 24-8.</p> <p>Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process.</p>		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
Response (Continued):	(see above)		Baa and bap were added as COPCs based on additional samples collected to investigate fuel-related contamination ("FL" series samples for TPH program). The text will be revised to correctly explain the addition of baa and bap. Results for samples collected deeper than 10 feet bgs are not posted on any figures.		
24-9 Mn, TCE, TPH-g, TPH-d	Extent determined for Mn and Mn average is < HPAL. Extent and excavation was sufficient for TCE. However, DLs for other VOCs were > ESD goals: other VOCs should have been identified as COPCs. SVOCs DLS > ESD goals: SVOCs with elevated DLs (up to 30) should have been identified as COPCs for 24-9 (e.g., bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, PCP). TPH-g and TPH-d were not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.7), Fe (45,500), Mn (2,220 in SSA), Hg (0.25), TCE (6.3) > 2002 PRGs. Ni (978), TI (3.7) close to 2002 PRGs (1,600, 5.2) DLs > 2002 PRGs: VOCs (1.4) and SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine, N-nitrosophenylamine at 12; PCP at 30). Close to or > PRGs adj: Mn (2,220 in SSA), Ni (978), Sb (6.6 in B009), TI (3.7), V (78.4).	<u>Coalescing Site B3916</u> . Mn was > ESD goals, but was not identified as a COPC. Mn in B3916 may extend into 24-9. Regarding Zn (the only COPC in B3916), B3916 samples nearest to 24-9 were < ESD goals. <u>RA</u> . Confirmation samples remain in place so Mn and TCE can be included in RA. Compounds in column 3 (all data from PA24B010 or IR24MW04A, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (79.5 at 2.25 feet bgs and 92.8 at 10.25) close to EPSC (113). Extent not determined for asbestos (chrysotile at 2% in B010 at 2.75 feet bgs).		
Response:	Detection limits for TCE in confirmation samples were all much less than the cleanup goal. Detection limits in RI data were considered in the COPC selection process conducted during the RD. SVOCs were not COPCs for this excavation. SVOC detection limits were within acceptable ranges.		Mn was not identified as a COPC driving risk during the RD. However, this location is affected by the reduction in the Mn cleanup goal from 2,264 mg/kg in the 1997 ROD to 1,400 in the 2000 ESD. The Mn exceedance (2,080 mg/kg at 6.75 ft in boring IR24B011) at B3916 was removed. Excavation 24-9 was completed to 10 feet bgs, so Mn from B3916 cannot extend into 24-9 (at depths that are relevant for risk exposure). Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.		
B2414 Aroclor-1260, Hg, TPH-d	The extent of Aroclor-1260 has not been determined. On NE sidewall, Aroclor-1260 (5.5 at SNA) is > ESD goal (0.21). Releases on the surface could have impacted soil on both sides of the sub-surface seawall. Also, the assumption that the historic seawall is a barrier to contaminant migration may not be valid. Samples should have been collected on the other side of the seawall. The extent of Hg has not been determined. Hg was identified as a COPC in W and analyzed for in the subsequent 00-01 excavation. For the 00-01 excavation, the extent and excavation for Hg is sufficient. However, the 98-99 excavation (which is the majority of the excavation) was not investigated for Hg, so the extent of Hg in the 98-99 excavation was not determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. Aroclor-1260 (5.5 in SNA), As (9.1), Fe (37,000), total Aroclors (0.38 in W), SVOCs in W (baa, bap, bbf, bkd, daha, icdp and N-nitrosophenylamine at 2.7; N-nitroso-di-N-propylamine at 1.8; PCP at 14) > 2002 PRGs. DLs > 2002 PRGs: Hg (0.06), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.39). Cd (0.4) close to 2002 PRG (1.7). Close to or > PRGs adj: Cd (0.40), Hg (0.32 in W1B), Mn (567), Ni (454), N-nitroso-di-N-propylamine (1.8 in W), N-nitrosophenylamine (2.7 in W), Sb (4.6).	<u>RA</u> . Confirmation samples remain in place so Aroclor-1260 and Hg can be included in RA. Compounds below (all data from IR46B032, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).	Benzo(a)anthracene (2.7 mg/kg), benzo(a)pyrene (2.7 mg/kg), benzo(b)fluoranthene (2.7 mg/kg), benzo(k)fluoranthene (2.7 mg/kg), dibenz(a, h)anthracene (2.7 mg/kg), indeno(1, 2, 3 - cd)pyrene (2.7 mg/kg), and penta-chlorophenol (14.0 mg/kg)	Detected in waste profile samples, but compounds were not added to COPC list, so the extent of contamination is unknown. It is also unclear if the excavation was sufficient because confirmation samples were not analyzed for these compounds. Also, the extent of Aroclor-1260 at 6.25 feet has not been delineated.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B2414 Aroclor-1260, Hg, TPH-d (Continued)	SVOCs in W (e.g., baa, bap, bbf, bkd, daha, icdp and N-nitrosophenylamine at 2.7; N-nitroso-di-N-propylamine at 1.8; PCP at 14) were > ESD goals and should have been identified as COPCs. SVOCs DLs in IR46B032 were > ESD goals. Extent not determined for SVOCs. Total Aroclors in W and DLs for total Aroclors in IR46B032 were > ESD goal for total Aroclors. Extent not determined for total Aroclors. TPH-d was not reviewed.	(see above)	(see above)	(see above)	(see above)
Response:	The area north of the seawall was not accessible for further sampling and no soil exists to sample north of the seawall. Hg was discovered only in the soil removed from the 2000 to 2001 portion of the excavation so there was no need to recharacterize the 1998 to 1999 portion. Hg was not detected in samples collected at boring IR46B032. SVOCs were not COPCs at this excavation. No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. SVOC detection limits for samples from boring IR46B032 were within acceptable ranges. No Aroclors exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Detection limits for Aroclors were within acceptable ranges. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.	Response presented under "EPA Comments" column	Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels. The horizontal extent of Aroclor-1260 detected in the sample at 6.25 feet bgs in boring IR46B032 is bounded by the eight sidewall composite samples and discrete samples 2414E1A and 2414W1A. The discrete samples were collected east and west of sample 2414SNA; a seawall and the termination of subsurface soil prohibited excavation further north. Hg exceeded the soil cleanup level in the waste profile sample so Hg was added as a COPC for this excavation. The Navy met the RD and RDA sampling requirements for this excavation.
B2614 baa, bap, bbf, bkf, chry	Extent and excavation sufficient for baa, bap, bbf, bkf, and chry. However, icdp in SS was > ESD goals: icdp should have been identified as a COPC. DLs for other SVOCs in B031 (e.g., daha, icdp and N-nitroso-di-N-propylamine at 0.73) were > ESD goals: other SVOCs should have been identified as COPCs. Extent not determined for SVOCs. DLs for total Aroclors in IR46B031 (1.45) were > ESD goal for total Aroclors. Extent not determined for total Aroclors.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.1), Fe (34,000), Hg (0.54), icdp (0.36 in SS) > 2002 PRGs. DLs > 2002 PRGs: Aroclor-1221 (0.37), total Aroclors (1.45), SVOCs (e.g., daha, icdp and N-nitroso-di-N-propylamine at 0.73). Cd (0.7) close to 2002 PRG (1.7). Close to or > PRGs adj: Cd (0.7), Cu (72.4), Hg (0.54), Mn (720), Ni (198), N-nitroso-di-N-propylamine (0.73), Pb (42), Sb (6.1 DL), Zn (140).	<u>RA</u> . Confirmation samples remain in place so baa, bap, bbf, bkf, and chry can be included in RA. Compounds in column 3 (all data from IR46B031, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (140) > EPSC (113).		
Response:	icdp was not detected in the sample collected at 1.75 feet bgs in boring IR46B031. The location of the cited icdp exceedance is not clear. SVOC detection limits were within acceptable ranges. PCBs were not identified as risk drivers during the RD. Detection limits for Aroclors were within acceptable ranges. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.		
B2616 Aroclor-1242	Extent and excavation sufficient for Aroclor-1242. Excavation was stopped at a concrete vault: please confirm that vault extended to depths > 10 feet bgs. Other Aroclors (e.g., Aroclor-1221 at 1.7 in W) and total Aroclors (13.2 in W) are > ESD goals and so other Aroclors and total Aroclors should have been identified as COPCs. Extent of other Aroclors and total Aroclors has not been determined. SVOCs in W (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.86; PCP at 4.3) are > ESD goals and should have been identified as COPCs. Extent of SVOCs has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (3.2 in SS), Hg (0.29 in W), SVOCs in W (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine-di-n-p at .86; PCP at 4.3), total Aroclors (13.2 in W) > 2002 PRGs. DLs > 2002 PRGs: total Aroclors (0.27). Close to or > PRGs adj: chlordane (1.7 in W), Hg (0.29), Ni (140 in W), N-nitroso-di-N-propylamine (0.86 in W), Sb (1.5 in W), Zn (280 in SS).	<u>RA</u> . Most confirmation samples have been excavated, so Aroclor-1242 may be under-represented in RA. Compounds in column 3 (data from PA51SS01, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (280 in SS) > EPSC (113).	Aroclor-1016 (0.86 mg/kg), Aroclor-1221 (1.7 mg/kg), Aroclor-1232 (0.86 mg/kg), Aroclor-1248 (0.86 mg/kg), Aroclor-1254 (0.43 mg/kg), Aroclor-1260 (0.43 mg/kg), benzo(a)anthracene (0.86 mg/kg), benzo(a)pyrene (0.86 mg/kg), benzo(b)fluoranthene (0.86 mg/kg), benzo(k)fluoranthene (0.86 mg/kg), dibenz(a, h)anthracene (0.86 mg/kg), indeno(1,2,3-cd)pyrene (0.86 mg/kg), and penta-chlorophenol (4.3 mg/kg)	Detected in waste profile samples, but compounds were not added to COPC list, so the extent of contamination is unknown. It is also unclear if the excavation was sufficient because confirmation samples were not analyzed for these compounds. Also, Aroclor-1242 was detected above the cleanup goal at 2616B1 at depths of 6.25 and 7.25 feet (0.88 and 2.6 mg/kg, respectively), but there are no other samples at these depths, so the extent has not been determined and it is not known if the excavation was sufficient to remediate the contaminant.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
Response:	The concrete vault at this location extends to 8 feet bgs. No Aroclors exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. SVOCs were not COPCs at this excavation. No SVOCs exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers.		Risk assessment only; no response.	Response presented under "EPA Comments" column	Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels. As a bottom sample, the delineation from location 2616B1 is downward, not outward. The bottom composite sample collected at 10 feet bgs at location 2616BC1 bounds the bottom of the excavation.
B2715 baa, bap, bbf, bkf, Cu, Zn	Extent and excavation sufficient for baa, bap, bbf, bkf, Cu, and Zn. chry (5.2), daha (1.2), icdp (3.2) in W2C (and elsewhere) were > ESD goals: chry, daha, and icdp should have been identified as COPCs. However, since confirmation samples were analyzed for these compounds, the extent of contamination has been determined for chry, daha, icdp. DL for total Aroclors (0.29 in TA08) was > ESD goal.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (6.2), Hg (0.14 in W), total Aroclors (0.29) > 2002 PRGs. DLs > 2002 PRGs: PAHs (e.g., bap 0.19 in S1D), N-nitroso-di-N-propylamine (0.36). Close to or > PRGs adj: Cu (65 in N1C), Hg (0.14 in W), Mn (437), Ni (562 in W), N-nitroso-di-N-propylamine (0.36 DL), Zn (77.8 in S1C).	The excavation for B2715 chases contaminants 50 feet to the NW in a line that extends from FLA towards Building 159 (the latrine). Was there a pipeline connecting Building 159 (the latrine) with FLA? <u>Coalescing Site</u> <u>FLA.</u> B2715 sample E1A at the boundary with FLA does not meet ESD goals for PAHs: however, the nearest FLA samples do meet ESD goals for B2715 COPCs (Cu, Zn, baa, bap, bbf, bkf) and also for chry, daha, icdp. Nearest FLA samples also meet ESD goals for three FLA COPCs not analyzed for in B2715: Aroclor-1260, As, Be. <u>RA.</u> All sidewall samples (except 1) were excavated, so Cu, Zn, and PAHs (baa, bap, bbf, bkf, chry, daha, icdp) may be under-represented in RA. Compounds in column 3 (all data from PA46TA08, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs) Zn (77.8 in S1C) close to EPSC (113). Results from FLA should be shown on figures for B2715.	Extent of PAHs near Stations 2715W1C , 2715W2C, 2715W3C, and 2715W4C at 1.25 feet bgs have not been completely delineated. PAHs at station 2715W2C ranged from 4.2 to 5.5 mg/kg. Also, at Station 2715W1G at a depth of 1.25 feet bgs, copper (1,900 mg/kg) and zinc (1,500 mg/kg) and at Station 2715W1D at a depth of 4.25 feet bgs, copper (360 mg/kg) and zinc (550 mg/kg).	Extent not determined to the south and southeast of the listed stations.
Response:	PAHs chry, daha, and icdp were bounded throughout the excavation. PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Fuel line drawings do not indicate any fuel lines connected to Building 159. Appropriate results from Fuel Line A will be shown on figures for B2715.	Response presented under "EPA Comments" column	Samples 2715S1A, -S1E, and -S2A bound the PAH contamination along the south sidewall. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not required by the RDA. Samples 2715W2G and -W2D bound the western extent of Cu and Zn contamination. Location 2715W2G is about 5.5 feet from the exceedance location, -W1G. Likewise, samples at location 2715S1D bound the southern extent of contamination. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA.
B2915 Aroclor-1260, TPH-d	DLs for SVOCs in B002 (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine, N-nitrosophenylamine at 9.2; PCP at 23) were > ESD goals and so additional SVOCs should have been identified as COPCs. Extent of some SVOCs (e.g., N-nitroso-di-N-propylamine and N-nitrosophenylamine at 9.2; PCP at 23) has not been determined. DL for total Aroclors was > ESD goal in B002: however, multiple screening samples had total Aroclors < ESD goal.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (3.3), Fe (43,100), Hg (0.15) > 2002 PRGs. Ni (1,430) close to 2002 PRG (1,600). DLs > 2002 PRGs: SVOCs (e.g., N-nitroso-di-N-propylamine, N-nitrosophenylamine at 9.2; PCP at 23). Ni (1,520) to 2002 PRG (1,600). Close to or > PRGs adj: Cu (86.3 in S1B), Mn (900), Ni (1,520 in W), N-nitroso-di-N-propylamine and N-nitrosophenylamine (9.2 DL), Sb (4.3 DL), Zn (307 in SSK and 206 in SNK).	Figure B2915 misrepresents the contamination at B2915. Because B2915 is coexistent with FLA, COPCs for FLA should have been identified as COPCs for B2915. Figures for B2915 and FLA should show data for both sites. <u>Coalescing Site</u> <u>FLA.</u> FLA samples within/near B2915 were analyzed for As, Be, Cu, Hg, Mn, Zn, PAHs, Aro1260. Extent is determined sufficiently for these compounds. However, the excavation for Cu and PAHs is not sufficient. The excavation for exceedances at SSK/SSM should have extended SW to confirmation samples S1A, S1B, S1C.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B2915 Aroclor-1260, TPH-d	The locations of the screening samples are not given. However it is assumed that the number and distribution are sufficient and that the extent of total Aroclors is determined sufficiently. TPH-d was not reviewed.	(see above)	RA. Many confirmation samples (FLA and B2915) were excavated so Aroclor-1260 may be under-represented in RA. Compounds in column 3 (all data from PA46TA08, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Chrysotile asbestos (3%) was > hazardous waste levels: extent of asbestos has not been determined. Zn (307 in SSK and 206 in SNK) > EPSC (113) Ni (1,520) close to EPSC (1,941).	(see above)	(see above)
Response:	PAHs were COPCs for Fuel Line A and the area around B2915 was bounded for PAHs.		Figures were prepared on a case-by-case basis to present relevant data in as clear a manner as possible. Figure clarity and space constraints do not allow presentation of all overlapping data on every figure. Excavation of Fuel Line A stopped at the foundation of Building 128 to avoid compromising the integrity of the foundation. Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.		
B2918 bap, bbf, bkf, icdp	Extent and excavation have not been determined for bap, bbf, bkf, icdp. The excavation should have gone to at least 6.75 feet bgs. Also, the DLs (0.37) for bbf, bkf and icdp at 6.75 are > ESD goals (0.34 to 0.35): so the depth of contamination has not been determined for bbf, bkf, icdp. Consequently, the sidewall samples at depths of 1.5 to 3 feet bgs are also not sufficient. Other SVOCs (e.g., icdp at 0.51) and SVOCs DLs (e.g., daha, icdp and N-nitroso-di-N-propylamine at 0.39) were > ESD goals and so other SVOCs should have been identified as COPCs. Extent not determined for other SVOCs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.9), Fe (47,100), Hg (0.40), Ni (2070) > 2002 PRGs. chry (1.1), icdp (0.51) close to 2002 PRG (3.8, 0.62). DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine at 0.38). Close to or > PRGs adj: Cd (1.4 DL), Mn (917), Ni (2,070), N-nitroso-di-N-propylamine (0.39 DL).	Ni (2,070) is > 2002 PRG (1,600). But since 2020 is < point-by-point HPAL for Ni, Ni was not identified as a COPC. This exceedance was measured at 11.75 feet bgs, and so represents a portion of the interval from 6.75 feet bgs to 11.75 feet bgs). Extent of Ni has not been determined. RA. All confirmation samples are still in place so bap, bbf, bkf, and icdp can be represented in RA. Compounds in column 3 (all data from IR10MW31A1D, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (2,070 at 11.75 feet bgs) > EPSC (1,941). Zn (63 at 1.75 feet bgs close to EPSC (113).	Boring IR10MW31A1D: benzo(a)pyrene (1.3 mg/kg), benzo(b)fluoranthene (1.4 mg/kg), benzo(k) fluoranthene, (1.4 mg/kg) and indeno(1,2,3-cd)pyrene (0.51 mg/kg) at 1.75 feet	The extent of these PAHs has not been determined to the east, northeast or southeast of this boring. The boring is in the extreme northeast corner of the excavation and no sampling was done to the east, northeast or southeast.
Response:	Cleanup goal were not exceeded in any samples below 1.75 feet bgs. Detection limits (0.37 mg/kg) in the 6.75-foot sample only slightly exceeded soil cleanup levels. PAH detection limits that were greater than the soil cleanup level were not investigated unless the detection limit exceeded 3 mg/kg. This was in accordance with the RDA, Appendix 6. Excavation to 2 feet bgs was in accordance with the RD. Other SVOCs were not identified as risk drivers, nor therefore as COPCs, during the RD.		Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process.	Response presented under "EPA Comments" column	Excavation B2918 appears to have been mislocated approximately 7 feet west of the ideal location. However, considering the uniformly low concentrations of COPCs found in all the samples at this excavation, it is unlikely that any significant contamination was overlooked. Composite confirmation samples 2918SNA and -SEA bound the northern and eastern sidewalls. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B3114 bap, bbf, bkf	<p>The extent of bap, bbf, bkf has not been determined and the excavation is not sufficient. The excavation should have gone at least to 5.75 feet bgs, based on results from IR46B019. No stepouts were performed on SE sidewall at SEA for the following exceedances of ESD goals: bap (4.8), bbf (5.6), bkf (4.5). On NE sidewall, bap (0.44), bbf (0.69), bkf (0.54) at SNA is > ESD goals (0.33, 0.34, 0.34). Releases on the surface could have impacted soil on both sides of the sub-surface seawall. Also, the assumption that the historic seawall is a barrier to contaminant migration may not be valid. Samples should have been collected on the other side of the seawall. DLs in bottom samples at 3 feet bgs (1.6 in BC2) are > ESD goals.</p> <p>Other SVOCs exceed ESD goals and should have been identified as COPCs, including icdp (0.54 in B019), daha (1.1 in W), N-nitroso-di-N-propylamine (0.74 in W), PCP (5.6 in W). SVOC DLs were > ESD goals (e.g., 12 for bap, 30 for PCP in IR46B019). The extent of other SVOCs has not been determined.</p> <p>VOC DLs exceeded ESD goals (e.g., TCE at 3 in IR46B019) and should have been identified as COPCs. The extent of VOCs has not been determined.</p> <p>Total Aroclors (0.42 in W) are > ESD goals: extent of total Aroclors has not been determined.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p>As (5.8), daha (1.1 in W), Fe (48,500), Hg (0.73 in W), icdp (0.90), N-nitroso-di-N-propylamine (0.74 in W), PCP (5.6 in W), Total Aroclors (0.45 in W) > 2002 PRGs.</p> <p>Mn (1,080), Pb (67.6) close to 2002 PRGs (1,600, 150) DLs > 2002 PRG: total Aroclors (0.32), VOCs (3 for TCE) and SVOCs (12 for bap, 30 for PCP) > 2002 PRGs.</p> <p>Close to or > PRGs adj: Mn (1,080), Ni (585), N-nitroso-di-N-propylamine (0.74 in W), Pb (67.6).</p>	<p><u>Coalescing/Adjacent Sites</u></p> <p><u>24-2.</u> The extent of SVOCs has not been determined at the junction with 24-2 (i.e., no stepouts at SEA). Extent of TPH at about 10 feet bgs in B3114 has not been determined and may extend into 24-2.</p> <p><u>FLA.</u> Extent of TPH at about 10 feet bgs in B3114 and 24-2 has not been determined and may extend into FLA. FLA samples for TPH are all shallow (none deeper than 4 feet bgs.)</p> <p><u>RA.</u> Some confirmation samples were excavated: so, bap, bbf, bkf may be under-represented in RA. Compounds in column 3 (all data from IR46B019, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Extent of TPH at 10 feet bgs has not been determined and may extend into 24-2 and FLA. This fact, together with the high DLs for VOC at about 10 feet bgs, may suggest that data gaps for the air pathway exist for the RA.</p> <p>Se (0.76 DL), Zn (78.9) close to EPSC (1.95, 113).</p> <p>Results for "IR46B019" at 9.75 feet bgs are provided on Table 24-2: TPH-g, TPH-d, and TPH-mo were measured at 150, 5,500, 130 and BTEX compounds were ND at DL of 0.005. If this is a new sample (as indicated by the sampling date), then CSR sample naming conventions should be used. In the RI report, results are provided for IR46B019 at 5.75 feet bgs and 10.75 feet bgs. At 10.75, TPH-g is 2,200 and TPH-d is 5,300.</p>	<p>Benzo(a)anthracene, dibenz(a,h)anthracene, and pentachlorophenol were at 1.1 mg/kg, 1.1 mg/kg, and 5.6 mg/kg respectively in waste profile samples.</p>	<p>These analytes were not added to the list of COPCs, so there was no attempt to delineate the extent of contamination and it is not known if the excavation was sufficient for remediation.</p> <p>Also, all four bottom composite samples had detection limits (0.35 U mg/kg, 0.75 U mg/kg, 0.77 U mg/kg, and 1.6 U mg/kg) that exceeded the cleanup goal of 0.33 mg/kg, so it is unclear if the excavation was deep enough to remediate benzo(a)pyrene.</p>
Response:	<p>No PAHs exceeded cleanup goals at boring IR46B019 below the sample collected at 1.75 feet bgs. PAH detection limits were within the acceptable range (less than 3 mg/kg) at location IR46B019. The RDA (Appendix 6) concluded action was not necessary to address elevated PAH detection limits at IR46B019. Excavation 24-2 extended deeper than B3114; consequently, no soil was available to sample (except in the area of location 3114E1A) as a stepout southeast from B3114. The area north of the seawall was not accessible for further sampling and no soil exists to sample north of the seawall.</p> <p>Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.</p> <p>VOCs were not identified as risk drivers, and therefore COPCs, during the RD.</p> <p>PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>	<p>PAHs in the eastern sidewall of Excavation B3114 were bounded at location 3114E2A. Excavation 24-2 extended deeper than B3114; consequently, no soil was available to sample (except in the area of location 3114E1A) as a stepout from B3114. TPH was not a COPC at Excavation B3114. However, additional investigation in this area is planned as part of the TPH program.</p> <p>Excavation 24-2 did not join the excavation for Fuel Line A and, therefore, the COPCs for bottom composite samples at 24-2 were not analyzed for the cited additional chemicals.</p> <p>The cited sample was collected as part of the TPH CAP and followed the naming convention in the CAP. Samples collected from deeper than 10 feet bgs were not considered in the COPC selection process.</p>		<p>Response presented under "EPA Comments" column</p>	<p>Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels.</p> <p>PAH detection limits that were greater than the soil cleanup level were not investigated unless the detection limit exceeded 3 mg/kg. This was in accordance with the RDA, Appendix 6.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B3415 Aroclor-1260	Extent and excavation sufficient for Aroclor-1260 at B3415, based on nearby FLA samples. DLs for SVOCs and total Aroclors in nearest FLA samples are > ESD goals.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. Hg (0.12) > 2002 PRGs. DLs > 2002 PRGs: As (7.4), SVOCs (0.38), total Aroclors (0.27). Close to or > 2002 PRGs adj: Cd (0.96 DL), Mn (280).	<u>Coalescing Site</u> <u>FLA.</u> FLA COPCs were not all analyzed for in B3415. COPCs in FLA include: As, Cu, Hg, Mn, Zn, Aroclor-1260, PAHs (baa, bap, bbf, bkf, daha, icdp, chry), TPH-g, TPH-d, TPH-mo. Extent and excavation of Aroclor-1260, As, Cu, Hg, and Zn in the vicinity of B3415 is sufficient. PAHs DLs (0.38) are > ESD goals. For Mn, extent of Mn not determined. TPH was not reviewed. <u>RA.</u> Single RI sample (PA46TA07) and some nearby FLA confirmation samples were excavated: so, Aroclor-1260 may be under-represented in RA. Compounds in column 3 (all data from PA46TA07, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (65.8) close to EPSC (113).		
Response:	SVOCs were not COPCs at this excavation. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Excavation B3415 is completely surrounded by Fuel Line A and delineation of Fuel Line A COPCs is covered by Fuel Line A. Refer to responses to comments on Fuel Line A. PAH detection limits were within the acceptable range (less than 3 mg/kg). Refer to responses to comments on Fuel Line A for Mn discussion.		
B3514 cyanide, TPH-d, Zn	Extent and excavation sufficient for cyanide and Zn. Mn (2,210 in FLA sample E1CE) was > ESD goal (1,400). Mn should have been identified as a COPC for B3514. The extent of Mn has not been determined. Extent has not determined for SVOCs with DLs > ESD goals in PA24B006 (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosodimethylamine at 18, PCP at 44). SVOCs should have been identified as COPCs. TPH-d was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (2.8 in W), Hg (0.48) > 2002 PRG. DLs > 2002 PRGs: As (2.0), SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine and N-nitrosodimethylamine at 18, PCP at 44). Close to or > PRGs adj: Cu (79.9 in W), cyanide (0.60 DL, .4 in W), Mn (2,210 in FLA sample E1CE), Ni (369 in W), N-nitroso-di-N-propylamine and N-nitrosodimethylamine (18 DL).	Chrysotile asbestos (2%) > hazardous waste levels: the extent of asbestos has not been determined. <u>Coalescing Site</u> <u>FLA.</u> FLA COPCs were not all analyzed for in B3514. COPCs in FLA include: Aroclor-1260, As, Cu, Hg, Mn, PAHs (i.e. baa, bap, bbf, bkf, daha, icdp, chry), Zn and TPH-g, TPH-d, TPH-mo. Extent and excavation of Aroclor-1260, As, Cu, PAHs and Zn in the vicinity of B3514 are sufficient: there are no nearby samples for Hg. The extent of Mn in FLA has not been determined. DLs > 2002 PRGs for SVOCs (e.g., PAHs at 0.19, PCP at 25) and total Aroclors. TPH was not reviewed. <u>RA.</u> Single RI sample (PA24B006) and some nearby FLA confirmation samples were excavated: so, cyanide and Zn may be under-represented in RA. Compounds in column 3 (all data from PA24B006, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Se (0.79 in W) close to EPSC (1.95).		
Response:	Refer to responses to Fuel Line A comments for Mn discussion. SVOCs were not identified as risk drivers, and therefore COPCs, during the RD.		Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup. Excavation B3514 is nearly completely surrounded by Fuel Line A and delineation of Fuel Line A COPCs is covered by Fuel Line A. Refer to responses to comments on Fuel Line A. PAH detection limits were within the acceptable range (less than 3 mg/kg). Refer to responses to comments on Fuel Line A for Mn discussion.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B3614 baa, bap, bbf, bkf, chry, daha, icdp	Extent and excavation is not sufficient for baa, bap, bbf, bkf, chry, daha, icdp: no bottom sample was collected for the 00-01 excavation. DLs for N-nitroso-di-N-propylamine (0.69), Sb (20.8) and total Aroclors (0.28) were > ESD goals: these compounds should have been identified as COPCs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.3), Fe (36,900) > 2002 PRGs. chry (1.1), Ni (1,210 in W) close to 2002 PRGs. DLs > 2002 PRGs: daha and icdp (0.19 in BOA), Hg (0.07), N-nitroso-di-N-propylamine (0.69), total Aroclors (0.28), Sb (20.8). Close to or > PRGs adj: Sb (20.8 DL), Mn (622), Ni (797 in B026A and 1210 in W) and N-nitroso-di-N-propylamine (0.69 DL).	<u>Coalescing Site</u> <u>FLB</u> . COPCs in FLB include: Aroclor-1260, As, Be, Cu, Mn, PAHs (baa, bap, bbf, bkf, chrys, daha, icdp), Zn, and TPH-g, TPG-d, TPH-mo. FLB COPCs were not all analyzed for in B3914. However, nearby FLB samples were < ESD goals, except Aroclor-1260 (0.32) in B53 has not been stepped down. TPH was not reviewed. bap and daha DLs (0.21) are > 2002 PRGs. <u>RA</u> . Sidewall confirmation samples were excavated, so PAHs (i.e., baa, bap, bbf, bkf, chry, daha, icdp) may be under-represented in RA. Compounds in column 3 (all data from IR46B026A, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,210), Zn (79.9) close to EPSCs (1,941, 113).		
Response:	The sampling rules in the RDA do not require a new bottom composite sample when the total size of the excavation remains less than 500 sq ft and there is a pre-existing clean bottom sample. The cited compounds were not identified as risk drivers, and therefore COPCs, during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		The delineation of B3614 did not join with Fuel Line B. Also refer to responses to comments on Fuel Line B.		
B3718 Al, Cd, chry, Mn, TPH-d	Extent and excavation are not sufficient for Al, Cd, chry, and Mn. The 98-99 excavation should have extended to 9.25 feet bgs to include Mn (2,320) at 6.75 feet bgs. Also, no bottom sample was collected for 00-01 excavation. Sidewall exceedances for Mn were not stepped out on the NE (2,200 in N1A) and SW (2,900 in S1B). The text says that Cd was identified by field observation. How does one specifically identify Cd by field observation? Why were other metals (and other compounds) not suspected? Chry was identified as COPC because the DL was > ROD goal. Other SVOCs (e.g., baa, bap, bbf, N-nitroso-di-N-propylamine) and total Aroclors with DLs > ROD and > ESD goals should have been identified as COPCs. TPH-d was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (9.8), Cd (3.5 in E1B), Fe (46,100 in S1A), Mn (2,900 in S1B) > 2002 PRGs. DLs > 2002 PRGs: Cd (1.7), Hg (0.24), SVOCs (DL 0.41), total Aroclors (0.33). Ni (1,590), V (105) close to 2002 PRG. Close to or > PRGs adj: Cd (3.5 in E1B), Cu (88.3), Mn (2,900 in S1B), Ni (1,590), TI (2.4 in N1A), V (110 in S1A), and N-nitroso-di-N-propylamine (0.33 DL).	TOG (110,000 at 6.75 feet bgs) suggests contamination at depths below the bottom of the excavation (at 5 feet bgs). Asbestos (chrysotile 2%) was > hazardous waste levels: the extent of asbestos has not been determined. <u>RA</u> . Some sidewall confirmation samples were excavated, so Al, Cd, chry, and Mn may be under-represented in RA. Compounds in column 3 (all data from PA24B007, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Se (1.9 DL), Ni (1,520), Zn (76.2) close to EPSC (1.95, 113).		
Response	Remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B. The footnote in the text states that Cd was added because "full-suite analysis for metals identified the chemical checked in this column as a COPC." No field observation was involved; however, adding a unique column for this purpose was not deemed necessary. Chrysene was not added as a COPC based on detection limits, but rather based on risk identified during the RD. The other cited compounds were not identified as risk drivers, and therefore were not selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		TPH extractable and purgeable data from boring PA24B007 do not exceed the 3,500 mg/kg criterion for total TPH. Total oil and grease data have not proven to be reliable predictors of TPH extractable or purgeable concentrations. There is no cleanup goal for total oil and grease. Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B3914 Chry, Cu, Mn	Extent and excavation in B3914 is sufficient for Cu and chyr. The extent and excavation for Mn is not sufficient. No stepouts have been performed for FLB samples directly NW of B3914 which are > ESD goals (i.e., 3,020 at B74, 3,370 at SE34, and 3,160 at SW34). Also, for the area of the B3914 excavation, two 5-point composite bottom samples should have been collected (but only one was collected). The contamination at B3914 is misrepresented on figures since FLB data is excluded: data (for all compounds) for both sites should be shown on both figures. Also, it is inappropriate to exclude FLB data from Mn-average calculations. DLs for SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosodimethylamine at 3.7, PCP at 9) and total Aroclors (0.30) were > ESD goals and so these compounds should have been identified as COPCs. Extent has not been determined for SVOCs and total Aroclors.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (2.8), Fe (46,000), Mn (3,370 in SE34), Hg (1.5) > 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine, N-nitrosodimethylamine at 3.7, PCP at 9), total Aroclors (0.30). Pb (41.8) close to 2002 PRG (150). Close to or > PRGs adj: Cd (0.67 DL), Ni (632), Mn (3,370 in SE34), N-nitroso-di-N-propylamine and N-nitrosodimethylamine (9 DL), Pb (41.8), Sb (6.0 DL), Zn (91.9).	TPH-d (3,600 in B76 at 10 feet bgs in FLB) and unknown TPH (8,100 at 11.75 feet bgs in MW03AD) suggests that contamination may exist below the bottom of the B3914 excavation. On the figures, it is difficult to ascertain the depth of the excavation: please clarify whether the 98-99 excavation was further excavated to 6 feet bgs or greater in 00-01. <u>Coalescing Site</u> <u>FLB</u> . All COPCs in FLB were not sampled for in B3914. Additional FLB COPCs include As, Be, Zn, Aroclor-1260, and PAHs (baa, bap, bbf, bkf, icdp). FLB samples near or inside B3914 were < ESD for these compounds. bap (DL 0.18) > 2002 PRGs. TPH-d was measured at high levels (7,700 in BC42) at 10 feet bgs. Extent of TPH at depth has not been determined in FLB and may extend into B3914. <u>RA</u> . Confirmation samples (except one) were excavated, so chry, Cu, and Mn may be under-represented in RA. Compounds in column 3 (all data from PA24MW03AD, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (111 in N1A in FLB) close to EPSC (113).	PA24MW03AD: Copper detected at a depth of 4.25 feet bgs (537 mg/kg).	No confirmation samples at this depth. Excavation adjacent to Fuel Line B2 excavation, so this is only a problem to the north, northeast and east.
Response	Stepouts samples were collected to complete the delineation of Mn at B3914. See the responses to comments for Fuel Line B for discussion of Mn at Fuel Line B. Two bottom composite samples (3914BC1 and -BC2) were collected at this excavation. Figures were prepared on a case-by-case basis to present relevant data in as clear a manner as possible. Figure clarity and space constraints do not allow presentation of all overlapping data on every figure. All Mn data were included in the Mn calculations for Fuel Line B; the calculations presented on Figure B3914B were intended to only address samples from the excavation. SVOCs were not identified as risk drivers, and therefore COPCs, during the RD. Likewise, PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		This excavation was deepened from 5 to 6 feet bgs during the 2000 to 2001 activities. See Fuel Line B for additional discussion of TPH.	Response presented under "EPA Comments" column	Excavation B3914 extended to 5 feet bgs during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of Cu concentrations in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. The Navy met the RD and RDA sampling requirements for this excavation.
B3916 Zn	Extent and excavation sufficient for Zn. Mn (2,080) should have been identified as a COPC: extent has not been determined for Mn. SVOC DLs > ESD goals: extent of SVOCs has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (6.0), Fe (59,900), Hg (0.09) > 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at .39). Close to or > PRGs adj: Cu (76.6), Mn (2,080), Ni (516), Sb (DL 5.8), V (129).	<u>Coalescing Site</u> <u>24-9</u> . Mn in B3916 (2,080 in B011) is > ESD goal and should have been identified as a COPC. Mn in B3916 may extend to 24-9 (Mn is a COPC for 24-9). Confirmation samples remain in place so Zn can be included in RA. Compounds in column 3 (all data from IR24B011, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (80.6 in BOA) close to EPSC (113).		
Response:	Remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B. SVOCs were not identified as risk drivers, and therefore COPCs, during the RD.		Excavation 24-9 extended to 10 feet bgs so any Mn that may have extended from B3916 has been removed.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B4017 bis(2-ethylhexyl)-phthalate	Extent and excavation sufficient for bis (2-ethylhexyl) phthalate. Mn (1,480) should have been identified as COPC: the extent of Mn has not been determined. DLs for SVOCs (e.g., baa, bap, bbf, bkf, daha, icdp, N-nitroso-di-N-propylamine at 0.41) and total Aroclors (0.40) were > ESD goals and so these compounds should have been identified as COPCs. Extent has not been determined for SVOCs and total Aroclors.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. Fe (34,700), Mn (1,480), Hg (0.18) > 2002 PRGs. DLs > 2002 PRGs: As (2.6), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.41). Close to or > PRGs adj: Mn (1,480), Ni (822), N-nitroso-di-N-propylamine (0.41 DL).	Asbestos (chrysotile 2%) was > hazardous waste levels: the extent of asbestos has not been determined. <u>Coalescing Site</u> <u>FLC</u> . B4017 is separated from FLC by the railroad tracks only. FLC COPCs (Aroclor-1260, As, baa, bap, bbf, Be, bkf, chry, Cu, daha, icdp, Mn, Zn) were not sampled for in B4017, except at B007. Extent of Mn (1,480 at B007 and 1,830 in FLC at BC68) has not been determined in B4017 and nearby FLC. <u>RA</u> . Confirmation samples remain in place so bis (2-ethylhexyl) phthalate can be included in RA. Compounds in column 3 (all data from IR20B007, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).		
Response:	Remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B. No other SVOCs were identified as risk drivers during the RD; therefore, no other SVOCs were selected as COPCs. Likewise, PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup. Excavation B4017 does not join with Fuel Line C. B4017 is 9 ft (or more) southeast of Fuel Line C.		
B4018 Aroclor-1260, bap, Pb	Extent and excavation sufficient for Aroclor-1260. Extent of total Aroclors has not been determined. Extent and excavation not sufficient for bap. bap (DL 0.39 in BC2 at 7 feet bgs) was > ESD. BC2 was not stepped down. Also, as a result of this exceedance at 7 feet bgs, B4018 sidewall sample depths (1.5) are not sufficient. Extent and excavation for Pb (209 in S1A) sufficient for ESD goal. Mn exceedances in FLC (see last column) have not been stepped down and out, and may extend to B4018. Pb and Aroclor-1260 were identified as COPCs in W. But other exceedances in W (and DL exceedances in B021) were not identified as COPCs, including SVOCs (e.g., baa, bbf, bkf, daha, N-nitroso-di-N-phenylamine) and total Aroclors. Extent of SVOCs and total Aroclors has not been determined in B4018.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (3.7), bkf (0.55 in W), daha (0.55 in W), Fe (40,300), Hg (0.7 in W), N-nitroso-di-N-propylamine (0.55 in W), total Aroclors (0.39 in W) > 2002 PRGs. Cu (130 in W), Mn (1,130), PCP (2.8 in W) close to 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.40 in B021 and 0.39 in BC2). Close to or > PRGs adj: Cu (67.2 in B021, 130 in W), Mn (1,130), Ni (488), Sb (5.6 DL), V (104), Zn (66.2).	Extent and excavation for Pb (209 in S1A) sufficient for ESD goal but not for 2002 PRG goal (150). S1A is at the boundary between B4018 and FLC, so Pb > 2002 PRG may extend into FLC. <u>Coalescing Site</u> <u>FLC (C2)</u> . Compounds in FLC (C2) that were not analyzed for in B4018 include: As, Be, Cu, Mn, Zn, var PAHs, TPH-g/d/mo. Extent of Mn has not been determined for BC68 (1,830) in FLC north of B4018: there are no sidewall samples and it has not been stepped down. Mn may extend into B4018. In nearby FLC samples, Be, Cu, Zn, Aroclor-1260 were < ESD. Pb > 2002 PRG may extend into C2 from B4018: Pb was not identified as a COPC in C2. As, bap and daha (DL 0.2) > 2002 PRGs. Cu (117 in SES) close to ESD (160). Zn (102 in SES) close to EPSC (113). <u>RA</u> . Sidewall confirmation samples were all removed, so Aroclor-1260, bap, and Pb may be under-represented in RA. Compounds in column 3 (all data from IR46B021, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (230 in W) > EPSC (113).		
Response	PAH detection limits were within the acceptable range (less than 3 mg/kg) at location 4018BC2. Refer to responses to comments for Fuel Line C for discussion of Mn. Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process. Refer to responses to comments on Fuel Line C.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B4113 baa, bap, bbf, chry	Extent of baa, bap, bbf, and chry was not determined on the N sidewall. baa, bap (SNA at 0.56, 0.53) were stepped out to the E but were not stepped out to N. And, no FLB samples were collected on the N sidewall. No Bs (at 4 feet bgs) were collected for both small 00-01 excavations in B4113: however, three Bs were collected under the B4113 excavation in FLB (at 7 ft bgs) and these are sufficient. bap DL (0.21 in BC44) > 2002 PRG. DLs for SVOCs and total Aroclors were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5 in B45 in FLB), baa (0.56 in SNA), bap (0.53 in SNA) > 2002 PRGs. baa (0.56 in SNA), bbf (0.34 in SNA) close to 2002 PRGs. DLs > 2002 PRGs: bap (0.20) and daha (0.21 in E1BG in FLB). Close to or > PRGs adj: Cu (100 in B45 in FLB), Mn (785 in SW19 in FLB).	How was B4113 identified in the HHRA if there are no RI samples for the site? How was the short list of COPCs selected? The high concentrations in SSs (e.g., baa at 18, bap at 11, bbf at 12, and chry at 14) indicate that, at the minimum, other SVOCs (and TPH) should have been considered. Extent of baa, bap, bbf, and chry was not determined on the N sidewall: baa, bap (SNA at 0.56, 0.53) were stepped out to the E but were not stepped out to N. And, no FLB samples were collected on the N sidewall. No Bs (at 4 feet bgs) were collected for both small 00-01 excavations in B4113: however, three Bs were collected under the B4113 excavation in FLB (at 7 fbg) and these are sufficient. bap (0.21 DL in BC44) was > 2002 PRG. <u>Coalescing Site</u> <u>FLB</u> . FLB COPCs that were not analyzed for in B4113 include: As, Be, Cu, Mn, Zn, Aroclor-1260, PAHs (bkf, daha, icdp), and TPH-g, TPH-d, TPH-mo. FLB samples nearest to B4113 were < ESD goals for these FLB COPCs except for PAHs. Extent of PAHs in FLB has not been determined because no samples were collected on the N sidewall. Note that no TPH samples were collected below 4 feet bgs. The extent of TPH in FLB (B3) has not been determined at 10 feet bgs (e.g., TPH-d at 3,600 in B76), and may extend towards B4113 at 10 feet bgs. bap and daha DLs (0.20 in E1BG) were > 2002 PRGs. Cu (100 in B45) was close to ESD (160). Zn (122, 138, 225) was > EPSC (113). <u>RA</u> . Most confirmation samples were removed in B4113 and in surrounding FLB so baa, bap, bbf, and chry may be under-represented in the RA. Other compounds (including those in column 3) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Note that since there is no RI data for B4113, there is no information on compounds other than the COPCs in B4113 and FLB. Zn (122, 138, 225 in FLB samples B43, SW19, B45) > EPSC (113).	PAHs (benzo(a)anthracene and benzo(a)pyrene) not delineated north or northeast of B4113SNA at 2.5 feet. No samples (at all) have been collected north or northeast of this location for either B4113 or the Fuel Line B excavation.	It is likely that there is a layer of PAH contaminated soil at 2.5 feet, because PAHs have also been detected above the cleanup goal in three samples collected from the 2.5 foot depth south of station B4113SNA. PAHs were detected in samples collected from 2.5 feet from stations 4113SSA and from Fuel Line B stations 4600SE19 and 4600SW19.
Response	Northward expansion of Excavation B4113 stopped at the seawall. The area north of the seawall was not accessible for further sampling. The sampling rules in the RDA do not require a new bottom composite sample when the total size of the excavation remains less than 500 sq ft and there is a pre-existing clean bottom sample. Excavation B4113 is completely surrounded by Fuel Line B and delineation of Fuel Line B COPCs is covered by Fuel Line B. Refer to responses to comments on Fuel Line B. PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.	The location of Excavation B4113 and the COPCs are based on the RD. B4113 was originally a de minimis area associated with location PA46TA05. Figures for this excavation will be revised to show the location of PA46TA05. The location of the cited surface soil sample(s) is not clear. Northward expansion of Excavation B4113 stopped at the seawall. The area north of the seawall was not accessible for further sampling. The sampling rules in the RDA do not require a new bottom composite sample when the total size of the excavation remains less than 500 sq ft and there is a pre-existing clean bottom sample. Refer to responses to comments on Fuel Line B.	Response presented under “EPA Comments” column	It is not correct to assume that a layer of contamination at 2.5 feet bgs exists because all the samples cited were composite samples that represent varying depth intervals. The northern extent of Excavation B4113 and fuel line segment B4 was limited by the seawall bounding San Francisco Bay. Consequently, no additional soil remains to be sampled north of the excavation. Station 4113SNA exceeded the ESD 2000 goals for benzo(a)anthracene and benzo(a)pyrene, but is bounded on the east by stations 4113N1A and 460E1BG.	

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-24 (Continued)					
B4114 Be	Extent and excavation are sufficient for Be. Mn (1,480) was > ESD (1,400) and should have been identified as a COPC. Extent of Mn has not been determined. This exceedance is at 16.75 feet bgs, but includes a portion of the interval from 6.75 to 16.75 feet bgs.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.8), Fe (51,500), Mn (1,200 at 1.75, 1,480 at 16.75, closest sample at 6.75), Hg (0.08), Ni (2,240 at 16.75) > 2002 PRGs. Cu (68.8), Sb (8.5) close to 2002 PRG (10). DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.42), total Aroclors (0.34). Close to or > PRGs adj: Cd (0.43 ND), Mn (1,200, 1,480), Ni (403, 2,240), N-nitroso-di-N-propylamine (0.42 DL), Sb (8.5), V (116).	Ni (2,240) was < ESD but > 2002 PRG (1,600). Extent not determined for Ni. This exceedance is at 16.75 feet bgs, but includes a portion of the interval from 6.75 to 16.75 feet bgs. <u>RA.</u> Confirmation samples remain in place so Be can be included in the RA. Other compounds (including those below) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (69.2) close to EPSC (113).		
Response:	Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process.		Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process.		
IR-25					
B3530			IR-25 (which was included in Parcel B in the RI) is now in Parcel C.		
Response:	Excavation B3530 is part of Parcel C.				
B3822					
Response:	Excavation B3822 is part of Parcel C.				
B3921					
Response:	Excavation B3921 is part of Parcel C.				
IR-26					
26-1 and EE-04A Aroclor-1260, Zn	Extent and excavation was sufficient for Aroclor-1260. Extent and excavation was not sufficient for Zn. No samples for Zn were collected on the bottom of the excavation and on three sidewalls. DLs for SVOCs and total Aroclors were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (1.9), bap (0.083), Pb (175), Zn (968) > 2002 PRGs. Sb (9.3 ND), Cd (1.5), Cu (132), Fe (21 100) close to 2002 PRGs. DLs > 2002 PRGs: Aroclor-1221 (0.79), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.39), total Aroclors (2.4). Close to or > PRGs adj: Cd (1.5), Mn (448).	Pb (172) is < ESD but > 2002 PRGs: extent not determined for Pb. <u>RA.</u> Confirmation samples remain in place so Aroclor and Zn can be included in the RA. Other compounds in column 3 (all data from PA26SS02) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). PA26SS02 should be shown as excavated on Figure 26-1.		
Response:	Risks from Zn concentrations in this area will be evaluated in the TMSRA for Parcel B. SVOCs were not identified as risk drivers, and therefore COPCs, during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Figure 26-1 will be revised to indicate that location PA26SS02 has been removed.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-26 (Continued)					
26-2 and EE-04B PCE	<p>The extent of TCE (and other VOCs) has not been determined. TCE was measured at a high concentration (21 at 1.75 feet bgs) and should have been identified as a COPC. High DLs (1.3) for other VOCs suggest that other VOCs may also be COPCs. TCE at 0.120 (greater than the 2002 PRG of 0.052) was also measured at 6.25 feet bgs: this indicates that the excavation should have been deeper than 6 feet bgs.</p> <p>Breakdown products of PCE (e.g., TCE, DCE, vinyl chloride) should have been included as COPCs: breakdown products must be included in the RA. Because of the lack of information for other VOCs, the extent and excavation for PCE can not be fully evaluated.</p> <p>DLs for SVOCs and total Aroclors were > ESD goals: extent has not been determined.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p>As (2.2), Cd (1.7), Fe (39,400), Hg (0.07), TCE (21) > 2002 PRGs.</p> <p>Sb (4.1), Mn (1,090), Ni (1,490) close to 2002 PRGs.</p> <p>DLs > 2002 PRGs: VOCs (1.3), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.44), total Aroclors (0.35).</p> <p>Close to or > PRGs adj: Cd (1.7), Mn (1,090), Ni (1,490), N-nitroso-di-N-propylamine (0.44), Sb (0.41).</p>	<p>This site is curious because high TCE (21) was not identified as a COPC, although PCE (4.6) in the same sample was identified as a COPC. The excavation was very shallow: confirmation samples were collected at 1.75 or 2 feet bgs. The size and shape of the excavation (about 24 ft x 37 ft) suggests that the the contamination was chased along a plane at 2 feet bgs (with TRPH?). Vertical migration is not uncommon for DNAPLs like PCE and TCE: Was the contamination constrained by site conditions? More information should be provided regarding site conditions (e.g., sump? concrete foundations?). Field notes should be provided for this excavation, and screening sampling results, if any exist.</p> <p><u>RA</u>. Data for the air pathway assessment (i.e., VOC data) is not sufficient. Confirmation samples remain in place so Aroclor and Zn can be included in the RA. Other compounds in column 3 (all data from IR26B024) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Ni (1,490) close to EPSC (1,941).</p>		
Response:	<p>The Navy acknowledges that TCE, in addition to PCE, exceeded the cleanup goal in the sample collected at 1.75 ft bgs and that TCE also should have been included as a COPC. However, soil represented by this sample was removed during excavation activities (to 3 ft bgs). Risks from remaining chemicals will be evaluated in the TMSRA for Parcel B. SVOCs and PCBs were not identified as risk drivers, and therefore COPCs, during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>		<p>Information supporting this excavation was obtained from the report summarizing the exploratory excavation activities (IT Corporation 1999 Completion Report, Exploratory Excavations, Hunters Point Shipyard).</p>		
B4315 baa, bis (2-ethylhexyl) phthalate, chry, TPH-mo	<p>Extent and excavation sufficient for baa, bis (2-ethylhexyl) phthalate, and chry. DLs for SVOCs (0.39) and total Aroclors (1.44) were > ESD goals: extent has not been determined.</p> <p>TPH-mo was not reviewed.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p>As (7.9), Fe (27,700), Hg (0.17) > 2002 PRGs</p> <p>Cd (0.81), Mn (1,120) close to 2002 PRGs.</p> <p>DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.39), total Aroclors (1.4).</p> <p>Close to or > PRGs adj: Cd (0.81), Mn (1,120), N-nitroso-di-N-propylamine (0.39 DL).</p>	<p><u>RA</u>. Confirmation samples remain in place so baa, bis(2-ethylhexyl)phthalate, and chry can be included in the RA. Other compounds in column 3 (all data from IR46B036) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Zn (94.1 at 1.25) close to EPSC (113).</p>		
Response:	<p>No other SVOCs were identified as risk drivers during the RD; therefore, no other SVOCs were selected as COPCs. Likewise, PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>		<p>Risk assessment only; no response.</p>		
B4417 Cu	<p>Extent and excavation sufficient for Cu. DLs for SVOCs (0.41) and total Aroclors (0.33) were > ESD goals: extent has not been determined.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p>Hg (0.24), Fe (37,400), Ni (1,790) > 2002 PRGs.</p> <p>Zn (248) close (370) to 2002 PRG.</p> <p>DLs > 2002 PRGs: As (2.9), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at .41), total Aroclors (0.33).</p> <p>Close to or > PRGs adj: Cy (0.15), Mn (921), Ni (1,790), N-nitroso-di-N-propylamine (0.39 DL), Zn (248).</p>	<p><u>RA</u>. RI sample removed. Confirmation samples remain in place so Cu can be included in the RA. Other compounds below (data from IR20B008) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Zn (248 at 1.75 feet bgs) > EPSC.</p> <p>Ni (1,790) close to EPSC (1,941).</p>	<p>Copper 744 mg/kg at a depth of 1.75 feet bgs</p>	<p>Confirmation samples all collected at a depth of 4 feet. Extent of copper contamination not known.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-26 (Continued)					
Response:	No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.	Response presented under "EPA Comments" column	Excavation B4417 extended to 7 feet bgs during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of Cu concentrations in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.
B4715 As, Mn	Extent and excavation sufficient for Cu. Extent not determined for Mn: no stepout for 1,430 at SNA on NE sidewall for 1,430. DLs for SVOCs (0.38) and total Aroclors (0.30) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (1.7), Fe (41,900), Pb (175 at 12.75), Mn (1,430 at SNA), Hg (0.36) > 2002 PRGs. Cd (1.4), Cu (111), Zn (116) close to 2002 PRGs. DLs > 2002 PRGs: As (2.9), SVOCs (e.g., baa, bap, bbf, bkf, daha, N-nitroso-di-N-propylamine at 0.38), total Aroclors (0.30). Close to or > PRGs adj: Cd (1.4), Cu (111), Mn (1,430 in SNA), Ni (553), N-nitroso-di-N-propylamine (0.38 DL), Pb (175), Zn (116).	Pb (175) is < ESD but > 2002 PRG: extent not determined. Pb (170) at 12.75 feet bgs represents some portion of the interval from 6.25 to 12.75 feet bgs. RA. RI sample removed. Confirmation samples remain in place so As and Mn can be included in the RA. Other compounds in column 3 (data from IR26B035, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (116) > EPSC at 12.75 feet bgs. Zn (109) close to EPSC (113).	At 6.25 feet, arsenic (14.9 mg/kg) and manganese (2,640 mg/kg).	Confirmation samples were collected at a depth of 4 feet, so the extent of contamination at 6.25 feet is unknown. There were no delineation samples.
Response:	Cu was not a COPC at B4715. Sample 4715SNA does not exceed the Mn soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the BCT during preparation of the May 2000 ESD. No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process.	Response presented under "EPA Comments" column	This excavation extended below the target sample during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of contamination in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.
B4815 baa, bkf	Mn (2,220 at 6.25 feet bgs) should have been identified as a COPC. Extent of Mn has not been determined. Extent and excavation sufficient for baa and bkf. However, high levels in SS for baa (21) and bkf (12) suggest that PAHs are significant contaminants at B4815 and that other PAHs should have been identified as COPCs. DLs for SVOCs (0.71) and total Aroclors (5.7) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.9), Fe (40,100), Mn (2,220), Hg (1.8) > 2002 PRGs. Cu (112), TI (1.5) Zn (166) close to 2002 PRGs (160, 370, 5.2). DLs > 2002 PRGs: SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 0.71), total Aroclors (5.7). Close to or > PRGs adj: Cd (0.23), Cu (112), Hg (1.8), Mn (2,220), Ni (378), N-nitroso-di-N-propylamine (0.71 DL), TI (1.5), Zn (166).	RA. RI sample removed. Confirmation samples remain in place so baa and bkf can be included in the RA. Other compounds in column 3 (data from IR26B023, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (166) > EPSC (113). Se (0.72) close to EPSC (1.95).		
Response:	Remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B. No other SVOCs were identified as risk drivers during the RD; therefore, no other SVOCs were selected as COPCs. Likewise, PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-26 (Continued)					
B4818			Shoreline complications ³		
Response:	This excavation will be included in a future addendum to the report.				
EE-04C baa, bap, bbf, bkf, TPH-mo	Extent and excavation is not sufficient for baa, bap, bbf, bkf. All confirmation samples have elevated DLs: however, no step-outs were performed at locations with DLs > ESD goals. Also, sidewall and bottom sampling density was not sufficient for ESD. Some PAHs (bap, daha, icdp) and bis (2-ethylhexyl) phthalateates were not analyzed for in RI sample (B022) with highest concentrations for baa (1.2), bbf (1.1). DLs were > ESD goals for PAHs (B014: bap at 1.5), other SVOCs (B014: PCP at 3.7, N-nitroso-di-N-propylamine at 1.5) and Aroclors (0.72). And in B014, multiple SVOCs and high TRPH (26,000) were detected. These facts indicate that other PAHs, SVOCs, and Aroclors should have been identified as COPCs. Mn (B022: 2,230, 1.25 feet bgs) should have been identified as a COPC. Extent of Mn has not been determined. TPH-mo was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.1), Fe (42,600), Hg (0.67), Ni (1,700 at 11.25), Mn (2,230) > 2002 PRGs. PCE (0.12) > HERD's recommended criteria. Cd (0.72), Cu (94.8), Zn (237) close to 2002 PRGs (1.7, 160, 370). DLs > 2002 PRGs: SVOCs (e.g., baa, bap, bbf, bkf at 0.86 in confirmation samples, daha, N-nitroso-di-N-propylamine at 1.5, PCP in B014 at 3.7), total Aroclors (1.5). Close to or > PRGs adj: Cd (0.72), Cu (94.8), Mn (2,230), Ni (1,700), N-nitroso-di-N-propylamine (1.5 DL), Zn (237).	Ni (1,700) exceeds 2002 PRGs at 11.25 feet bgs (B014). This sample represents a portion of the interval from 5.75 to 11.25 feet bgs. Extent of Ni is not determined. PCE (B015: 0.12 at 6.25 feet bgs) > HERD's 2002 recommended criteria (0.10). The extent of PCE has not been determined. RA. RI samples were removed (to 7 feet bgs). Confirmation samples remain in place so baa, bap, bbf, bkf can be included in the RA. Other compounds in column 3 (data from IR26B014, B015, B016, and B022, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (237, 115) > EPSC (113). Ni (1,700), Se (DL 0.82) close to EPSCs 1,941, 1.95).	Benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and benzo(k)fluoranthene was detected at 1.75 feet bgs in boring IR26B014 (0.43, 0.46, 0.41, and 0.57 mg/kg, respectively) and benzo(a)anthracene, and benzo(b)fluoranthene were detected at 1.25 feet bgs in IR26B022 (1.2 and 1.1 mg/kg, respectively)	The shallowest delineation samples were collected at depths of 3.25, 3.5 and 3.75 feet, so the extent of contamination in the 1.25 foot to 1.75 foot depth interval was not determined. The excavations only extended 2 to 2.5 feet beyond these borings. (IR26B014 was in the southwest corner of the excavation and IR26B022 was in the northeast corner of the excavation.)
Response:	Detection limits for PAHs were within the acceptable range (less than 3 mg/kg) so stepouts were not necessary. Samples for this excavation were collected during exploratory excavation activities; sampling was not reinitiated during the RA. Risk from remaining chemical concentrations will be evaluated during the TMSRA for Parcel B. A full suite of PAHs was analyzed in the samples collected at 6.25 and 11.25 feet bgs in boring IR26B022 even though some PAHs were not analyzed in the 1.25 ft sample. No detections were observed in either sample for any PAHs. No other SVOCs or PCBs were identified as risk drivers during the RD and therefore were not selected as COPCs. Remaining Mn concentrations will be evaluated as part of the TMSRA for Parcel B.		Samples collected from deeper than 10 feet bgs were not considered in the excavation planning process.	Response presented under "EPA Comments" column	Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.
EE-05 alpha-chlordane, As, baa, bap, bbf, bkf, chry, Cu, daha, gamma-chlordane, icdp, Pb, Mn, Hg, Zn	Very high levels (some of the highest on site for metals and PAHs) were measured on or near to the surface, but no surficial stepouts were performed. More surface samples all around the excavation are needed to determine if surficial contamination still exists: this is especially critical given the very high levels of metals measured. Surface samples should be analyzed for the full suite (but no VOCs), including CrVI and tributyltin. Sb (11) and Cd (4.3) should have been identified as COPCs, based on exceedances in RI samples. High concentrations of Ni (1,840) are also cause for concern. Extent of Sb, Cd and Ni has not been determined. Similarly, carbazole (0.82) > ESD (0.64) but was not identified as a COPC.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As, Cd (4.3), Cu, Fe, Hg, Mn, Ni, Pb, Sb (11) > 2002 PRGs. DLs > 2002 PRGs: SVOCs (e.g., N-nitroso-di-N-propylamine, PCP). Close to or > PRGs adj: Cd, Mn, Ni, N-nitroso-di-N-propylamine (DL), Sb. Also, As, Cu, Hg, Mn, Pb, Zn, baa, bap, bbf, bkf, icdp > 2002 PRGs remain in place at > 10 feet bgs. Some comments on 2002 PRGs are provided in column 2.	The fact that the EE05 area is largely unpaved is cause for concern: contaminant concentrations and distributions indicate that wastes were released directly to the ground. In addition to the source in the RI sampling area, the data indicate other sources (e.g., near EE0511, (5E1E, 5E2E, 5N1F, 5N1I, 5N1H), 5N2G, etc.). Grid sampling at surface and at multiple depths over the entire unpaved area at EE05 area would be prudent: samples should be analyzed for a full suite of compounds. As, Cu, Hg, Mn, Pb, Zn, baa, bap, bbf, bkf, icdp > 2002 PRGs remain in place near 10 feet bgs. Widespread contamination near 10 feet bgs is indicated. Because Bs exceed 2002 PRGs, sidewalls may also exceed 2002 PRGs at depths near 10 feet bgs. This is true even for those compounds for which sidewall samples are provided because the sidewall samples were not taken as deep as 10 feet bgs. And, for some compounds, no sidewall samples are provided at some locations where Bs exceed 2002 PRGs.	Lead- EE0506 (646 mg/kg) and IR26B020 (233 mg/kg) at 2 feet bgs and 1.75 feet bgs, respectively. However, confirmation samples were not collected from this depth to the south of these locations. No delineation or confirmation (sidewall) samples were collected south of IR26B020 at all. Lead in EE0511 (2,090 mg/kg) at a depth of 3 feet bgs, Mercury (southwest corner of excavation)- EE0507, EE0506, EE0505, and EE0504 at a depth of 2 feet bgs (7.5, 44, 4.5, and 2.4 mg/kg, respectively). Also, stations from EE0511 to EE0514 (134, 153, 482 mg/kg).	Sampling does not appear to comply with the RA and RD documents. The extent of lead at 1.75 feet in original boring IR26B020 was not delineated to the south and the closest edge of the excavation was only about 2.5 feet from the boring. No samples at all were collected south of the area of the excavation delineated with color (except some bottom composite samples to the west south west. Note there were no bottom composite samples to the south or southeast.); it appears that the excavation was simply extended an arbitrary distance beyond existing sampling locations. There are no confirmation samples to the west or northwest of this location at this depth. The original excavation extended about 3 feet north of this location; the closest new excavation boundary is about 6 feet to the northwest. No delineation samples at a similar depth to the west or northwest at all nor are there confirmation (sidewall or bottom composite) samples in this area (except a single sample collected from 5.25 feet).

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-26 (Continued)					
EE-05 (Continued)	<p>As (915 max). Extent not determined to the NE. On Figure EE05C, the line designating "Eastern extent of arsenic" is incorrect, since As was > ESD goals at BC21 and BC22 which are east of the line. Exceedances of 2002 PRGs in 5-pt composite Bs at 10 feet bgs suggest that exceedances are likely in sidewalls in the NE. But no sidewall samples for As were taken in the NE area.</p> <p>Cu (5,070 max). All Bs (at 10 feet bgs) along the N boundary exceed (BC11) or are close to (BC15, 18, 20, 22) the ESD goal of 160: this suggests widespread contamination by Cu near 10 feet bgs. Exceedances in 5-pt Bs at 10 feet bgs along the boundary, in areas where there are no sidewall stepouts (BC04, 14, 21), suggest that sidewalls may exceed also at depths near 10 feet bgs.</p> <p>Hg (482 max). Extent determined to ESD goals. However, ESD goal was 2.3 but new PRG for elemental Hg is zero (for both residential and industrial). Extent not determined to 2002 PRGs.</p> <p>Mn (11,200 max). Extent of Mn is not fully determined. Exceedances of 2002 PRGs in 5-pt composite Bs at 10 feet bgs indicate that high levels are likely in sidewalls. Stepouts were not completed on SW wall.</p> <p>Pb (4,200 max). Extent of Pb along N boundary is not determined. Exceedances of 2002 PRGs in 5-pt composite Bs at 10 feet bgs indicate that exceedances are likely in sidewalls. But no sidewall samples were taken.</p> <p>Zn (5,280 max). Extent and excavation sufficient for Zn. Bs at 10 feet bgs > ESD.</p> <p>PAHs: Very high values were measured: see (max's) below. More surface samples are needed for PAHs. Bs > ESD indicate widespread contamination near 10 feet bgs. High DLs are not shown as exceedances on figures, which as a result, may underrepresent the extent of PAH contamination. Examples: baa, bbp, bbf, bbf, chry and daha at 5.9 in SS07, daha at 14 in EE0506 and 1.8 in 5E1C.</p>	(See above)	<p><u>Industrial</u></p> <p>This area is designated for industrial re-use in the latest plans from the City's developers. Compounds measured > 2002 industrial PRGs include: As, Pb, Fe, Hg, baa, bap, bbf, bbf, daha, and icdp (and Mn was close). Fe (174, 000) and N-nitroso-di-N-propylamine (2.1 DL) were > industrial PRGs (100,000 and 0.25) in RI samples.</p> <p>RA. All confirmation samples have been removed or are at 10 feet bgs (except for 4 samples in the SW), so all COPCs (i.e., alpha-chlordane, As, baa, bap, bbf, bbf, chry, Cu, daha, gamma-chlordane, icdp, Pb, Mn, Hg, and Zn) may be under-represented in the RA. Compounds in column 3 may be under-represented in RA since the extent has not been determined, or since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Zn > EPSCs.</p>	<p>Mercury, Arsenic</p> <p>Arsenic was detected in a bottom 5-point composite sample at Stations EE05BC21 (12.6 mg/kg) and EE05BC22 (14.6 mg/kg), but there is a line west of these sample locations on Figure EE-05 C that indicates the "eastern extent of arsenic."</p> <p>Central part - locations EE05E2E, EE05E5A, EE05E3E, EE05E6A, EE05E7A, EE05E5E</p> <p>Mercury ranges from 2.7 to 374 mg/kg. Arsenic from 18.2 to 538 mg/kg (EE05E2, EE05E7A, and EE05E5E)</p> <p>Copper</p> <p>West - EE0511 Copper (855 mg/kg) at a depth of 3 ft.</p> <p>Central - Copper at 3,070 mg/kg at 5.75 feet in EE05E2E and 552 mg/kg at a depth of 2.25 feet in EE05E7A</p> <p>Zinc - 5.75 feet in EE05E2E (3450 mg/kg)</p> <p><u>PAHs</u></p> <p>West - EE05E7A Chrysene (1.5 mg/kg) and dibenz(a, h)anthracene (1.4 mg/kg) at 2.25 feet.</p> <p>Central - benzo(a)pyrene (1.9 mg/kg) at Station EE05E1A and benzo(a)pyrene (1.6 mg/kg), benzo(a)anthracene (1.5 mg/kg), benzo(b)fluoranthene (2.2 mg/kg), and indeno(1, 2, 3 - cd)pyrene (0.6 mg/kg) at Station EE05E2A were not delineated at 6.25 feet.</p> <p>Central (con't) -EE05E7A benzo(a)anthracene (15 mg/kg), benzo(a)pyrene (13 mg/kg), benzo(b)fluoranthene (9.9 mg/kg), benzo(k)fluoranthene (13 mg/kg), and indeno(1, 2, 3 - cd)pyrene (5.7 mg/kg) at 2.25 feet.</p>	<p>No confirmation samples were collected at this depth south of these locations. The area where the extent is not known is west and south of EE0507 and south of the other locations. NOTE: There is an area in an almost east-west line, from EE0511 in the west to EE0514 in the east, where mercury concentrations at the 3 foot depth were (from W-E) 134, 153, and 482 mg/kg. This is 58 to 210 times the cleanup goal!! This appears to be a contaminated layer; there is only 1 sample at this depth to the south (south of EE0511). The western extent of this "line" is not delineated. Arsenic is also high (180, 485, 213 mg/kg) in the E-W area between E0511 and E0514.</p> <p>It appears that arsenic was not analyzed in any other samples collected from this area (arsenic was only analyzed in bottom composite samples), but the presence of arsenic in the bottom composite samples suggests that arsenic may also be present at shallower depths and that there may not be a scientific basis for the "eastern extent of arsenic line."</p> <p>These locations are only about 6 to 13 feet from the southern edge of the excavation, but no samples were collected at comparable depths south of these locations to bound the extent of contamination. As a result, there is no way to determine if the excavation removed all of the contaminated soil. Since the excavation was extended beyond the original excavated area, the RD required confirmation samples, which were not collected.</p> <p>Excavation extended; samples not collected to northwest or west.</p> <p>Excavation extended; samples not collected to the south of these locations at similar depths.</p> <p>Extent of zinc not delineated to the south at this depth; excavation extended.</p> <p>Samples to the south and southeast only collected at depths greater than 4.25 feet or 6.25 feet.</p> <p>Samples were not collected to the south of these locations at or near 6.25 feet even though the excavation was extended.</p> <p>Original confirmation samples were collected at depths of 4.25, 6.25 or 8.25 feet, which is too deep to assess contamination in the shallower layer at 2.25 feet.</p> <p>Excavation extended to the south, confirmation samples not collected at original depth of contamination as RA requires.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-26 (Continued)					
EE-05 (Continued)	<p>baa (28 max), bap (30 max), bbf (44 max), bkf (18 max), icdp (12 max). Extent of shallow (about 2 feet bgs) exceedances at 05E2A (DL 16), EE0504 (DL 7.5) and 5E7A was not determined to the S.</p> <p>chrys (27 max) and daha (5 max). Extent and excavation sufficient for chry. However, high values for chry in 5-pt Bs (BC21: 1.5, BC08: 1.6, BC11: 1.6BC14: 2.2) although < ESD, still suggest widespread contamination near 10 feet bgs which may not be represented in sidewall samples.</p> <p>chlordan. Extent and excavation sufficient for alpha- and gamma-chlordane.</p>	(See above)	(See above)	(See above)	(See above)
Response:	<p>Only the sample from a single location (PA26SS07) was collected at the surface and this sample did not exceed cleanup goals for the majority of COPCs. The statement that the highest levels of COPCs were found in very shallow samples is subjective and not representative of the data observed at this excavation. Stepouts were conducted in accordance with the RDA. Other compounds, including Sb, Cd, Ni, and carbazole, were not identified as risk drivers and therefore not selected as COPCs during the RD.</p> <p>Bottom composite samples collected at 10 feet bgs do not affect the horizontal delineation. Neither the RD nor the RDA require or discuss the addition of COPCs to previously clean sidewalls based on exceedances detected in excavation bottom composite samples. Such a change to the RDA would represent a significant departure from the approved sampling approach and would result in a large number of new samples at this and other completed excavations. Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.</p> <p>Delineation to the ESD 2000 cleanup goals was the objective of the confirmation sampling. It is not feasible to delineate the extent of a naturally occurring metal such as Hg to a zero level. Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Mn contamination was bounded along the southern sidewall of the original excavation at locations EE0509 and EE0520. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work.</p> <p>PAHs Refer to previous response concerning surface samples. The detection limits for PAHs at location EE05E1C were within the acceptable range (less than 3 mg/kg). Refer to previous response for Mn concerning expansion of EE-05 to the south for PAHs. Bottom composite samples collected at 10 feet bgs do not affect the horizontal delineation.</p>	Discussion of data adequacy and any additional sampling will occur during discussions of the TM.	Response presented under "EPA Comments" column	<p>Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Pb contamination was bounded along the southern sidewall of the original excavation at locations EE0509 and EE0520. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work. The locations of bottom composite samples are approximate; bottom composite samples characterize the entire excavation bottom, not the immediate vicinity around the symbol location.</p> <p>Pb contamination at location EE0511 is bounded to the north by samples from locations EE05N1A and -N1B. Sampling depths for stepout samples -N1A and -N1B were in accordance with specific depth intervals listed in the RDA. Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Samples were not collected to the west because sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work.</p> <p>Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Hg and As contamination at the cited locations was bounded to the south at locations EE0509 and EE0520 and to the west at location EE0508. Sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work.</p> <p>Arsenic-Bottom composite samples collected at 10 feet bgs do not affect the horizontal delineation. Neither the RD nor the RDA require or discuss the addition of COPCs to previously clean sidewalls based on exceedances detected in excavation bottom composite samples. Such a change to the RDA would represent a significant departure from the approved sampling approach and would result in a large number of new samples at this and other completed excavations.</p>	

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-26 (Continued)					
EE-05 Response (Continued):	(See above)	(See above)	(See above)	(See above)	<p>Hg and As contamination at the cited locations is bounded to the south at locations EE05E2F, -E3F, -E4F, -E5F, and -E8A. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA. The RDA specifies that "The depth of each sample initially collected at a proposed location will be randomly selected from a depth near or below the depth where contamination was detected or from 1 foot bgs and the excavation floor. All subsequent stepout samples behind this location will be collected at about the same depth as the initial sample, approximately 5 feet behind the initial location." The locations listed in the comment are subsequent stepout locations and the bounding samples were collected at about the same depths as the cited samples. The Navy met the RDA sampling requirements for this excavation. Cu contamination at location EE0511 is bounded to the north by samples from locations EE05N1A and -N1B. Sampling depths for stepout samples -N1A and -N1B were in accordance with specific depth intervals listed in the RDA. Excavation EE-05 expanded only along the northern sidewall of the original excavation, in accordance with the RDA. Samples were not collected to the west because sampling activities described in the RDA were not intended to reverify areas that were already identified to be clean by previous excavation and sampling work.</p> <p>Cu and Zn contamination at the cited locations is bounded to the south at locations EE05E2F, -E3F, -E4F, -E5F, and -E8A; locations EE05E5A and -E6A provide additional confirmation. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA.</p> <p><u>PAHs</u></p> <p>Chrysene and dibenz(a,h)anthracene contamination at the cited locations is bounded to the south at locations EE05E4F and -E5F. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA.</p> <p>PAH contamination at locations EE05E1A and -E2A is bounded to the south by samples from locations EE05E1B and -E1F. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA.</p> <p>PAH contamination at the cited locations is bounded to the south at locations EE05E3F, -E4F, -E5F, and -E8A. Exact correlation between the depth of a sample exceeding the soil cleanup level and a stepout bounding sample is not part of the sampling design presented in the RDA.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-42					
42-1 Al, As, Mn	Extent and excavation sufficient for Al, As and Mn. DLs for SVOCs (0.43) and total Aroclors (0.92) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (9.9 in SEA), Fe (50,900), Hg (0.16), Ni (1,920) > 2002 PRG Close to or > PRGs adj: Mn (1160 in SEB), Ni (1,920), N-nitroso-di-N-propylamine (0.43 DL). DLs > 2002 PRGs: SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 0.43), total Aroclors (0.92).	RA. All confirmation samples remain in place so Al, As, and Mn can be included in the RA. Compounds in column 3 (data IR10MW15A, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,920), Zn (71.2) close to EPSCs (1,941, 113). The text says that As was identified in W, but no W provided.		
Response:	No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		As data for Excavation 42-1 are provided in the screening sample data table in Appendix A of the CSR.		
B3229 Mn	Extent not determined for Mn. There are no samples deeper than 1.75 feet bgs to the NE (near the wall of Building 113). Cd (3.6 in S1B) was > ESD goal (2.3). Cd should have been identified as a COPC: extent has not been determined. DLs for SVOCs (0.38) and total Aroclors (0.30) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (7.4), Cd (3.6 in S1B), Fe (36,400), Hg (0.25 in S1B), Mn (8,500 in N1B) > 2002 PRGs. Close to or > PRGs adj: Cd (2.8 in N1B), Cu (75.1), Hg (0.25 in S1B), Mn (8,500 in N1B), Ni (1,500 in S1B), N-nitroso-di-N-propylamine (0.38 DL), Tl (1.8 in N1B). DLs > 2002 PRGs: SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 0.38), total Aroclors (0.30).	RA. All confirmation samples remain in place so Al, As, and Mn can be included in the RA. Other compounds in column 3 (data PA42SS06, except as noted) may be under-represented in RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,500 in S1B), Zn (68.1) close to EPSCs (1,941, 113).	Cadmium - 3.6 mg/kg at 3229S1B	Exceedance listed in table (Table 3229, pg 3), but not included as COPC
Response:	The sample distribution at B3229 met the requirements of the RDA. Cd only very slightly exceeds the cleanup goal (3.6 versus 3.5 mg/kg goal). Risks from remaining Cd concentrations will be evaluated during discussions of the TMSRA for Parcel B. No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.	Response presented under "EPA Comments" column	The Navy does not believe that additional sampling is warranted based on the very slight exceedance of the cleanup goal (3.6 versus the 3.5 mg/kg goal) and the obstructions to collecting samples (beneath the concrete floor inside Building 113 close to building support columns and interior walls). Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.
B3229A Al, Aroclor-1254, Aroclor-1260, Mn	Extent not determined for Mn. No stepouts for Mn exceedance (1,450). Mn is contaminant at nearby sites B4715, B4815, EE04C and B3229. DLs for SVOCs (0.38) and total Aroclors (0.30) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (6.2), Fe (38,700), Hg (0.09)> 2002 PRGs. Mn (1,450) close to 2002 PRG. DLs > 2002 PRGs: SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 0.43), total Aroclors (0.34). Zn (78.8) close to EPSC (113). Close to or > PRGs adj Cd (DL .79), Mn (1,450), Ni (624), N-nitroso-di-N-propylamine (0.43 DL).	RA. Single RI sample remains in place so Mn can be included in the RA. However, Mn and compounds in column 3 (all data from PA42B004) may be under-represented in the RA since the extent has not been determined, or since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (78.8) close to EPSC (113).		
Response	The cited sample from boring PA42B004 does not exceed the Mn soil cleanup level based on two-significant-figure evaluation. The use of two-significant-figure rounding was agreed by the Navy and the BCT during preparation of the May 2000 ESD. Excavations B4715, B4815 and EE-04C are not near B3229A—these excavations are more than 1,000 feet from B3229A. No SVOCs were identified as risk drivers during the RD; therefore, no SVOCs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-46			IR-46 (waste oil and fuel lines) was included in the RI but is not presented as a site in the CSR, although samples from IR-46 have been included at other sites. Please discuss the status of IR-46 is this now Fuel Lines A, B and C? Please confirm that all IR-46 data has been screened against ESD goals and that all exceedances have been included in the CSR.		
Response:			The portion of the fuel distribution system (IR-46) on Parcel B included in the CSR includes the segments termed Fuel Lines A, B, C, and F. Fuel line D is part of Parcel C and will be included in future reports associated with that parcel. All fuel line data were incorporated into the excavation planning process that included the RD and RDA. In addition, all fuel line data will be included in the screening process that will be part of the TMSRA for Parcel B.		
IR-50			IR-50 (storm drains and sanitary sewers) was included in the RI but is not included in the CSR, although IR-50 data is included at other sites. Please discuss the status of IR-50. Please confirm that all IR-50 data in Parcel B has been screened for exceedances of ESD goals and that all exceedances have been included in the CSR.		
Response:			The portions of the storm drain and sanitary sewer systems (IR-50) that are part of Parcel B were included as individual excavation sites in the CSR (for example, area B2727 is included with IR-10 based on its location but is also associated with IR-50).		
IR-51			IR-51 (transformer sites) was included in the RI but is not included in the CSR, although IR-51 data is included in sections for other sites. Please discuss the status of IR-51. Please confirm that all IR-51 data in Parcel B has been screened for exceedances of ESD goals and that all exceedances have been included in the CSR.		
Response:			The portions of the transformer sites (IR-50) that are part of Parcel B were included as individual excavation sites in the CSR (for example, area B2616 is included with IR-24 based on its location but is also associated with IR-51).		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-60					
60-1 As, baa, bap, bbf, bkf, chry, dhah, icdp, Mn	Extent and excavation was not sufficient for As: the excavation (which stopped at 3 feet bgs) should have included the exceedance (11.7) at 6.25 feet bgs (or additional samples at depth should have been collected). Similarly, the extent and excavation was not sufficient for baa, bap, bbf, bkf, chry, dhah, icdp: the excavation should have gone at least as deep as the DL exceedances at 6.25 feet bgs (or additional samples at depth should have been collected). Mn. Extent not determined for Mn on NE side (2,080 at 2.25 feet bgs). DLs for PAHs/SVOCs (0.37) and total Aroclors (0.30) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (3.3 in BOA), bap (0.28 in SNA), Mn (2080 in 1B2), Hg (0.11), TI (5.5) > 2002 PRGs. Fe (24,200) close to 2002 PRG. DLs > 2002 PRGs: dhah (0.19 in SEA), SVOCs (e.g., N-nitroso-di-N-propylamine at 0.37), total Aroclors (0.30). Close to or > PRGs adj: Mn (2,080 in 1B2), Ni (645 in W), TI (5.5).	<u>RA</u> . RI sample and some confirmation samples were removed so COPCs (i.e. As, baa, bap, bbf, bkf, chry, dhah, icdp, Mn) may be under-represented in the RA. Compounds in column 3 (all data from IR60B001, except as noted) may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (171) > EPSC (113).	Arsenic - 11.7 mg/kg at 6.25 feet	The excavation only extended to 3 feet bgs, so the arsenic contamination was not removed. There were no samples collected to determine the extent of arsenic.
Response:	Stepout only to the north was in accordance with the RDA. Extension of the excavation downward to address the 11.7 mg/kg As concentration was not completed because this concentration is only slightly above the cleanup goal (HPAL = 11.1 mg/kg). Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B. Detection limits for the cited PAHs were within the acceptable range (less than 3 mg/kg). Additional samples were not required. Step-outs north of location 6001B2 were not completed because the weighted average Mn concentration was less than 1,400 mg/kg for this excavation.		Risk assessment only; no response.	Response presented under "EPA Comments" column	Stepout only to the north was in accordance with the RDA. Extension of the excavation downward to address the 11.7 mg/kg As concentration was not completed because this concentration is only slightly above the cleanup goal (HPAL = 11.1 mg/kg). Risk from remaining chemical concentrations will be evaluated as part of the TMSRA for Parcel B.
60-2 As, Cd, Cu, TPH-d, Zn	Extent and excavation sufficient for As and Cu. Extent and excavation were not sufficient for Cd: no sidewall samples were collected S and SE of SEA (2.6). Extent and excavation was not sufficient for Zn: no bottom sample for 00-01 excavation. DLs for PAHs/SVOCs (0.37) and total Aroclors (0.30) were > ESD goals: extent has not been determined. Pb (179 at 6.25 feet bgs) exceeds 2002 PRG (150). Extent of Pb not determined. Sb, Hg and TI may also be of concern. TPH-d was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (6.1 in BOB), Cu (153 in SSB), Fe (30,300), Pb (179), Hg (1.5), Zn (239 in BOA) > 2002 PRGs. Sb (9.5) and TI (1.5) close to 2002 PRGs (10, 5.2). DLs > 2002 PRGs: SVOCs (e.g., bap, bbf, dhah, N-nitroso-di-N-propylamine at 0.37), total Aroclors (0.30). Close to or > PRGs adj: Cd (0.38 DL in SWA), Mn (640), N-nitroso-di-N-propylamine (0.37 DL).	<u>RA</u> . Single RI sample and some confirmation samples were removed so COPCs (i.e. As, Cd, Cu, and Zn) may be under-represented in the RA. Compounds in column 3 (all data from IR60MW10A, except as noted) may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (239 in BOA) > EPSC (113). The text says that Cd and Cu were identified in Ws but no Ws were provided.		
Response:	This excavation extended outward from the target Cd sample during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of contamination in the sidewalls. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. A new bottom composite sample was not required by the RDA because the area of the excavation expansion (about 100 sq ft) was less than 500 sq ft and suitable, clean bottom composite samples (0602B0A and -B0B) already existed for Zn. No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. Other compounds, including Pb, Sb, Hg, and TI, were not identified as risk drivers and therefore not selected as COPCs during the RD.		The summary of COPCs table for Excavation 60-2 indicated that cadmium and copper were selected as COPCs based on soil screening sample results. This selection was based on information contained in the RD (see sheet 6 of the RD). However, these soil screening sample results are not available for inclusion in Appendix A. Waste profile data for Excavation 60-2 collected during 2000 were inadvertently omitted from Appendix A and will be included in the final report, but these data do not indicate cadmium and copper exceeded the soil cleanup level. Nevertheless, the excavation was bounded for both cadmium and copper.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
IR-60 (Continued)					
B1816 TPH-d, Zn	Extent and excavation sufficient for Zn. DLs for PAHs/SVOCs (0.42) and total Aroclors (0.34) were > ESD goals: extent has not been determined. TPH-d was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (5.1), Fe (43,400), Ni (1,761), Zn (485), > 2002 PRGs. Pb (114), Mn (1,040) close to 2002 PRGs (150, 1,800). Close to or > PRGs adj: Hg (DL .35), Mn (1,040), Ni (1,761), N-nitroso-di-N-propylamine (0.42 DL).	<u>RA</u> . Single RI sample was removed. Confirmation samples remain in place so Zn can be included in the RA. Compounds in column 3 (all data from IR60MW04A) may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).		
Response:	No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.		
IR-61					
B2225 Aroclor-1260	Extent and excavation for Aroclor-1260 sufficient at depth, but not at surface. Aroclor-1260 (0.25) was > ESD goal in the surface sample (0.50 feet bgs). Since this was a compressor plant, surface spills were the likely rationale for collecting a surface sample. No other surface samples were collected in the B2225 area. All confirmation samples were collected at depth (4, 8.5, 10 feet bgs). The extent of surface contamination is not determined. Aroclor-1260 was measured at highest concentration (3.9) in the screening sample. Where was the screening sample located? DLs for PAHs/SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 12, PCP at 30) and total Aroclors (2.5) were > ESD goals: extent has not been determined.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. Fe (35,500), Hg (0.42) > 2002 PRGs. Ni (1,440) close to 2002 PRG (1,600). DLs > 2002 PRGs: As (DL 1.1), SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 12, PCP at 30), total Aroclors (2.5). Close to or > PRGs adj: Mn (921), Ni (1,440).	<u>RA</u> . RI sampling location was excavated. Confirmation samples remain in place so Aroclor-1260 can be included in the RA. Compounds in column 3 (all data from IR61B009) may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,440) close to EPSC (1,941).		
Response:	This excavation was conducted during the 1998 to 1999 RA and the sidewall composite samples collected characterize the full extent of contamination in the sidewalls, both horizontally and vertically. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD. The cited screening sample was a bottom composite sample collected at 3.5 feet bgs. No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.		
B2425 As, TPH-d	Extent and excavation for As was sufficient. DLs for PAHs/SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 0.43) and total Aroclors (0.34) were > ESD goals: extent has not been determined. TPH-d was not reviewed.	Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.2 in SEA), Fe (34,200), Hg (0.85) > 2002 PRG. Cu (117), Mn (1,030), Ni (1210) close (10, 160, 1,800, 1,600). Close to or > PRGs adj: Cu (117), Mn (1,030), Ni (1210), Sb (DL 8.5).	<u>RA</u> . RI sampling location was excavated. Confirmation samples remain in place so As can be included in the RA. Compounds in column 3 (all data from IR61B007, except as noted) may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Ni (1,210) close to EPSC (1,941).		
Response:	No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.		Risk assessment only; no response.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
<p>IR-62 B2030 TPH-g, TPH-d</p>	<p>DLs for PAHs/SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 12, PCP at 30) and total Aroclors (0.37) were > ESD goals. Other SVOCs (i.e, 2-methylnaphthalene at 52 and naphthalene at 18) were close to ESD goals (56, 56). These compounds should have been identified as COPCs: extent has not been determined. Ni (2,150) appears to be widespread. TPH-g and TPH-d were not reviewed.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. As (4.1), Fe (50,200), Hg (0.32), Ni (2,150) > 2002 PRGs. Mn (890), 2-methylnaphthalene (52), naphthalene (18) close to 2002 PRGs (10, 1,800, 56, 56). DLs > 2002 PRGs: VOCs (1.5 at B007), SVOCs (e.g., bap, bbf, daha, N-nitroso-di-N-propylamine at 12 to PCP at 30 in B007), total Aroclors (0.37). Close to or > PRGs adj: Mn (890), Ni (1,640), N-nitroso-di-N-propylamine (12 DL). Ni (2150) > EPSC (1,941). Sb (DL .81) close to EPSC (1.95).</p>	<p>RA. Confirmation samples (except at one location) were analyzed only for TPH. Since TPH is not considered in the RA, B2030 may not be represented. 3 RI samples were excavated. Confirmation samples and 2 RI samples remain in place. Compounds in column 3 (all data from UTO2B004, B007, B008, B009, and B010) may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). "UTO2" sampling results which are shown on Figure B2030 are not included on Table 2030. Results for "UTO2B007" at 4.75, 6.75 and 8.75 feet bgs are provided on Table B2030: at 4.75 feet bgs, TPH-d, TPH-g, and TPH-mo were measured at 4,200, 0.3 DL and 140 and BTEX compounds were ND at DL of 0.008. TPH-d at 4,200 at 4.75 feet bgs is not shown on Figure B2030. Two additional sets of results (both with lower concentrations) are provided for "UTO2B007" at 4.75 feet bgs: please explain. If these are new samples (as indicated by the sampling dates), then CSR sample naming conventions should be used, to distinguish these samples from the historic "UTO2" samples. The text says that TPH-g was identified by FO, but RI UTO samples had TPH-g at 5,100 which exceeds goals for TPH-g. Adjoining site EE02 should be shown on Figure B2030.</p>		
<p>Response:</p>	<p>No SVOCs or PCBs were identified as risk drivers during the RD; therefore, no SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>	<p>Results for UT02B007 are included in the data table for this excavation. Results for other UT02-series samples will be added to the table. Data for samples collected at 4.75 and 8.75 feet bgs will be added at location UT02B007. The samples at UT02B007 were collected after B2030 had been backfilled (from the 1998 to 1999 remedial action) and the 4,200 mg/kg detection was unexpected. The two, additional samples (collected April 3, 2001) bracket UT02B007 and demonstrate that the related petroleum contamination is very limited. The Navy prepared an information package (dated November 12, 2002) that addresses this area in greater detail. These samples were collected as part of the TPH program and used the naming convention followed by that program. Excavation EE-02 will be added to the figure.</p>			

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (FLs)					
FLA Aroclor-1260, As, baa, bap, bbf, bkf, Be, chry, Cu, daha, icdp, Mn, Zn, TPH- g, TPH-d, TPH-mo	<p>Comments on the boundaries between FLA and coalescing sites are provided first below, followed by comments on the rest of FL (e.g, A1, A2).</p> <p><u>Coalescing/Adjacent Areas</u> <u>B2715</u>. B2715 sample E1A at the boundary with FLA does not meet ESD goals for PAHs: however, the nearest FLA samples do meet ESD goals for B2715 COPCs (Cu, Zn, baa, bap, bbf, bkf) and also for chry, daha, icdp. Nearest FLA samples also meet ESD goals for these FLA COPCs not analyzed for in B2715: Aroclor-1260, As, Be, Hg. <u>B2915</u>. Aroclor-1260 is the only COPC at B2915. FLA samples within/near B2915 were analyzed for As, Be, Cu, Hg, Mn, Zn, PAHs, Aroclor-1260. Extent is determined sufficiently for these compounds. However, the excavation for exceedances of Cu and PAHs is not sufficient. The excavation for exceedances at SSK/SSM should have extended SW to confirmation samples S1A, S1B, S1C. Figures for B2915 and FLA should show data for both sites. <u>B3114 and 24-2</u>. The extent of TPH at about 10 feet bgs in B3114 and 24-2 has not been determined and may extend to FLA. <u>24-3</u>. 24-3 was sampled for Aroclor-1260 only: Aroclor-1260 at 26 was the area maxima for FLA. Extent and excavation was sufficient for Aroclor-1260 at FLA/24-3 boundary. For other compounds, the two nearest FLA samples (460W1A and B) meet ESD goals. In the usual case, these FLA samples might be considered to represent the extent of these compounds at the S corner of 24-3. But given the high levels in W from 24-3, there is still concern regarding other compounds in 24-3. That is, contaminants from FLA may extend into 24-3. These include: As, Fe, Hg, Aroclors, PAHs (2.2), SVOCs (e.g., N-nitroso-di-N-phenylamine at 1.4 and PCP at 11) > 2002 PRGs. Also, Ni and Pb were close to PRGs.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p><u>Summary of Coalesced Areas and Other Areas</u> As, Fe, Hg, Mn > 2002 PRGs. DLs > 2002 PRGs: PAHs (2.2), SVOCs (e.g., N-nitroso-di-N-phenylamine at 1.4 and PCP at 11), total Aroclors. Ni, Pb close to 2002 PRGs. Crysotile asbestos (3 %) > haz waste. PAHs in FLA Bs at 10 feet bgs (bap at 0.58) > 2002 PRGs. Close to or > PRGs adj: Cy, Hg, Mn, Ni. No data on Cd. Some comments on 2002 PRGs are included in column 2.</p>	<p><u>General Comments</u> With the exception of one trench sample, no RI results were provided. And, confirmation samples in FLA were not analyzed for a full suite of contaminants. So, how were COPCs identified? Extent has not been determined for As, Hg, Mn, Zn and chrysotile asbestos. DLs for PAHs/SVOCs and total Aroclors were > ESD goals: extent has not been determined. TPH-d remains in place > 1,000 at 8 to 10 feet bgs in A6 and A7. <u>RA</u>. Most confirmation samples have been excavated so COPCs in column 1 may be under represented in RA. Compounds in column 3 may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (307) > EPSC (113). Ni close to EPSC.</p>	<p>Copper - 4.25 feet bgs Stations 4600B84 (232 mg/kg) and 4600B47 (265 mg/kg) Arsenic - 4 feet - 4600B84 (22.6 mg/kg) and 4600B47 (22.7 mg/kg) Arsenic at Stations 4600SS1 (18.8 mg/kg), 4600SN19 (430 mg/kg), and 4600SN1 (58.4 mg/kg) at a depth of 2.5 feet bgs Aroclor-1260 - 460BC72 (0.31 mg/kg) at 7 feet. 4600B39 (0.47 mg/kg) and 4600B37 (0.46 mg/kg) at a depth of 5 feet bgs 4600B0Y - 4 ft. benzo(a) anthracene (0.52 mg/kg), benzo(a)pyrene (0.58 mg/kg), benzo(b) fluoranthene (0.79 mg/kg), and benzo(k)fluoranthene (0.45 mg/kg) 460BC20 - benzo(a) anthracene (2.3 mg/kg), benzo(a)pyrene (1.2 mg/kg), benzo(b)fluoranthene (1.4 mg/kg), and benzo(k) fluoranthene (1.0 mg/kg); 460BC21- benzo(a)pyrene (0.97 mg/kg), benzo(b) fluoranthene (0.85 mg/kg), and benzo(k)fluoranthene (0.54 mg/kg) - 7 feet bgs. 4600B0U - 4 ft. Benzo(a) anthracene (0.41 mg/kg) and benzo(b) fluoranthene (0.41 mg/kg) 4600B47- 4 feet bgs benzo(a) anthracene (5 mg/kg) benzo(a)pyrene (4.4 mg/kg), benzo(b) fluoranthene (6.3 mg/kg) and benzo(k) fluoranthene (1.7 mg/kg) 4600B49 - 4 ft. benzo(a) anthracene (6.5 mg/kg), benzo(a) pyrene (4.2 mg/kg), benzo(b)fluoranthene (5.9 mg/kg), and benzo(k) fluoranthene (4.4 mg/kg) 460BC20 - 7 ft. Indeno(1,2,3-cd)pyrene (0.43 mg/kg) 460BC21 - 7 ft indeno(1,2,3-cd)pyrene (0.6 mg/kg) and dibenz(a, h)anthracene (2.1 mg/kg) 4600B49 - 4 feet bgs chrysene (7.4 mg/kg) and indeno(1,2,3-cd)pyrene (0.75 mg/kg)</p>	<p>There were no samples to delineate horizontal extent of contamination in this area (southeastern portion of the excavation). There were no samples to delineate horizontal extent of contamination in this area. (Bottom composite samples) These sidewall samples are in the vicinity of the bottom composite samples (previous entry). The RD required that samples be collected at the same depth when the excavation was extended. This was not done to the north and northeast. RD did not require horizontal extent be determined for bottom composite samples but nearby samples were shallower or deeper. Same problem. Samples were 7 or 8 feet from edge of excavation. Samples not collected to south or southwest of this bottom composite. Excavation extended, but boundary only 5 feet from location. Same problem. No delineation at or near 7 feet bgs to the northeast or southwest. Same problem. No delineation to south, north and northeast. Same problem. No delineation to south or southwest. Similar problem, except excavation boundary only 6 feet to southwest. No delineation along southern edge of excavation at all. Same problem. No samples at similar depth to north or northeast. Similar problem. No samples along southern boundary of excavation at all. Boundary 6 feet away</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (FLs) (Continued)					
FLA (Continued)	<p><u>B3415.</u> Extent and excavation was sufficient for Aroclor-1260 at FLA/B3415 boundary, based on FLA samples near B3415. Other FLA COPCs were not analyzed for in B3415, including As, Cu, Hg, Mn, Zn, PAHs (baa, bap, bbf, bkf, daha, icdp, chrys), TPH-g, TPH-d, TPH-mo. Extent and excavation of Cu, and Zn in the vicinity of B3415 is sufficient, based on FLA samples. For other compounds: As (> PRG), Hg (too few samples), PAHs (DLs 0.38 > PRGs). For Mn, Mn ave < HPAL but extent of Mn was not determined before average was calculated. TPH was not reviewed.</p> <p><u>B3514.</u> Cy (DL 0.6) was identified as a COPC in B3514, so may also be a COPC for FLA. Cy was < goals of ROD and ESD (2) and 2002 PRG (11). However, DL of 0.6 is likely to exceed the PRG adjusted for plant uptake (PRG adj). If so, the extent of Cy may not be determined in FLA/B3514. Why was Cy selected as COPC in B3514, and not for other areas in FLA?</p> <p>FLA COPCs were not all analyzed for in B3514. COPCs in FLA include: As, Cu, Hg, Mn, Zn, Aroclor-1260, PAHs (baa, bap, bbf, bkf, daha, icdp, chry), TPH-g, TPH-d, TPH-mo. Extent and excavation of Cu and Zn in the vicinity of B3514 is sufficient. For other compounds: As (> PRG), Hg (no samples nearby), PAHs (DLs 0.19 > PRGs), PCP (DL 25 > ESD), Aroclor-1260 (DLs > ROD but < PRG). For Mn, Mn ave < HPAL but extent of Mn not determined before average was calculated. Chrysotile asbestos (2%) was > haz waste, extent of asbestos was not determined.</p> <p><u>FLB (B1).</u> See A8 (below).</p> <p><u>Other FLA Areas</u> (See notes in column 3)</p> <p>A1: Not sufficient sidewall samples in A1 east of B2715 (near BC18, BC71). Why was this excavation extended to the NE?</p> <p>A3-A4: May be under-sampled for Zn.</p> <p>A4: No sidewall samples for As.</p> <p>A5: Hg was sampled for only in the SE portion of A5 and one RI location in A7. No confirmation samples on N sidewall. Why was Hg a COPC in this area (and A9) only?</p> <p>A6: No PAH stepout at 460N1BA.</p> <p>A7: No sidewall samples on NE wall east of 24-3. Mn extent not determined.</p>	(See above)	(See above)	(See above)	(See above)

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLA (Continued)	<p><u>Other FLA Areas</u> (See notes in column 3)</p> <p>A8: The sidewall interval between 3 and 7 feet bgs is under-represented, especially for PAHs. Metals are not sampled for in Bs at 7 feet bgs.</p> <p>A9: No sidewall samples for metals (except Hg).</p> <p>DLs for PAHs/SVOCs and total Aroclors were > ESD goals: extent has not been determined.</p> <p>General comments on TPH are provided: however, TPH was not reviewed with respect to criteria.</p>	(See above)	(See above)	(See above)	(See above)
Response:	<p>B2715: No response necessary.</p> <p>B2915: Excavation of Fuel Line A stopped at the foundation of Building 128 to avoid compromising the integrity of the foundation. Figures were prepared on a case-by-case basis to present relevant data in as clear a manner as possible. Figure clarity and space constraints do not allow presentation of all overlapping data on every figure.</p> <p>B3114 and 24-2: Additional investigation in this area is planned as part of the TPH program.</p> <p>24-3: Aroclor-1260 was bounded and excavated at 24-3. Other than Aroclor-1260, no chemicals exceeded cleanup goals in waste profile samples. Error in Appendix A data qualifiers. Comparisons in the CSR include only the ESD 2000 goals, not other PRGs. Discussion of revised cleanup goals will be part of the TMSRA for Parcel B.</p> <p>B3415: Aroclor-1260 was the only risk driver and COPC identified at location PA46TA07; a full suite of analyses at PA46TA07 did not uncover any other chemicals at concentrations sufficient to identify them as COPCs. As is bounded by locations 4600SS13, 460E1BN, 460E1CA, 460E1C, and 460W1CE in the vicinity of B3415. Comparison of As to other PRGs is beyond the scope of the CSR. Hg did not exceed the cleanup goal anywhere throughout Fuel Line A, including the area of B3415. PAH detection limits were within the acceptable range (less than 3 mg/kg) in the area of B3415. Risks from remaining Mn concentrations will be evaluated during discussions on the TMSRA for Parcel B.</p> <p>B3514: Comparison of cyanide to other PRGs is beyond the scope of the CSR. Cyanide did not exceed cleanup goals in any samples at this excavation. There was no reason to suspect cyanide contamination in conjunction with the operation of the fuel lines so cyanide was not incorporated into the fuel line COPCs. Comparison of As to other PRGs is beyond the scope of the CSR. Hg did not exceed the cleanup goal anywhere throughout Fuel Line A, including the area of B3514. PAH detection limits were within the acceptable range (less than 3 mg/kg) in the area of B3415. Aroclor-1260 was bounded by Fuel Line A samples in the immediate vicinity of B3514. Risks from remaining Mn concentrations will be evaluated during discussions on the TMSRA for Parcel B. Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.</p> <p>Segment A1: This segment of Fuel Line A expanded to the northeast to bound Cu and Zn exceedances at location 4600SEK. The stepout sidewall is 46 feet long and is delineated by three samples (460E2A, -E1B, and -E1BK). The RDA requires three samples for sidewalls 34 to 50 feet in length and these samples meet that criterion.</p> <p>Segments A3-A4: There were no exceedances for Zn in these segments, so Zn was not a COPC and was not part of the analytical suite.</p> <p>Segment A4: Samples 4600SSK, -SSM, -SNK, -SNM, SNI, and -SSI bound the sidewalls of segment A4 for As.</p>	<p>COPCs were identified during the RD for the fuel lines as a whole. The same process of dropping COPCs at clean sidewalls was used for the fuel lines as for the rest of the excavations. Stepout sidewall confirmation samples were analyzed only for the COPCs that exceeded cleanup goals.</p> <p>As, Mn, and Zn were delineated according to the requirements of the RDA. Hg was not identified as a COPC for Fuel Line A; however, Hg data are presented for completeness. Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup. Detection limits for SVOCs that were COPCs were within the acceptable range (less than 3 mg/kg). No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. Additional investigation in the segment A6 area is planned as part of the TPH program. It is not clear what part of segment A7 exceeds the TPH cleanup goal.</p>	Responses presented under "EPA Comments" column	<p>Cu at 4600B84 and 4600B47 – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p> <p>Arsenic at 4600B84 – Same response as for Cu.</p> <p>Arsenic at 4600SS1 and others – The cited samples were composite samples collected over a sidewall extending from the surface to 5 feet bgs. As composite samples, they do not represent a distinct depth horizon. Samples from locations 460N1R, 460N1BA, and 460N1CD bound As contamination to the northeast. These stepout samples meet the requirements of the RDA.</p> <p>Aroclor-1260 at 460BC72 and others– The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p> <p>PAHs at 4600B0Y and others – Same response as for Aroclor-1260.</p>	

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLA Response (Continued):	<p>Segment A5: Hg appears to have been inadvertently added to the analyte list for a portion of Fuel Line A; however, no Hg detections exceeded the cleanup goal.</p> <p>Segment A6: Validation of data resulted in the exceedance at 460N1BA after segment A6 had been backfilled. Risk from remaining chemical concentrations will be evaluated during the TMSRA for Parcel B.</p> <p>Segment A7: Location 4600SW13 bounds Mn in this portion of Fuel Line A. This sample did not exceed the cleanup goal and there was no cause for a stepout sample at this location.</p> <p>Segment A8: Samples collected in this segment met the requirements of the RD and RDA.</p> <p>Segment A9: Aroclor-1260 was the COPC for the stepout at segment A9 so sidewall samples were not analyzed for metals.</p> <p>No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>		(See above)	(See above)	(See above)
FLB Aroclor-1260, As, baa, bap, bbf, bkf, Be, chry, Cu, daha, icdp, Mn, Zn, TPH-g, TPH-d, TPH-mo	<p>Comments on the boundaries between FLB and coalescing sites are provided first below, followed by comments on the rest of FLB.</p> <p><u>Coalescing Sites</u></p> <p><u>FLA (A8).</u> The sidewall interval in FLA and in FLB (B1) between 3 and 7 feet bgs is under-represented, especially for PAHs. Metals are not sampled for in Bs at 7 feet bgs.</p> <p><u>B3614.</u> B3614 was analyzed only for PAHs: extent of PAHs in B3614 has not been determined. FLB sampling is minimal near B3614. However, FLB samples nearest to B3614 were < ESD goals for all FLB COPCs, except Aroclor-1260. Aroclor-1260 (0.32) in B53 has not been stepped down. PAH DLs (0.21) in nearest FLB samples are > PRGs for bap and daha.</p> <p><u>B3914.</u> The extent of Mn, SVOC DLs and total Aroclors DLs has not been determined in B3914. All COPCs in FLB were not sampled for in B3914. Additional FLB COPCs include As, Be, Zn, Aroclor-1260, PAHs (baa, bap, bbf, bkf, icdp). FLB samples near or inside B3914 were < ESD for these compounds. bap (DL 0.18) > 2002 PRGs. TPH-d (3,600 in B76 at 10 feet bgs in FLB) and unknown TPH (8,100 at 11.75 feet bgs in MW03AD) suggests that contamination may exist below the bottom of the B3914 excavation. TPH-d (7,700 in BC42) at 10 feet bgs in FLB may extend to B3914.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p><u>Summary of Coalesced Areas and Other Areas</u></p> <p>As, Mn, H > 2002 PRGs.</p> <p>DLs > 2002 PRGs: PAHs, bap (0.066, DL .23), daha (DL 0.38).</p> <p>Ni (1,230) close to 2002 PRG (1,600).</p> <p>Close to or > PRGs adj Cy, Mn (3,370), Ni (1,230).</p> <p>Some comments on 2002 PRGs are included in column 2.</p>	<p><u>FLB General Comments</u></p> <p>There were no RI samples for FLB. And, confirmation samples were not analyzed for a full suite of contaminants. So, how were COPCs identified? Extent has not been determined for Mn (and other compounds as noted in column 2). Areas on the N boundary were not sampled for multiple COPCs. Ni not analyzed for but may be a COPC. Pb not analyzed for but often occurs in association with Cu and Zn (which are COPCs). DLs for PAHs/SVOCs and total Aroclors were > ESD goals: extent has not been determined. Extent of TPH is not determined and is widespread at 10 feet bgs.</p> <p><u>RA.</u> Most confirmation samples have been excavated so COPCs in column 1 may be under-represented in RA. Compounds in column 3 may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Cu, Mn, Zn at 10 feet bgs > 2002 PRGs. TPH-d also at 10 feet bgs.</p> <p>Zn (255) > EPSCs, Ni (1,230) close (1,941).</p>	<p>Copper - 4600B55 (266 mg/kg), 4 feet bgs.</p> <p>Copper - 4600SS11 (870 mg/kg) , 3 ft confirmation samples were not collected to the west, south, or southeast</p> <p>Manganese - 460S1AA sidewall sample at a depth of 4.25 feet bgs (3,190 mg/kg)</p> <p>Manganese - weighted average concentration in characterization area was 1,590 mg/kg.</p> <p>4600B47 - 5 ft. benzo(a) anthracene (2.2 mg/kg), benzo(a)pyrene (1.4 mg/kg), benzo(b)fluoranthene (2.3 mg/kg), benzo(k) fluoranthene (1.8</p>	<p>Confirmation samples were not collected at this depth to the northeast of this location.</p> <p>Confirmation samples were not collected to the west, south, or southeast</p> <p>Contamination probably extends beneath Building 130. No samples to delineate extent to south (in building).</p> <p>Additional excavation was not done, manganese present above the cleanup goal at 4600SW34, 4600B74, and 4600SE35.</p> <p>Bottom composite sample, but extent not known to north, northeast, south and southwest.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLB (Continued)	<p>B4113. No explanation provided in the CSR for the short list of COPCs in B4113. COPCs in B4113 were baa, bap, bbf, and chry. Extent of baa, bap, bbf, and chry (and other SVOCs) in B4113 (and in FLB) was not determined: no samples were collected on the N sidewall common to both sites. Note that no TPH samples were collected below 4 feet bgs in B4113/FLB (B4). The extent of TPH in FLB (B3) has not been determined at 10 feet bgs (e.g., TPH-d at 3,600 in B76), and may extend towards B4113 and B4 at 10 feet bgs. Bap (0.28 in SSA) and daha DLs (0.20 in E1BG in FLB) were > 2002 PRGs. Cu (100 in B45) close to ESD (160). Zn (122, 138, 225) > EPSC (113).</p> <p>FLC. TPH extensive at 10 feet bgs, continuing from FLB: TPH-g (100), TPH-d (2,900), TPH-mo (430) at 10 feet bgs. Based on nearest samples in FLC (C1), other COPCs in nearest samples in FLC (C1) are < ESD, including As, Be, Mn, Zn, Aroclor-1260, PAHs. As (8.1), bap (DL 0.2), daha (DL 0.2) > PRG Zn (144) > EPSC (113)</p> <p><u>Other FLB Areas</u></p> <p>B1: General comment. All sidewall confirmation samples are < 3 feet bgs and Bs are at 7 feet bgs, so the interval 3-7 feet bgs may be under-represented on the sidewalls, especially for PAHs.</p> <p>B2: General comment. Why was the excavation extended NE of B3914?</p> <p>B2, B3: Regarding Mn. Extent of Mn was not determined and may be widespread.</p> <p>B2, B3, B4: Regarding TPH. Extent of TPH-d (max 8,100) is not determined at about 10 feet bgs in B2, B3, FLC, and maybe B4. TPH associated with Cu, Zn > ESD at 10 feet bgs in B1. B4 was only sampled to 7 feet bgs: all COPCs were not sampled for at 7 feet bgs (or deeper) in B4. If other COPCs are entrained in TPH-d, the extent of other COPCs may not be determined in B4 near 10 feet bgs. Zn > EPSC.</p> <p>B3: No N sidewall samples were collected--except for a discrete sample for Cu, Mn at 2.25 feet bgs. Cu and Mn at 4 feet bgs are the only 2 exceedances in</p>	(See above)	(See above)	(See above)	(See above)

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLB (Continued)	<p>B3. TPH-d was measured at 10 feet bgs: extent was not determined. Need N sidewall samples with all COPCs at 2 depths to 10 feet bgs.</p> <p>B4: No N sidewalls and closest W and E sidewalls are 2.75 only. Need N sidewall with all COPCs at 2 depths to 10 feet bgs. DLs for PAHs/SVOCs and total Aroclors were > ESD goals: extent has not been determined.</p> <p>General comments on TPH are provided: however, TPH was not reviewed with respect to criteria.</p>				
Response:	<p>FL A, segment A8 Samples collected in this segment met the requirements of the RD and RDA. B3614: The delineation of B3614 did not join with Fuel Line B. Segment B1 was deepened to remove the cited exceedance. Locations 460BC38 and -BC39 define the new clean bottom for Aroclor-1260. Detection limits for PAHs were within the acceptable range (less than 3 mg/kg). B3914: Stepouts samples were collected to complete the delineation of Mn at B3914. SVOCs were not identified as risk drivers, and therefore COPCs, during the RD. Likewise, PCBs were not identified as risk drivers during the RD. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. Risks from chemical concentrations remaining at 10 feet bgs will be discussed in the TMSRA for Parcel B. B4113: The location of B4113 and the COPCs are based on the RD. B4113 was originally a de minimis area associated with location PA46TA05. Northward expansion of Excavation B4113 stopped at the seawall. The area north of the seawall was not accessible for further sampling. TPH concentrations did not exceed the cleanup goal in bottom composite samples collected at 4 feet bgs, so there was no requirement to collect deeper samples. Sidewall composite samples (4600SN11, -SN12, -SNY, -SNZ, -SS15, -SS16, -SS17, and -SS18) bound TPH concentrations in the 1998 to 1999 excavation to 10 feet bgs. Detection limits for PAHs were within the acceptable range (less than 3 mg/kg) Fuel line C: Risks from chemical concentrations remaining at 10 feet bgs will be discussed in the TMSRA for Parcel B. Comparisons in the CSR include only the ESD 2000 goals, not other PRGs. Segment B1: Bottom composite samples in this segment were collected at 4 (not 7) feet bgs. Sidewall samples are composites that represent the entire sidewall. Segment B2: The fuel line excavation continued to the seawall. Segments B2, B3: Risks from remaining Mn concentrations will be evaluated during discussions on the TMSRA for Parcel B. Segments B2, B3, B4: Risks from chemical concentrations remaining at 10 feet bgs will be discussed in the TMSRA for Parcel B. Segment B3: The northern sidewall of segment B3 was bounded by samples 4600SN11, -SN12, -SNY, -SNZ, -SS15, -SS16, -SS17, and -SS18 collected during 1998 to 1999. Cu and Mn are bounded along the southern sidewall of segment B3. Segment B4: Northward expansion of segment B4 stopped at the seawall. The area north of the seawall was not accessible for further sampling. No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>		<p>COPCs were identified during the RD for the fuel lines as a whole. The same process of dropping COPCs at clean sidewalls was used for the fuel lines as for the rest of the excavations. Stepout sidewall confirmation samples were analyzed only for the COPCs that exceeded cleanup goals.</p> <p>Risks from remaining Mn concentrations will be evaluated during discussions on the TMSRA for Parcel B.</p> <p>Ni and Pb were not identified as risk drivers during the RD and were not selected as COPCs.</p> <p>Detection limits for SVOCs that were COPCs were within the acceptable range (less than 3 mg/kg). No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p> <p>Risks from chemical concentrations remaining at 10 feet bgs will be discussed in the TMSRA for Parcel B.</p>	<p>Responses presented under “EPA Comments” column</p>	<p>Cu at 4600B55 – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p> <p>Cu at 4600SS11 – Sample 4600SS11 was a composite sample collected over a sidewall extending from the surface to 4 feet bgs. As a composite sample, it does not represent a distinct depth horizon. Samples from locations 460S1AA, 460S1CG, and 460S1AB bound Cu contamination to the south and west. These stepout samples meet the requirements of the RDA.</p> <p>Mn at 460S1AA – Although Mn concentrations observed in samples from Fuel Line B were not specifically identified in the final Mn site proposal, the averaging protocol presented on Figure I is the same. Part of the intent of the Mn site proposal was to address the ongoing inability to delineate excavations to the 1,400 mg/kg cleanup level. The Navy will evaluate the most efficient means to characterize Mn concentrations that may extend beyond location 460S1AA. Discussions of ambient metals concentrations, including Mn, are part of the ongoing discussions for the TM.</p> <p>PAHs at 4600B47 – Samples from location 4600B47 did not exceed cleanup goals. However, the listed results correspond to location 4600B57 and this location is assumed to be the focus of the comment. Related to 4600B557 – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
<p>FLC Aroclor-1260, As, baa, bap, bbf, bkf, Be, chry, Cu, daha, icdp, Mn, Zn, TPH-g, TPH-d, TPH-mo</p>	<p>Comments on the boundaries between FLC and coalescing sites are provided first below, followed by comments on the rest of FLC. <u>Coalescing Sites</u> <u>FLB (B3)</u>. TPH extensive at 10 feet bgs, continuing from FLB (B3) into FLC. Other COPCs were < ESD at FLB/FLC boundary except Mn. <u>24-8</u>. All FLC and 24-8 samples should be shown (e.g., E44, E45, B82, etc.) on both figures. With respect to PAHs (baa, bap, bbf, bkf, chry, daha, icdp) and other SVOCs (e.g., N-nitroso-di-N-propylamine), "FL" samples and 24-8 samples in the 24-8 area do not meet ESD goals for DLs (e.g., FL1, B022). Since stepouts have not been performed at locations of DL exceedances, the extent of contamination has not been determined for various SVOCs. 24-8 was not analyzed for some COPCs in FLC, including: Aroclor-1260 and Zn: the nearest FLC samples meet ESD goals for Aroclor-1260 and Zn. For TPH-d, the extent was not determined in FLC and 24-8 at and below 10 feet bgs (e.g., 9,800 at 10.25 feet bgs in FL3). For TPH-g, the extent was not determined in FLC and so TPH-g may extend into 24-8. TPH-g was not included as a COPC for 24-8 (although some confirmation samples were analyzed for TPH-g). Regarding Mn, 24-8 has some of the highest values for Mn on site (> 13,000 at two locations: these were removed). Mn is widespread but extent not determined for Mn to SW and SE. <u>B4017</u>. B4017 is separated from FLC by the railroad tracks only. FLC COPCs were not sampled for in B4017, except for the single RI location. B4017 has one COPC only—bis (2-ethylhexyl) phthalate. Mn (1,480) should have been identified as COPC: extent of Mn not determined. Chrysotile asbestos was > haz waste: extent not determined. Closest FLC (C2) COPCs < ESD, except for Mn. As, bap (DL 0.2), daha (DL 0.22), Mn > 2002 PRGs.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below. <u>Summary of Coalesced Areas and Other Areas</u> As, Hg (1.3), Mn (3,520), Pb (209) > 2002 PRGs. DLs > 2002 PRGs: SVOCs: (N-nitroso-di-N-propylamine at .74, N-nitrosodiphenylamine at 1.1, and PCP at 5.6), total Aroclors. Close to or > PRGs adj: Hg, Mn. Some comments on 2002 PRGs are included in column 2.</p>	<p><u>General Comments</u> There were no RI results. And, confirmation samples were not analyzed for a full suite of contaminants. So, how were COPCs identified? Extent not determined for Aroclor-1260, Mn, Pb, PAHs (DLs) and chrysotile asbestos. DLs for SVOCs and total Aroclors were > ESD goals: extent not determined. <u>RA</u>. Most confirmation samples have been excavated so COPCs in column 1 may be under-represented in RA. Compounds in column 3 may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs). Zn (110) close to EPSC (113). Figure FLC C: arrows from spider boxes point to wrong sample locations.</p>	<p>4600B0 - 5 ft benzo(a) anthracene (2 mg/kg), benzo(a)pyrene (2.2 mg/kg), benzo(b) fluoranthene (3.2 mg/kg), dibenz(a, h)anthracene (0.51 mg/kg), and indeno(1,2,3-cd)pyrene (1 mg/kg) Manganese - 460E1R, 3.25 feet bgs (2,410 mg/kg). Manganese - 2406B1- 4.25 feet bgs (28,600 mg/kg) Manganese - 460BC09 - 6 feet bgs (3,520 mg/kg) Manganese - 4600B07 - 5 feet bgs (1,470 mg/kg)</p>	<p>The excavation was extended beyond the original boundaries so the CSAP required collection of confirmation samples at the original depth of contamination, but the only confirmation samples collected in this area were collected from a depth of 3 feet. There were no confirmation or delineation samples to the south, east, northeast or north. As a result, the calculated weighted average does not truly represent the average level of manganese contamination. This was a bottom composite sample and the CSAP did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Same problem. Not delineated to north and west. Basically, samples were not collected along the northwestern edge of the extended excavation. This was a bottom composite sample and the CSAP did not require determination of horizontal extent, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north and west is undefined. Also, this sample was close to 2406B1, suggesting that there may be a 0.75 to 1 foot (or more) thick layer of soil with high manganese content in the vicinity of these two sample locations.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLC (Continued)	<p><u>B4018.</u> B4018 was analyzed for Aroclor-1260, Pb and bap only. Pb was not a COPC in FLC, so extent of Pb (209 in S1A in B4018) > 2002 PRGs is not determined in FLC (C2) to 2002 PRG (150). Pb and Aroclor-1260 were identified as COPCs in W for B4018--but other exceedances in W were not identified as COPCs (bkf, daha, N-nitroso-di-N-phenylamine, total Aroclors): the extent of these compounds in B4018 is not known. bap (DL 0.39 at 6 feet bgs in BC2) in B4018 were not excavated and were not stepped down. So, the extent of bap (and other SVOCs) in B4018 was not determined. Also, sidewall sampling depths on the E wall (SEA: 1.5 feet bgs) are not sufficient in B4018. For other FLC samples nearest to B4018, Be, Cu, Zn, Aroclor-1260 were < ESD. As, Pb, PAHs (DL 0.2) > 2002 PRGs. Cu (117) close to ESD (160), Zn (102) close to EPSC (113).</p> <p><u>24-6.</u> Very high Mn (28,600 and 14,000) samples were excavated. However, Mn extends into adjacent FLC and the extent of Mn is not determined for the area. 24-6 was sampled only for As, Be, Cu, Mn. 24-6 was not sampled for PAHs and Aroclors, which are COPCs in FLC. In nearby samples in FLC, ESD goals were met for these compounds. PAH (DLs) were > 2002 PRGs.</p> <p><u>B3921/FLD.</u> Results for B3921/FLD were not included, since B3921/FLD is in Parcel C. So, it is not possible to evaluate the boundary between FLC and B3921/FLD.</p> <p><u>Other FLC Areas</u></p> <p><u>C1.</u> Extent of Mn in 24-8 is not determined and may extend into FLC C1. For high PAHS at SWU, sidewall should have been excavated to confirmation sample at W1D. Otherwise, COPCs are < ESD, including As, Be, Zn, Aroclor-1260, PAHs. As (8.1), bap (DL 0.22), daha (DL 0.22) > PRG. TPH is extensive at 10 feet bgs, continuing from FLB (B3) into FLC, maybe 24-8. TPH-g (100), TPH-d (1,600), TPH-mo (430) at 10 feet bgs. baa (0.71), bap (0.42), bbf (0.55) at 10 feet bgs > ESD and > 2002 PRG. Zn (144) > EPSC (113).</p>	(See above)	(See above)	(See above)	(See above)

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLC (Continued)	<p><u>C2</u>. Extent of Mn (1,830 at 6 feet bgs) not determined for bottom sample 460BC68 which was not stepped down. No sidewall samples for Mn on FLC C2 on SE wall (NW of B4017) near B exceedance (BC68 at 1,830) which was not stepped down. Mn may extend into B4017. Mn should have been identified as COPC for B4017. No sidewall for Aroclor-1260 at SEU. Other COPCs As, Be, Zn, PAHs < ESD but As, PAH (DL 0.2) > 2002 PRGs. Not sampled for bis (2-ethylhexyl) phthalate, the only COPC in adjacent B4017.</p> <p><u>C3</u>. Extent of Pb (209) > 2002 PRG not determined at boundary of B4108 and C3. Extent of Mn not determined in C3 (BC09: 3,520 at 6 feet bgs; E1R: 2,410 at 3.25 feet bgs) and 24-6.</p> <p>DLs for PAHs/SVOCs and total Aroclors were > ESD goals: extent has not been determined.</p> <p>General comments on TPH are provided: however, TPH was not reviewed with respect to criteria.</p>	(See above)	(See above)	(See above)	(See above)
Response:	<p>Fuel line B, segment B3: Risks from chemical concentrations remaining at 10 feet bgs will be discussed in the TMSRA for Parcel B.</p> <p>24-8: Data presentations for adjoining excavations, especially those adjacent to fuel lines, were prepared on a case-by-case basis to produce comprehensible figures. Samples collected at 24-8 containing the designation “FL” were collected to support delineation of fuel-related compounds, not as part of work to support Fuel Line C.</p> <p>SVOC and PAH detection limits are within acceptable ranges.</p> <p>Aroclor-1260 and Zn were bounded in the 1998-1999 portion of Fuel Line C. These analytes did not extend to the part of Fuel Line C that merged with 24-8 so there was no need to delineate these compounds at 24-8.</p> <p>Risks from chemical concentrations remaining at 10 feet bgs will be discussed in the TMSRA for Parcel B.</p> <p>Stepouts were not completed for Mn because the average concentration was less than 1,400 mg/kg.</p> <p>B4017: Excavation B4017 does not join with Fuel Line C. B4017 is 9 feet (or more) southeast of Fuel Line C. Remaining Mn concentrations will be evaluated as part of the evaluations for the TMSRA for Parcel B. Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.</p> <p>B4018: Risks from remaining Pb concentrations will be evaluated during the TMSRA for Parcel B. Error in Appendix A data qualifiers. The waste profile samples cited in this comment did not exceed soil cleanup levels. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors. PAH detection limits were within the acceptable range (less than 3 mg/kg) at location 4018BC2. The sample depth at location 4018SEA conformed to the requirements of the RD.</p> <p>24-6: Stepouts were not completed for Mn because the average concentration was less than 1,400 mg/kg. Fuel line C locations that exceeded cleanup goals for PAHs and Aroclor-1260 were not adjacent to 24-6 so there was no reason to add these chemicals as COPCs.</p>		<p>COPCs were identified during the RD for the fuel lines as a whole. The same process of dropping COPCs at clean sidewalls was used for the fuel lines as for the rest of the excavations. Stepout sidewall confirmation samples were analyzed only for the COPCs that exceeded cleanup goals.</p> <p>Aroclor-1260 was bounded in the 1998 to 1999 portion of Fuel Line C.</p> <p>Risks from remaining Pb and Mn concentrations will be evaluated during the TMSRA for Parcel B.</p> <p>No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p> <p>Asbestos was not identified in the Parcel B ROD as a substance requiring cleanup.</p> <p>Leaders on Figure C will be corrected.</p>	Response presented under “EPA Comments” column	<p>PAHs at 460B05 – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p> <p>Mn at 460E1R – The Navy will evaluate the most efficient means to characterize Mn concentrations that may extend beyond location 460E1R. Discussions of ambient metals concentrations, including Mn, are part of the ongoing discussions for the TMSRA for Parcel B.</p> <p>Mn at 2406B1, 460BC09, and 4600B07 – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLC Response (Continued):	<p>B3921; Fuel Line D: These excavations are part of Parcel C.</p> <p>Segment C1: The extent of Mn on the northern sidewall of 24-8 is bounded by locations 2408W2A and -W2B more than 20 ft before 24-8 merges with Fuel Line C. Excavation was not continued to location 460W1D because excavation would compromise the integrity of Building 130. Risks from chemical concentrations remaining at 10 feet bgs will be discussed in theTMSRA for Parcel B.</p> <p>Segment C2: Stepout (deepening) was not completed for Mn because the average concentration was less than 1,400 mg/kg. Remaining Mn concentrations will be evaluated in theTMSRA for Parcel B. The RDA does not require or discuss the addition of COPCs (Mn in this case) to previously clean sidewalls based on exceedances detected in excavation bottom composite samples. Excavation B4017 does not join with Fuel Line C.</p> <p>Segment C3: Risks from remaining Pb and Mn concentrations will be evaluated during theTMSRA for Parcel B.</p> <p>No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>		(See above)	(See above)	(See above)
FLD Response:	<p>Fuel line D is part of Parcel C.</p>				
FLF Aroclor-1260, As, baa, bap, bbf, bkf, Be, chry, Cu, daha, icdp, Mn, Zn, TPH-g, TPH-d, TPH-mo	<p>F1. Extent not determined for Mn. No stepouts to SW of BA56. No shallow stepouts for SE17 and SW17. Mn may extend into EE-03.</p> <p>Extent not determined for TPH-g, TPH-d and TPH-mo. No stepdowns/outs at B42 (for 3,000, 2,200, 970) at 7 feet bgs. No sidewall to SW and other sidewall samples are not that deep. May extend to SW into EE-03 and to NE in direction of F2, F3.</p> <p>Extent and excavation sufficient to ESD for Aroclor-1260, As, Be, Cu, Zn, PAHs. As, bap (DL), daha (DL) > 2002 PRGs. Zn > EPSC.</p> <p>F2. TPH-mo at 2,900 (SE9) not stepped out/down. No samples > 3 feet bgs so F1 contamination may extend to F2, F3 at depth.</p> <p>Extent and excavation sufficient to ESD for Aroclor-1260, As, Be, Cu, Mn, Zn, PAHs. As, bap (DL), daha (DL) > 2002 PRGs. Zn > EPSC.</p> <p>F3. Extent of TPH in F1, F2 not determined. May extend to F3 at depth.</p> <p>Extent and excavation sufficient to ESD for Aroclor-1260, As, Be, Cu, Zn, PAHs. As, bap (0.37), daha (DL) > 2002 PRGs. Zn > EPSC.</p>	<p>Extent not determined to 2002 PRGs (or PRGs adj) for compounds below.</p> <p><u>Summary of Coalesced Areas and Other Areas</u></p> <p>As, Mn, bap (0.3) > 2002 PRGs.</p> <p>DLs > 2002 PRGs: PAHs.</p> <p>Close to or > PRGs adj: Mn.</p> <p>Some comments on 2002 PRGs are included in column 2.</p>	<p><u>General Comment.</u> No RI results are provided. So, how were COPCs identified?</p> <p>Extent not determined for Mn. Extent not determined for TPH.</p> <p><u>RA.</u> Confirmation samples have been excavated so COPCs in column 1 may be under-represented in RA. Compounds in column 3 may be under-represented in the RA since they have not been identified as COPCs in the CSR, or since they were ND and so were not considered in the RATM (despite elevated DLs).</p> <p>Zn (317) > EPSC (113).</p>	<p>Copper, Zinc PAHs at 3 feet.</p> <p>chrysene- 4600B35 (4.3 mg/kg) at the 3 ft depth</p> <p>benzo(a)anthracene and benzo(a)pyrene at Stations 4600B35 (1.9, 0.81 mg/kg), 4600B33 (1.4, 2.3 mg/kg), 4600B13 (1.2, 0.86 mg/kg), and 4600B29 (0.61, 0.69 mg/kg) at the 5 ft depth.</p> <p>benzo(b)fluoranthene - 4600B35 (6.5 mg/kg), 4600B33 (2.4 mg/kg), 4600B13 (3.8 mg/kg), 4600B15 (1.2 mg/kg), and 4600B29 (1.2 mg/kg) at a depth of 3 ft</p> <p>benzo(k)fluoranthene 4600B35 (2.4 mg/kg) at the 3 ft depth</p> <p>indeno(1, 2, 3 - cd)pyrene at the 3 ft depth near Stations 4600B35 (0.46 mg/kg), 4600B33 (0.67 mg/kg), 4600B13 (0.69 mg/kg), and 4600B29 (0.47 mg/kg)</p> <p>zinc - 4600B15 (1,190 mg/kg) and 4600B29 (474 mg/kg) at 3 feet bgs.</p> <p>copper - 4600B31 (331 mg/kg) at a depth of 7 feet bgs</p> <p>copper - 4600SW11 (260 mg/kg) and 4600SE11 (417 mg/kg) at 2 ft.</p> <p>copper- 4600B35 (251 mg/kg), 4600B13 (257 mg/kg), 4600B15 (2,850 mg/kg), and 4600B29 (1,290 mg/kg) at a depth of 3 ft</p> <p>copper - 4600SE5 (865 mg/kg) and 4600SW5 (759 mg/kg) at the 2 ft depth</p> <p>manganese at 1.5 feet bgs - 4600SW17 (4,610 mg/kg) and 4600SE17 (2,820 mg/kg) and at 6.25 ft near 460BA56 (1,460 mg/kg)</p>	<p>The original 1998-99 excavation extended to 3 feet depth and was only 4.5 feet wide. The bottom composite samples had levels of PAHs and copper (see individual listings below) that were above cleanup goals. Zinc was also found at elevated concentrations in the northern half of this excavation. The CSAP did not require stepout sampling for bottom composite samples, but the presence of PAHs and Copper in 5 bottom composite samples spread out over 194 linear feet of excavation suggests the existence of a contaminated layer of soil at the 3 foot depth.</p> <p>Not delineated to east, west, or north. Part of contaminated layer.</p> <p>These samples are in the contaminated 3 ft depth layer. The CSAP did not require determination of horizontal extent for bottom composite samples, but it is unclear that the excavation was sufficient to remediate this contamination because the extent of contamination to the north, west, south and east of these locations is undefined.</p> <p>Same problem.</p> <p>Same problem.</p> <p>Same problem.</p> <p>Bottom composite samples. No delineation to north, east, south or west. Part of contaminated layer at 3 ft. depth.</p> <p>The extent of copper in the F2 section of the Fuel Line F excavation was not delineated to the east, west or south.</p> <p>The extent of copper in the F1 section of the Fuel Line F excavation was not completely delineated. The CSAP required stepout sampling at the same depth, but this was not done. The extent of contamination to the east, southeast, west and northwest is not known.</p>

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Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLF (Continued)	<p>F3 and Coalescing Sites 23-1, 23-3</p> <p>No samples for FLF F3 were taken in the area where F3 abuts 23-1 and 23-3 (for about 40 feet). Why was FLF extended to the NE to the end of 23-3? Why were no samples taken in this area? Although the most NE part of the FLC excavation was not sampled, samples taken SW of 23-1, 23-3 3 meet ESD.</p> <p><u>EE-03</u>. EE-03 was not included in the CSR so it is not possible to determine if the investigation or excavation at the boundary of FLF and EE-03 is sufficient. DLs for PAHs/SVOCs and total Aroclors were > ESD goals: extent has not been determined.</p> <p>General comments on TPH are provided: however, TPH was not reviewed with respect to criteria.</p>	(See above)	(See above)	(See above)	<p>These bottom composite samples are part of the evidence for a contaminated layer of soil at the 3 ft depth. Given the magnitude of the exceedances and the fact that all three of the samples from the northern half of the excavation were contaminated, stepout sampling to determine the horizontal extent should have been done. The CSAP required stepout sampling at the depth of contamination in this case, but the excavation was extended and neither stepout samples nor confirmation samples were collected at or near the 2 ft depth. The extent to the east, southeast, west and northwest is not delineated.</p> <p>The CSAP required stepout sampling near these sidewall and near-sidewall locations, but this was not done.</p>
Response:	<p>F1 (segment F2 on figures): Location 460E1AU provides the Mn delineation to the southeast. Little or no original soil remains southwest of Fuel Line F in the direction of EE-03. This segment of Fuel Line F (F2) was deepened to 10 ft so the cited TPH samples have been removed.</p> <p>F2 (segment F1 on figures): TPH concentrations at location 4600SE9 do not exceed the cleanup goal; no stepout was necessary.</p> <p>F3: Extent of TPH in segment F1 is known; unlikely for contamination to extent to segment F3. Data from segment F3 indicate only low TPH detections.</p> <p>F3 and 23-1/23-3: The samples in segment F3 were composite samples. Because the sidewall samples were composite samples, the symbol locations do not represent actual sampling locations, but rather only that the entire sidewall was sampled using a composite approach. This approach was in accordance with the RD.</p> <p>EE-03: Information on EE-03 will be added to the CSR.</p> <p>No other SVOCs or PCBs were identified as risk drivers during the RD; therefore, no other SVOCs or PCBs were selected as COPCs. Cleanup goals apply to individual Aroclors, not to any combination of Aroclors.</p>	(See above)	<p>COPCs were identified during the RD for the fuel lines as a whole. The same process of dropping COPCs at clean sidewalls was used for the fuel lines as for the rest of the excavations. Stepout sidewall confirmation samples were analyzed only for the COPCs that exceeded cleanup goals.</p> <p>Mn was bounded by samples 460W1AD and 460E1AU; the average Mn concentration in this area of Fuel Line F is less than 1,400 mg/kg.</p>	Response presented under "EPA Comments" column	<p>Cu, Zn and PAHs – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples. The bottom of this portion of Fuel Line F was bounded by the samples at locations 460BC12, 460BC13, 460BC14, 460BC16, and 460BC17. Discrete bottom samples at locations 460BA51 and 460BA52 collected at 3.75 feet bgs indicated Cu concentrations that were more than 10 times lower than the soil cleanup level. Observations made during excavation and sampling of this area did not reveal any distinct, obviously contaminated horizons. The RDA requires no special modifications to the sampling strategy based upon the magnitude of an exceedance. Stepout samples in segment F1 meet the requirements of the RDA.</p> <p>PAHs in various bottom composite samples – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on concentrations detected in excavation bottom composite samples.</p> <p>Zn at 4600B15 and 4600B29, Cu at 4600B31 – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on exceedances detected in excavation bottom composite samples.</p> <p>Cu at 4600SE11 and -SW11 – Samples 4600SW11 and 4600SE11 were composite samples collected over sidewalls extending from the surface to 3 feet bgs. As composite samples, they do not represent a distinct depth horizon. Samples from locations 460W1AA, 460W1AB, and 460W1AC (north and west) and 460E1AT and 460E1AR (south and east) bound Cu contamination in this area. These stepout samples meet the requirements of the RDA.</p> <p>Cu in various bottom composite samples – The RDA does not require or discuss the addition of COPCs to previously clean sidewalls based on exceedances detected in excavation bottom composite samples.</p>

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
FLF Response (Continued):	(See above)		(See above)	(See above)	Cu at 4600SE5 and -SW5 – Samples 4600SE5 and 4600SW5 were composite samples collected over sidewalls extending from the surface to 3 feet bgs. As composite samples, they do not represent a distinct depth horizon. Samples from locations 460W1R, 460W1BS, 460W1S, and 460W1T (north and west) and 460E1AI, 460E1BS, 460E1AJ, and 460E1AK (south and east) bound Cu contamination in this area. These stepout samples meet the requirements of the RDA. Mn – Although Mn concentrations observed in samples from Fuel Line F were not specifically identified in the final Mn site proposal, the averaging protocol presented on Figure H is the same. Part of the intent of the Mn site proposal was to address the ongoing inability to delineate excavations to the 1,400-mg/kg cleanup level. The Navy will evaluate the most efficient means to characterize Mn concentrations that may extend beyond cited locations. Discussions of ambient metals concentrations, including Mn, are part of the ongoing discussions for the TMSRA for Parcel B.
IDL (industrial drain line)	Unknown. Not included in CSR. Data not reviewed.	Unknown. Not included in CSR. Data not reviewed.	Crosses parcel boundaries ³ The fact that IDL “crosses parcel boundaries” is not sufficient reason to leave it out of the CSR. About 81% of the IDL is in Parcel B extending more than 1000 linear feet. Only about 19% (about 260 linear ft) crosses into Parcel C west of IR25.		
Response:	The industrial drain line excavation will be included in a future addendum to the CSR.				
Steam Lines	Unknown. SS data only included in CSR.	Unknown. SS data only included in CSR. Aroclor-1260 (0.55), As (5.3), Cu (2,900), Hg (0.52), Zn (970) > 2002 PRGs TPH-mo (4,300) Check PRGs adj: Cd (0.79), Sb (8.4), Mn (1,300), Ni (440), Pb (120), Zn (970)	What is the status and location of the Steam Lines? SS data was included but no other information. Cu (2,900), Zn (970) > EPSCs (1,084, 113)		
Response:			SI-45 is the steam line system. SI-45 was not carried forward into the RD because it was deemed clean in the ROD. The ROD did not require remedial action for soil at SI-45 (although removal of the steam lines was required as part of the groundwater remedy). All steam line data were incorporated into the excavation planning process that included the RD and RDA. In addition, all steam line data will be included in the screening process that will be part of the TMSRA for Parcel B.		
SI-31	Unknown. Not included in CSR (except on Figure 1-2). No post-RI data reviewed.	Unknown. Not included in CSR (except on Figure 1-2). RI data results noted below. No other data reviewed. As (1.0) > 2002 PRGs DLs > 2002 PRGs: bap, bbf, daha, N-nitroso-di-N-propylamine (0.66); Hg (0.05) Check PRGS adj: cyanide (0.5 DL)	SI-31 was included in the RI and in the CSR on Figure 1-2, but no information is provided. What is the status of this site? The RI contained only one sample of sandblast grit for SI 31 (located SW of B120). One sample does not seem adequate to characterize this area (about 100 x 200). Compounds in column 3 may be under-represented in RA.		

ATTACHMENT A: RESPONSES TO DTSC AND EPA COMMENTS ON THE DRAFT HUNTERS POINT SHIPYARD PARCEL B CONSTRUCTION SUMMARY REPORT (Continued)

Site/COPCs in CSR	Meets 2000 ESD Goals and RD Requirements? ¹	Meets Draft PRGs Adjusted (inorganics) and 2002 Residential PRGs? ²	Comments ⁴	EPA Concern	EPA Comments
Fuel Lines (Continued)					
Response:			SI-31 was not carried forward into the RD because it was deemed clean in the ROD. The ROD did not require remedial action for soil at SI-31.		
SI-45	Unknown. Not included in CSR. No post-RI data reviewed.	Unknown. Not included in CSR. No post-RI data reviewed.	What is the status and location of SI-45? SI-45 was included in the RI but is not in the CSR. RI contained results for only one water sample.		
Response:			SI-45 is the steam line system. SI-45 was not carried forward into the RD because it was deemed clean in the ROD. The ROD did not require remedial action for soil at SI-45 (although removal of the steam lines was required as part of the groundwater remedy).		
B1127	Unknown. Not included in CSR (except for SS results).	Unknown. Not included in CSR (except for SS results). bap (0.22), daha (1.6) > 2002 PRGs	What is status and location of B1127? SS were provided, but no other information.		
Response:	Renamed Excavation B1227. Excavation B1227 will be included in a future addendum to the CSR along with the other excavations at IR-07.		The area originally called B1127 became Excavation B1227. Soil screening samples for B1127 apply to Excavation B1227.		
B3530			B3530 (included in Parcel B in the RI) is now located in Parcel C.		
Response:	Excavation B3530 is part of Parcel C.				
A-1			A-1 (included in Parcel B in the RI) is now located in Parcel C.		
Response:	Excavation A-1 is part of Parcel C.				
EE0208	Unknown. Not included in CSR (except for SS results).	Unknown. Not included in CSR (except for SS results). baa, bap, daha > 2002 PRGs	What is status and location of EE0208? SS were provided but no other information.		
Response:	This sample is associated with Excavation EE-02; it is not a separate excavation. The soil screening sample data table in Appendix A will be corrected to include these data with the rest of EE-02.				

Notes

- In Column 2, the extent and excavation of chemicals of potential concern (COPC) are reviewed with respect to the chemical-specific goals of the 2000 explanation of significant differences (ESD) and the sampling approaches of the Remedial Design (RD) documents that apply. COPCs identified in the CSR are indicated in Column 1.
- In Column 3, chemical analytical results from the remedial investigation (RI) report, soil screening (SS), and waste characterization (W) were compared to EPA's 2002 residential preliminary remedial goals (PRG) and (for inorganics) to the draft PRGs adj for produce uptake ("PRGs adj") provided by the Navy on February 4, 2003. The PRGs adj have not been reviewed and approved by DTSC. The PRG for Pb is the California Modified (CalMod) PRG, which was calculated using DTSC's Leadsread model: this Mod PRG for Pb does include produce uptake.
- Phrases flagged with ^{3m} are the Navy's rationales for exclusion of a site from the CSR (from CSR, Table ES-1). For such sites, site data has not been provided and DTSC has not evaluated whether the Navy's rationale is acceptable. The Navy says that these sites will be included in a future addendum to the CSR.

Al	Alluminum	DCA	Dichloroethane	n/a	Not applicable	Sq ft	Square feet
As	Arsenic	DCE	Dichloroethene	ND	Not detected	SS	Soil screening result
B	Bottom sample	DL	Detection limit (laboratory)	NE	Northeast	SVE	Soil vapor extraction
baa	Benzo(a)anthracene	DNAPL	Dense nonaqueous phase liquid	Ni	Nickel	SVOC	Semivolatile organic compound
bap	Benzo(a)pyrene	DTSC	California Department of Toxic Substances Control	NW	Northwest	SW	Southwest
Ba	Barium	E	East	PAH	Polynuclear aromatic hydrocarbon	TCE	Trichloroethene
bbf	Benzo(b)fluoranthene	EPA	U.S. Environmental Protection Agency	Pb	Lead	TI	Thallium
Be	Beryllium	EPSC	Ecologically protective soil concentration for terrestrial habitat	PCB	Polychlorinated biphenyl	TM	Technical memorandum
bgs	Below ground surface	ESD	Explanation of significant difference	PCE	Tetrachloroethene	TOG	Total oil and grease
bkf	Benzo(k)fluoranthene	Fe	Iron	PCP	Pentachlorophenol	TPH-d	Total petroleum hydrocarbons quantified as diesel
CAP	Corrective action plan	FL	Fuel line	Phthal	Bis(2-ethylhexyl)phthalate	TPH-g	Total petroleum hydrocarbons quantified as gasoline
Cd	Cadmium	FO	Field observation	PRG adj	PRG-adjusted for produce uptake	TPH-mo	Total petroleum hydrocarbons quantified as motor oil
chry	Chrysene	FS	Feasibility study	PRG	Preliminary remediation goal for residential scenario	TPH-unk	Unknown total petroleum hydrocarbons
Co	Cobalt	HERD	DTSC's Human and Ecological Risk Division	RA	Risk assessment	TRPH	Total recoverable petroleum hydrocarbons
COC	Chain of custody	Hg	Mercury	RATM	Risk assessment technical memorandum for Parcel B	V	Vanadium
COPC	Chemical of potential concern	HPAL	Hunters Point ambient level	RD	Remedial design	VOC	Volatile organic compound
CrVI	Hexavalent chromium	icdp	Indeno(1,2,3-cd)pyrene	RDA	Remedial design amendment	W	Waste characterization result
CSAP	Confirmation sampling and analysis plan	IDL	Industrial drain line	RI	Remedial investigation	W	West
CSR	Construction summary report	IR	Installation Restoration	ROD	Record of decision	Zn	Zinc
Cu	Copper	mg/kg	Milligrams per kilogram	S	South		
Cy	Cyanide	Mn	Manganese	Sb	Antimony		
daha	Dibenz(a,h)anthracene	N	North	Se	Selenium		

**HUNTERS POINT SHIPYARD
PARCEL B CONSTRUCTION SUMMARY REPORT
MEETING MINUTES**

AUGUST 19, 2003

These minutes summarize the meeting regarding the Hunters Point Shipyard (HPS) Parcel B Construction Summary Report (CSR) held on August 19, 2003, at Tetra Tech EM Inc.'s (Tetra Tech) office in San Francisco, California. Meeting attendees included the Base Realignment and Closure (BRAC) Cleanup Team (BCT), which is comprised of representatives from the U.S. Department of the Navy (Navy), the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (RWQCB). The City of San Francisco (City), its team of developers, and Navy consultants also attended the meeting. These minutes discuss key points, decisions, and action items agreed to at the meeting. A list of attendees is included as Attachment A. A complete list of action items is included as Attachment B.

1.0 AGENDA

- Meeting Objective and Overview
- Background
- Discussion of Major Issues in the Briefing Packet
- Other Technical Issues
- Review Action Items

2.0 MEETING OBJECTIVE AND OVERVIEW

Before the meeting, the Navy distributed a briefing packet highlighting major issues identified in regulatory agency comments on the CSR. The Navy clarified that other comments could be addressed during the open forum session scheduled for the afternoon, or outside of this meeting. Mr. Chein Kao (DTSC) identified other issues that DTSC felt were important but were not included in the briefing packet; DTSC will discuss the other issues with the Navy to ensure that all concerns are addressed. Mr. Ryan Ahlersmeyer (Navy) stated that most risk-based decisions would be deferred to future discussions about the risk management review (RMR) process. The BCT meeting scheduled for August 26, 2003, will include a discussion of the RMR process. Mr. Kao emphasized that a complete data set was necessary to address risk and that, even if sampling fully complied with the requirements of the remedial design (RD) and remedial design amendment (RDA), the Navy should address other risk-related issues.

3.0 BACKGROUND

The Navy provided a brief history of Parcel B investigations and decision documents in the briefing packet. Mr. Kao (DTSC) stated his opinion that the remedial action was paused in 1999 so that the Navy could reevaluate their confirmation sampling strategy, after soil contamination was determined to be more widespread than anticipated. During their reevaluation, the Navy updated cleanup goals, as documented in the explanation of significant differences from May 2000 (ESD 2000). The BCT conducted meetings to discuss a revised field sampling plan (FSP) with different scenarios and developed an RDA sampling strategy. DTSC approved the RDA approach, but stated that the final data package would need to be reviewed.

The Navy held delineation meetings to provide the BCT with examples of how the RDA sampling rules applied to various scenarios. However, until the CSR was issued, DTSC claimed that the regulatory agencies did not review complete data packages. Ms. Eileen Hughes (DTSC) stated that several issues of concern arose during the delineation meetings; for example, DTSC was unaware that samples were not being analyzed for the full suite of polynuclear aromatic hydrocarbons (PAH). The Navy distributed several excavation reports during the delineation meetings, but subsequently ceased these meetings because of the level of effort required to produce the reports. DTSC claimed that communication between the Navy and the BCT about the excavations stopped until the CSR was issued.

Some of the BCT's concerns that were identified to fulfill the City's requirements, such as including analytical results for samples collected at 10 feet below ground surface (bgs), were addressed. However, DTSC assumed that the edges and bottoms of the excavations would be fully characterized and that analyses would be conducted for all chemicals of potential concern (COPC) before backfilling took place. Ms. Karla Brasaemle (TechLaw) conducted a field audit and noted that (1) different colored layers were present in excavations located in Installation Restoration (IR) Sites 07 and 18, (2) the layers ranged from 4 to 6.5 inches thick, and (3) the coloration indicated the layers were potentially contaminated. This observation was reflected in EPA's comments on the CSR about the Navy's deviation from sampling at the same depths during stepouts. Ms. Hughes previously requested that field judgment be incorporated into the sampling strategy; she claimed that the CSR reflected very few field observations.

Mr. Ahlersmeyer (Navy) clarified that IR-07/18 was a separate scenario from the rest of the parcel, and that the conceptual model for these sites would be modified and addressed in the upcoming RMR report. The Navy sent the entire Parcel B database to the regulatory agencies because EPA was planning to conduct a residual risk assessment. The Navy is now conducting their own residual risk assessment, so EPA will not proceed with their efforts. Mr. Kao (DTSC) stated that the BCT needs to agree on the boundary of IR-07/18 and that Navy and agency lawyers should discuss issues related to the property line. Ms. Brasaemle (TechLaw) stated that the area west of IR-07/18 comprises only a thin strip of soil because of the proximity of an easement and a street. Mr. Kao asked whether the 1935 shoreline boundary and the geophysical study would be used to define the southern boundary of IR-07/18. The Navy will present figures and data for IR-07/18 in the RMR report; however, they will not be in the same format as in the CSR. Spider diagrams will not be made, and the data will be evaluated based on redevelopment

blocks. Two blocks overlie the 1935 shoreline, and the Navy does not anticipate allowing unrestricted use in this area. The Navy will most likely propose a different remedy for those two redevelopment blocks.

Mr. Kao (DTSC) clarified that he does not want the summary of Parcel B events as written in the briefing packet to be official documentation, since it is missing some minor details.

4.0 DISCUSSION OF MAJOR ISSUES IN THE BRIEFING PACKET

The BCT discussed issues identified in the briefing packet.

Issue 1. A majority of comments are directed toward lack of compliance with the sampling plans contained in the RD and RDA.

Issue 1a. Stepout sample depth was not the same as the depth of a sample exceeding cleanup goals. In EPA's comments, these comments usually contain the sentence "while it appears that the sampling strategy followed the protocols outlined in the RDA, the horizontal extent of contamination was not delineated."

Using excavation B3324 as an example, the Navy demonstrated that RDA sampling rules were met. The RDA was designed so that the first stepout sample would be collected at a random depth. During field implementation, it was not always possible to collect stepout samples at the same depths as previous stepout samples because of several factors, including poor recovery and geological conditions. The Navy overexcavated many areas because a surgical excavation procedure was not planned. This overexcavation resulted in the removal of most samples in the final excavation stepout locations. Ms. Brasaemle (TechLaw) asked how the removed sidewall samples would be represented in a risk assessment, since it is not accurate to assume that there is no risk at the edges of the excavations.

Ms. Hughes (DTSC) reemphasized that DTSC has cautioned that each excavation should be examined individually and incorporate field judgment. DTSC did not have any concerns about excavation B3324, but did have issues with the horizontal delineation of Fuel Line F. Mr. Tim Mower (Tetra Tech) stated that larger excavations with locations where COPC concentrations exceeded criteria at different depths would likely have issues related to stepout depths. Only two sample depths were required per stepout location; however, there were instances where exceedances were detected at more than two sample depths. EPA and DTSC agreed that a difference in stepout depths of 1 foot could be overlooked, but did not approve of larger disparities. Mr. Kao (DTSC) provided the following example of where he saw problems: if an exceedance was detected at 1 foot bgs and the excavation was expanded vertically, characterization was needed between 1 foot bgs and the bottom of the excavation. Similarly, Ms. Brasaemle pointed out that, at Fuel Line F, soil between 3 feet bgs and the bottom of the excavation was not characterized. In general, DTSC stated that it did not have major concerns related to Issue 1a, except where surface contamination was present and samples were collected at deeper depths.

Issue 1b. Additional delineation of sidewalls should be completed based on bottom composite samples exceeding cleanup goals (especially for fuel line excavations).

The Navy used exploratory excavation (EE) 05 as an example of an excavation where the horizontal extent of lead was fully delineated, but bottom composite samples collected at 10 feet bgs outside of the delineation boundary had COPC concentrations above ESD 2000 cleanup goals. The RDA strategy did not specify that sidewalls should be recharacterized if concentrations of COPCs in these bottom composite samples were above ESD 2000 cleanup goals. Bottom composites were collected at 10 feet bgs solely for the City's information purposes. Once lead was bounded at EE-05, the Navy did not continue stepping out for lead, but did continue stepping out for other COPCs.

DTSC and TechLaw recalled discussions and a lack of resolution related to this issue. Mr. Kao (DTSC) reiterated that DTSC reserved the right to review all sampling at the end of the delineation process. Mr. Ahlersmeyer (Navy) referred to previous minutes from a managerial meeting that indicated a lack of agreement on whether COPCs could be dropped from the stepout process. However, Ms. Hughes claimed that DTSC had not approved the meeting minutes. Ms. Amy Brownell (City) pointed out that EPA and DTSC both agree that the Navy conducted sampling in accordance with the RDA strategy, but that they wanted to review data after excavations were completed. Ms. Hughes stated that some misinterpretation of the sampling rules might have occurred. From the onset of the RD process, DTSC emphasized that remedial investigation (RI) data should be screened against the ESD 2000 cleanup goals; for example, antimony and cadmium should have been identified as COPCs at EE-05. Mr. Mower (Tetra Tech) stated that COPCs were identified in the RDA. DTSC stated that they did not have time to perform a full review of the RDA.

Issue 2. Waste profile and soil screening samples: terminology, use to add new COPCs, and locations.

The Navy clarified that waste profile and soil screening samples were used to identify additional COPCs at the excavations. During 1998 to 1999, waste profile samples were collected in situ to estimate the extent of contamination, which had exceeded the Navy's expectations. Mr. Kao (DTSC) requested that soil screening data be added to the CSR figures to show sampling and field decisions associated with each excavation. Mr. Mower (Tetra Tech) stated that it would require significant additional effort to incorporate this information into the figures, especially for larger excavations, and that all soil screening decisions are confined within confirmation samples. The delineation reports contained this level of detail, but that effort was abandoned because it was very time-intensive. Ms. Hughes (DTSC) requested that the Navy rescreen all soil data against the ESD 2000 cleanup goals. Mr. Mower clarified that soil screening samples and confirmation samples contained the same COPCs.

Screening sample and waste profile data are listed in Appendix A of the CSR. Qualifiers were inadvertently omitted from some tables in the draft CSR, thereby resolving many regulatory agency comments about the screening sample and waste profile data. Since these samples were collected for waste disposal purposes, they were not analyzed using low detection limits. These

data were not validated and are therefore not useful for the risk assessment. Furthermore, sampling locations were not surveyed. The BCT agreed that screening sample and waste profile data would not be added to the revised CSR figures.

Issue 3. Technical issues related to PAH detection limits, use of significant figures in comparing sample concentrations to cleanup goals, and the sum of total petroleum hydrocarbons (TPH) as gasoline, diesel, and motor oil.

As part of discussions with the BCT in November 2000, the Navy agreed to include all 17 PAHs, whenever PAHs were considered to be COPCs. The Navy did not resample excavations that were completed, but agreed to sample for all 17 PAHs in subsequent excavations. Ms. Hughes (DTSC) claimed that by November 2000, most of the excavations were completed. Mr. Mower (Tetra Tech) clarified that in many cases, detection limits were only slightly above cleanup goals. If nondetected samples had detection limits between 0.3 and 3 milligrams per kilogram (mg/kg), the Navy did not feel that resampling was necessary. Ms. Hughes stated that the Navy could not ignore nondetects because the extent of contamination beyond those sampling locations remains unknown.

Samples collected along the fuel lines in 1998 and 1999 were analyzed for TPH as extractables (TPH-e) and for TPH as purgeables (TPH-p). TPH-e and TPH-p samples that were collected in the same location were given unique names. During the screening process, samples names were used to sum up TPH concentrations, and results of the screening process were used to prepare the CSR. The collocated samples with unique names were inadvertently overlooked in the draft CSR.

RWQCB commented on areas where the extent of TPH was not clearly defined and other locations where TPH exceeded the screening criteria. The Navy clarified that the TPH screening criteria changed over time; sometimes the previous criterion of 1,000 mg/kg for total TPH was exceeded but not the current criterion of 3,500 mg/kg. Ms. Julie Menack (RWQCB) stated that the soil cleanup level of 3,500 mg/kg is designed to protect groundwater but does not address nuisance. The proposed nuisance criteria are 1,000 mg/kg for TPH as diesel, 100 mg/kg for TPH as gasoline, and 1,000 mg/kg for TPH as motor oil. The BCT agreed to postpone this discussion, since TPH areas will be addressed under the follow-on Parcel B TPH corrective action plan (CAP). The Navy will revise the CSR to clarify that TPH screening criteria have changed and that areas not covered under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) cleanup will be addressed in the Parcel B CAP. Commingled TPH and CERCLA waste currently meet the CERCLA goals. Mr. Kao (DTSC) suggested that the Navy communicate with RWQCB to identify the extent of TPH sampling.

Per Ms. Brasaemle's (TechLaw) question, the Navy clarified that excavation B2030 was largely excavated based on visual observations. Analytical contamination did not drive the expansion of the excavation.

Issue 4. EE cleanups that predate the record of decision (ROD). Some comments were concerned with the omission of EE-01 and EE-03 from the CSR.

The Navy did not recharacterize EEs in accordance with the RDA sampling rules. For instance, the south sidewall of EE-05 was not recharacterized because data met the ESD 2000 cleanup goals even though samples were not collected 17 feet apart. Similarly, EE-01 and EE-03 were determined to be clean in 1996 and were not included in the RD. The regulatory agencies did not provide previous comments on the omission of EE-01 and EE-03 from the RD. Mr. Kao (DTSC) stated that the EEs were conducted as interim remedies because the ROD had not been signed. The rules governing the EEs related to size and cost; however, those rules did not address cleanup goals and confirmation samples. According to Mr. Kao, DTSC requested that the Navy reevaluate the EEs in the RD. The Navy stated that it would be easier to add EE-01 and EE-03 to the revised CSR.

5.0 OTHER TECHNICAL ISSUES

Mr. Kao (DTSC) requested further clarification on the RMR process. The Navy stated that the RMR process would be used to develop new remedial alternatives in preparation of the ROD amendment. Mr. Kao stated that Navy report titles were often confusing and suggested calling the RMR report the "Technical Memorandum in Support of the ROD Amendment." This revision will prevent confusion with the previous RMR process. The Navy supported the renaming of the report but will verify this modification with Mr. Keith Forman (Navy). The Navy also clarified that, while the report title would change, the RMR process would remain as planned. **Follow-on:** Mr. Forman verified the proposed title modification.

The Navy will provide line-by-line responses to agency comments on the CSR and will issue replacement pages for editorial changes. However, the Navy will not collect additional samples or expand the excavations. If excavation is determined to be the preferred alternative as a result of the RMR process, the Navy will explore that option. Mr. Kao (DTSC) suggested conducting another meeting to review the draft responses to comments before they are finalized. Sites that were not included in the CSR will be discussed in the technical memorandum (TM). Ms. Brasaemle (TechLaw) suggested that if the regulatory agencies did not provide comments on a particular excavation, the Navy could assume BCT agreement on that site. Ms. Hughes (DTSC) expressed her concern that abiding by the CSR was a moot point in light of the upcoming change in remedy. Mr. Kao suggested that the Navy focus on comments about the risk assessment and move forward on the TM.

The BCT meeting scheduled for August 26, 2003, will address regulatory agency concerns with the RMR and identify the critical path toward a ROD amendment. The Navy stated there is no intent to conduct further sampling for the risk assessment. Mr. Kao (DTSC) stated that the Navy could not assume an area is clean if there is an exceedance at one sampling location but no data beyond that location. He suggested that the Navy make conservative assumptions, using Hunters Point ambient levels (HPAL) or the same concentrations as the previous stepout sample. Ms. Brownell (City) emphasized that data were being assessed on a redevelopment block basis, so the remedy would likely be the same, regardless of using concentrations from previous stepout samples for comparison purposes.

The Navy stated that open space risk assessment criteria, assumptions, and methodology would need to be addressed before conducting a risk assessment meeting. These issues will be addressed in a letter or memorandum and submitted to the BCT for review. The Navy believes that one alternative may include implementing basewide land-use controls to resolve issues with arsenic, iron, and manganese concentrations that are prevalent in HPS bedrock.

DTSC and RWQCB suggested that the Navy resolve the data set before conducting the risk assessment. Using excavation B2918 as an example, Ms. Brasaemle (Tech Law) pointed out that the RI sample was not bound. The Navy can expect to encounter regulatory agency concerns with the data set where horizontal bounding is in dispute. Ms. Brownell (City) suggested that the Navy compare the outcomes of running a risk assessment on one exposure grid using both Navy and DTSC methodology. DTSC stated it still wanted to see results on a grid level, not just on a redevelopment block basis. The Navy does not foresee issues where potential metals contamination exists because HPALs can be assumed; however, areas with potential PAH contamination will be more difficult to address.

The Navy and regulatory agencies agreed to postpone discussion on risk related to backfill material. DTSC did not want to assume zero risk, but agreed to look at the end result of the risk assessment, since this issue may become moot.

DTSC stated that samples were often not collected under building footprints; therefore, the spatial distribution of nearby samples was inadequate. The Navy clarified that sampling was usually pursued under building footprints if a spill or release was recognized. For instance, many samples were collected inside Building 123.

Mr. Kao reiterated his major points of concern, as described below:

1. Per the existing ROD, Parcel B is only designated for residential reuse. Other reuse scenarios will have to be incorporated into the ROD amendment.
2. Sites not discussed in the CSR will result in a conceptual model or remedy change, and these sites will be addressed elsewhere. The EEs and industrial drain line should be evaluated in the revised CSR.
3. Building footprints that were not sampled should have institutional controls.
4. At a minimum, HPALs should be assumed in areas without samples.
5. The discussion of risk related to backfill material was postponed.
6. Not all COPCs have been identified. If no other data are present, the Navy should use RI data and conservative assumptions in the risk assessment.
7. In areas where stepout locations were not completed, the Navy should use perimeter data and conservative assumptions in the risk assessment. This applies largely to manganese and shoreline excavations.

8. The risk assessment should consider nondetect concentrations as having a concentration of one half of the detection limit. However, EPA guidance states that the chemical has to be detected at least once in the data set; otherwise, a concentration of zero is assumed. The data set may need to be reviewed on an IR site level, instead of an exposure grid level. This issue will be further discussed.
9. DTSC was concerned about four manganese excavations; however, the manganese discussion was postponed. Sweeping land-use controls may be needed to achieve the protectiveness of the current cleanup goals.
10. For areas that were overexcavated, perimeter samples should be used in the risk assessment.
11. If sidewall samples were not collected, bottom samples should be used in the risk assessment.

The Navy will create a table identifying areas where there were concerns about horizontal delineation. Many of these areas were near the fuel lines. Ms. Hughes (DTSC) requested a formal presentation of the data for sites not discussed in the CSR. The Navy cannot prepare detailed spider maps for these excavations, but is willing to present sampling location and data tables. The BCT suggested organizing the data tables by analytes and possibly simulating hit boxes in the data tables. Ms. Hughes requested that the Navy provide an example of the revised format for the BCT to review.

The action items list was reviewed and is included as Attachment B.

ATTACHMENT A

HUNTERS POINT SHIPYARD BASE REALIGNMENT AND CLOSURE CLEANUP TEAM MEETING ATTENDANCE SHEET

Organization	Name	Telephone Number	E-Mail Address
Department of the Navy (Navy)	Patrick Brooks	619.632.0930	George.brooks@navy.mil
	Ryan Ahlersmeyer	619.532.0960	Ryan.ahlersmeyer@navy.mil
U.S. Environmental Protection Agency (EPA)	Michael Work	415.972.3024	Work.Michael@epa.gov
Department of Toxic Substances Control	Chein Kao	510.540.3822	ckao@dtsc.ca.gov
	Eileen Hughes	510.540.3760	ehughes@dtsc.ca.gov
Regional Water Quality Control Board	Julie Menack	510.622.2401	JSM@rb2.swrcb.ca.gov
City of San Francisco	Amy Brownell	415.252.3967	amy.brownell@sfdph.org
Tetra Tech EM Inc. <i>Navy Contractor</i>	Doug Bielskis	415.222.8242	Doug.Bielskis@ttemi.com
	Doug Davenport	415.222.8217	Doug.Davenport@ttemi.com
	Tim Mower	303.312.8874	Tim.Mower@ttemi.com
	Debbie Cheng	415.222.8215	Deborah.Cheng@ttemi.com
	Julia Vetromile	415.222.8225	Julia.Vetromile@ttemi.com
Tech Law, Inc. <i>EPA Contractor</i>	Karla Brasaemle	415.281.8730	kbrasaemle@techlawinc.com
Arc Ecology	Lea Loizos	415.495.1786	lealoizos@mindspring.com

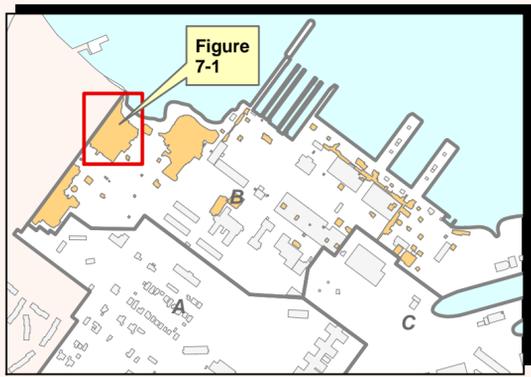
**ATTACHMENT B
HUNTERS POINT SHIPYARD BASE REALIGNMENT AND CLOSURE CLEANUP TEAM ACTION ITEMS**

Action	Date Identified	Responsible Party	Date Due	Date Accomplished	Notes
Revise the CSR to more clearly state that TPH screening criteria changed over time and that areas beyond the extent of CERCLA cleanup will be addressed in the Parcel B CAP.	19-Aug-03	Ryan Ahlersmeyer (Navy), Tetra Tech	TBD		
Change the title of the upcoming RMR report to "Technical Memorandum in Support of the Proposed ROD Amendment."	19-Aug-03	Ryan Ahlersmeyer (Navy), Tetra Tech	TBD		Title change approved by Keith Forman
Conduct a meeting to discuss CSR replacement pages; agencies would like to review the draft RTCs before this meeting is held.	19-Aug-03	Ryan Ahlersmeyer (Navy), Michael Work (EPA), Chein Kao (DTSC), Julie Menack (RWQCB)	TBD		
Issue a letter/memorandum to address open space risk assessment criteria, assumptions, and methodology.	19-Aug-03	Ryan Ahlersmeyer (Navy), Tetra Tech	TBD		
Compile a table listing areas where there are horizontal or vertical delineation issues.	19-Aug-03	Ryan Ahlersmeyer (Navy), Tetra Tech	TBD		
Prepare graphics/tables for excavations that were not covered in the CSR. Provide the agencies with an example of the revised format for their review.	19-Aug-03	Ryan Ahlersmeyer (Navy), Tetra Tech	TBD		
Screen all Parcel B data against the ESD 2000 cleanup goals to determine a revised COPC list.	19-Aug-03	Ryan Ahlersmeyer (Navy), Tetra Tech	TBD		

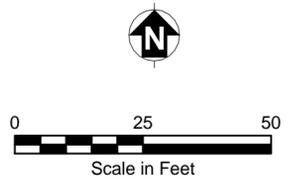
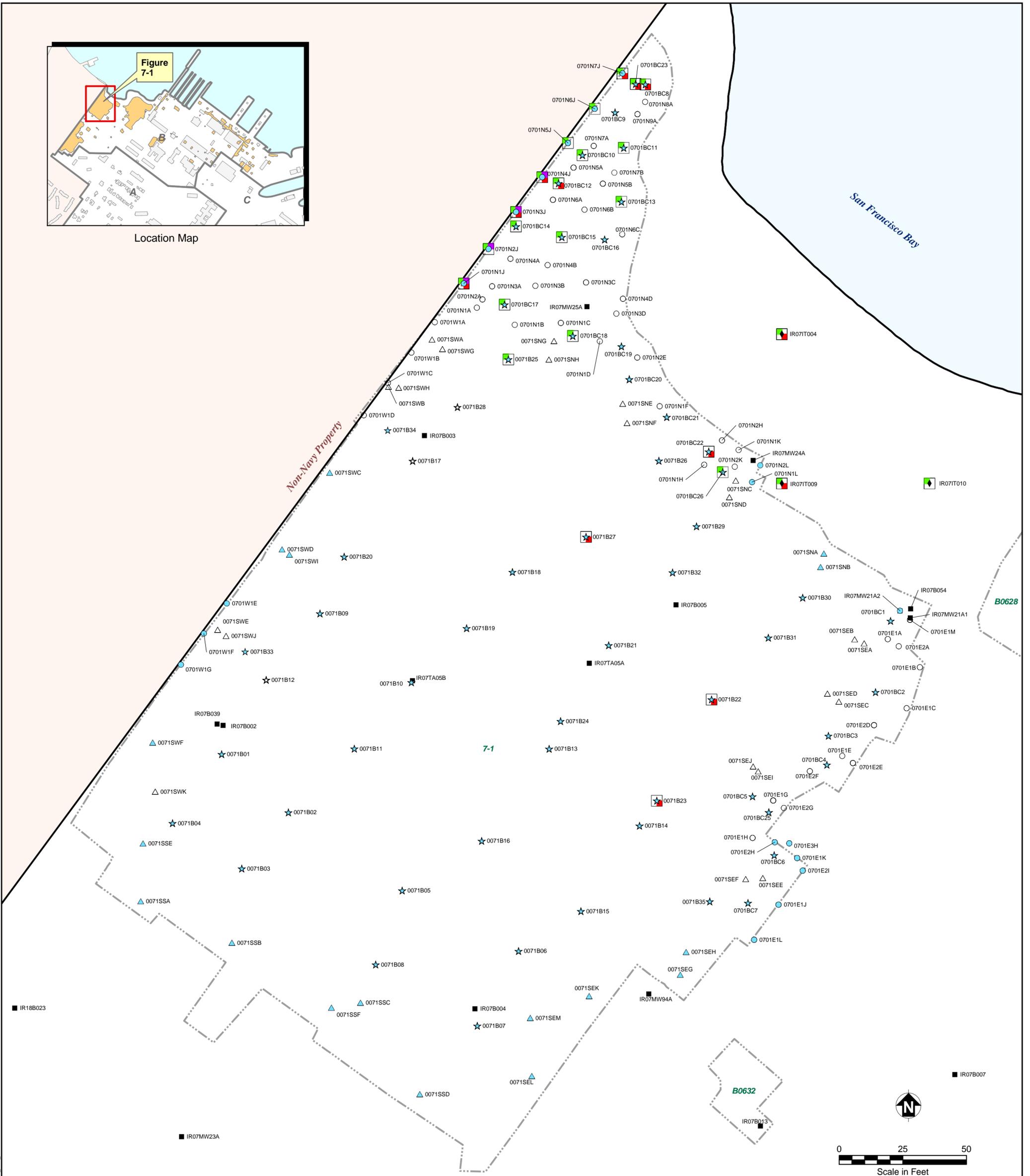
HUNTERS POINT SHIPYARD BASE REALIGNMENT AND CLOSURE CLEANUP TEAM ACTION ITEMS

Notes:

CAP	Corrective Action Plan	Navy	Department of the Navy
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ROD	Record-of-decision
City	City of San Francisco	RTC	Response to comment
CSR	Construction summary report	RWQCB	Regional Water Quality Control Board
DTSC	Department of Toxic Substances Control	TBD	To be determined
EPA	Environmental Protection Agency	Tetra Tech	Tetra Tech EM Inc.
ESD	Explanation of Significant Differences	TPH	Total petroleum hydrocarbons



Location Map



Legend

- | | |
|---|---|
| ■ Result above Metals Criteria | ■ RI Sample Location |
| ■ Result above Total TPH Criterion | ◆ Shoreline Investigation Sample Location |
| ■ Result above PAH Criteria | ⬡ Excavation Boundary |
| ● Discrete Excavation Sample (Only an outline if removed) | ⬢ Parcel Boundary |
| ★ 5-Point Bottom Composite Excavation Sample (Only an outline if removed) | ⬤ Non-Navy Property |
| ▲ 3-Point Sidewall Composite Excavation Sample (Only an outline if removed) | PAH - Polynuclear Aromatic Hydrocarbon |
| | RI - Remedial Investigation |
| | TPH - Total Petroleum Hydrocarbons |

Notes:

1. Colored quadrant boxes surround sample locations that exceed cleanup goals. Only samples that remain in place (Light Blue) were compared to cleanup goals. In place samples that do not exceed cleanup goals have no quadrant boxes.
2. Refer to data table for individual chemical concentrations for all sample locations.



Hunters Point Shipyard, San Francisco, California
U.S. Navy Southwest Division, NAVFAC, San Diego

**FIGURE 7-1
SAMPLE LOCATIONS THAT EXCEED
ESD 2000 OR TOTAL TPH GOALS**

Parcel B Construction Summary Report Addendum

TABLE 7-1

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B01	0071B02	0071B03	0071B04	0071B05
Sample Number:				9844B064	9844B065	9844B066	9844B067	9844B068
Sample Depth (feet bgs):				8.5	8.5	7	8.5	7
Sample Date:				10/28/98	10/28/98	10/28/98	10/28/98	10/28/98
TMETAL (mg/kg)	ARSENIC	11.1	11	3	1.2 U	1.5 J	4.2	1.2 U
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.07 U1	0.02 U	0.02 U	0.03 U1	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	26.4 J3	18.3 J3	21.2 J3	31.4 J3	22.4 J3
TMETAL (mg/kg)	LEAD	221	220	157	22.7	44.4	58.3	29.4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	142	60.4	76	146	72.6
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.021 J03	0.011 J	0.013 J	0.055 J0	0.21 U
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.042 J03	0.013 J	0.015 J	0.039 J0	0.21 U
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.036 J03	0.012 J3	0.027 J3	0.048 J03	0.21 UJ3
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.032 J03	0.009 J	0.19 U	0.18 UJ0	0.21 U
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.009 U	0.01 U	0.01 U	0.009 U	0.011 U

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B06	0071B07	0071B08	0071B09	0071B10
Sample Number:				9844B069	9844B070	9844B071	9844B072	9844B073
Sample Depth (feet bgs):				8.5	8.5	7	8.5	8.5
Sample Date:				10/28/98	10/28/98	10/28/98	10/29/98	10/29/98
TMETAL (mg/kg)	ARSENIC	11.1	11	1.2 U	1.2 U	1.7	3.5	1.4 J
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.021 U1	0.02 U	0.07 U1	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	95.2 J3	58.3 J3	25.2 J3	36.5 J4	16.9 J4
TMETAL (mg/kg)	LEAD	221	220	37.4	95.7	43.8	169 J4	10.7 J4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	75.3	87.7	75.7	245	58.7
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.016 J	0.045 J	0.009 J	0.03 J	0.2 U
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.023 J	0.037 J	0.009 J	0.043 J0	0.2 U
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.025 J3	0.047 J3	0.015 J3	0.078 J07	0.2 U
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.2 U	0.19 U	0.19 U	0.08 J0	0.2 U
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.01 U	0.01 U	0.009 U	0.01 U

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B11	0071B12	0071B13	0071B14	0071B15
Sample Number:				9844B074	9844B075	9844B076	9844B077	9844B078
Sample Depth (feet bgs):				8.5	7	8.5	10	8.5
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
TMETAL (mg/kg)	ARSENIC	11.1	11	2 J	3.5	3.3	3.8	4.3
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.04 U1	0.13 U1	0.02 U	0.02 U	0.04 U1
TMETAL (mg/kg)	COPPER	157.3	160	18.7 J4	29.4 J4	20.9 J4	60 J4	40.8 J4
TMETAL (mg/kg)	LEAD	221	220	38.7 J4	8380 J4	63.1 J4	102 J4	49.6 J4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	55.7	135	62.9	96.8	67.5
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.01 J	0.008 J	0.019 J	0.13 J	0.059 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.01 J	0.009 J	0.022 J	0.18 J0	0.067 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.01 J	0.014 JY	0.056 JY	0.27 J07	0.074 J
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.009 J	0.18 U	0.18 U	0.24 J0	0.066 J
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.009 U	0.009 U	0.009 U	0.009 U

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B16	0071B17	0071B18	0071B19	0071B20
Sample Number:				9844B079	9844B080	9844B081	9844B082	9844B083
Sample Depth (feet bgs):				8.5	8.5	8.5	8.5	8.5
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
TMETAL (mg/kg)	ARSENIC	11.1	11	2.3	3.1	3.4	1.9	3
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	25.2 J4	37.2 J4	25.6 J4	24.3 J4	25.7 J4
TMETAL (mg/kg)	LEAD	221	220	26.7 J4	239 J4	20.3 J4	15.7 J4	132 J4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	71.1	179	64.7	61.8	106
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.2 U	0.022 J	0.02 J	0.027 J	0.015 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.009 J	0.029 J	0.018 J	0.031 J	0.018 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.016 JY	0.059 J	0.023 J	0.055 J	0.029 J07
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.2 U	0.18 U	0.016 J	0.037 J	0.03 J0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.009 U	0.01 U	0.01 U	0.01 U

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B21	0071B22	0071B23	0071B24	0071B25
Sample Number:				9844B084	9844B085	9844B086	9844B087	9844B088
Sample Depth (feet bgs):				8.5	10	10	8.5	10
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
TMETAL (mg/kg)	ARSENIC	11.1	11	4.7	3.6	4.9	5.2	5.4
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.13 U1	0.02 U	0.12 U1	0.19 U1	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	20.1 J4	23.1 J4	28.5 J4	22.8 J4	145 J4
TMETAL (mg/kg)	LEAD	221	220	56.1 J4	118 J4	116 J4	49.1 J4	2360 J4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	84.9	94.9	96.7	76.4	630
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.082 J	0.31	0.26	0.041 J	0.096 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.14 J0	0.38	0.57	0.044 J	0.095 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.2 J07	0.57 YJ7	0.55 J7	0.043 J7	0.22 YJ0
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.15 J0	0.18 U	0.29	0.039 J	0.18 UJ0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.009 U	0.009 U	0.009 U	0.009 U	0.048

TABLE 7-1 (Continued)

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B26	0071B27	0071B28	0071B29	0071B30
Sample Number:				9844B089	9844B090	9844B091	9844B092	9844B093
Sample Depth (feet bgs):				10	10	8.5	10	10
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
TMETAL (mg/kg)	ARSENIC	11.1	11	4	4.1	5	6.6	3.5
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.06 U1	0.02 U	0.2 U1	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	39.6 J4	50 J4	36.1 J4	38.2 J4	60.3 J4
TMETAL (mg/kg)	LEAD	221	220	161 J4	76.5 J4	245 J4	149 J4	203 J4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	136	139	354	102	197
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.091 J	0.51	0.067 J	0.22	0.084 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.12 J	0.5	0.056 J	0.33	0.1 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.15 J	0.48	0.093 J	0.22	0.062 J
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.11 J	0.41	0.062 J	0.28	0.091 J
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U				

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B31	0071B32	0071B33	0071B34	0071B35
Sample Number:				9844B094	9844B095	9847B172	9847B173	9849B233
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				10/29/98	10/29/98	11/17/98	11/17/98	12/01/98
TMETAL (mg/kg)	ARSENIC	11.1	11	4.6	4.9	NA	NA	2.4
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.17 U1	NA	NA	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	39.5 J4	34.5 J4	NA	NA	69.8 J2
TMETAL (mg/kg)	LEAD	221	220	151 J4	108 J4	139	78.3	21.8
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	152	87.7	NA	NA	69.3 J2
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.06 J	0.04 J	NA	NA	0.055 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.073 J	0.054 J	NA	NA	0.048 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.053 J	0.046 J	NA	NA	0.067 YJ0
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.055 J	0.051 J	NA	NA	0.21 UJ0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.009 U	NA	NA	0.01 U

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SEA	0071SEB	0071SEC	0071SED	0071SEE
Sample Number:				9849B225	9849B226	9849B227	9849B228	9849B229
Sample Depth (feet bgs):				4	8.5	4	8.5	4
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
TMETAL (mg/kg)	ARSENIC	11.1	11	0.93 U	3.6	0.7 U	1.7 J	1.1 U
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.03 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	284 J2	36.4 J2	64 J2	48.6 J2	27.3 J2
TMETAL (mg/kg)	LEAD	221	220	46.1	126	37.4	153	42
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	255 J2	100 J2	78.8 J2	136 J2	79.6 J2
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.3	0.077 J	0.028 J	1	0.033 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.29 J0	0.088 J	0.03 J0	1.2 J0	0.039 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.34 J0	0.063 J	0.039 J0	1.3 J0	0.046 J0
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.38 J0	0.1 J	0.034 J0	1.2 J0	0.046 J0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.01 U	0.01 U	0.011 U	0.01 U

TABLE 7-1 (Continued)

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SEF	0071SEG	0071SEH	0071SEI	0071SEJ
Sample Number:				9849B230	9849B231	9849B232	9849B234	9849B235
Sample Depth (feet bgs):				8.5	4	8.5	4	8.5
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
TMETAL (mg/kg)	ARSENIC	11.1	11	5.3	1.2 J	0.89 U	0.98 U	3.4
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	59.9 J2	46.2 J2	73.8 J2	24.9 J2	43.2 J2
TMETAL (mg/kg)	LEAD	221	220	333	28.4	91.4	9.8	46.5
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	129 J2	184 J2	86.5 J2	50.2 J2	90.6 J2
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	1.5 J03	0.19 J03	0.23 J03	0.03 J	0.27
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	1.4 J03	0.13 J03	0.18 J03	0.038 J0	0.33 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	1 J03	0.13 YJ03	0.15 J03	0.037 J0	0.32 J0
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	1.2 J03	0.21 UJ0	0.16 J03	0.056 J0	0.4 J0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SEK	0071SEL	0071SEM	0071SNA	0071SNB
Sample Number:				9849B236	9849B237	9849B238	9849B217	9849B218
Sample Depth (feet bgs):				4	4	8.5	4	8.5
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
TMETAL (mg/kg)	ARSENIC	11.1	11	1.4 J	2.5	0.91 U	1.1 U	1.4 J
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	52.4 J2	31.1 J2	33.1 J2	40.4 J2	37.6 J2
TMETAL (mg/kg)	LEAD	221	220	23.8	24.8	21	66.9	107
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	59.1 J2	63.6 J2	56.3 J2	98.5 J2	94.9 J2
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.043 J	0.038 J	0.062 J3	0.2 U	0.074 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.035 J0	0.037 J0	0.076 J03	0.01 J	0.12 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.045 YJ0	0.046 J0	0.17 YJ03	0.013 J	0.16 J0
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.2 UJ0	0.057 J0	0.2 UJ0	0.01 J	0.18 J0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.019	0.01 U	0.01 U	0.01 U

TABLE 7-1 (Continued)

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SNC	0071SND	0071SNE	0071SNF	0071SNG
Sample Number:				9849B219	9849B220	9849B221	9849B222	9849B223
Sample Depth (feet bgs):				4	8.5	4	8.5	4
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
TMETAL (mg/kg)	ARSENIC	11.1	11	0.95 U	2	1.6 J	1.2 J	0.77 U
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	60.3 J2	79.1 J2	87.7 J2	300 J2	70.2 J2
TMETAL (mg/kg)	LEAD	221	220	56.2	39.4	51.9	107	16.4
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	90.6 J2	123 J2	130 J2	371 J2	75.6 J2
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.017 J	0.019 J	0.025 J3	0.09 J	0.023 J3
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.023 J0	0.026 J0	0.042 J03	0.15 J0	0.03 J03
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.034 J0	0.035 J0	0.079 YJ03	0.14 J0	0.043 J03
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.042 J0	0.028 J0	0.2 UJ0	0.17 J0	0.037 J03
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SNH	0071SSA	0071SSB	0071SSC	0071SSD
Sample Number:				9849B224	9849B188	9849B189	9849B190	9849B191
Sample Depth (feet bgs):				8.5	4	4	8.5	4
Sample Date:				12/01/98	11/30/98	11/30/98	11/30/98	11/30/98
TMETAL (mg/kg)	ARSENIC	11.1	11	2.7	1.3 J1	3.4 J1	1.1 UJ1	6
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	209 J2	26.3 J3	50.3 J3	23.3 J3	63.9 J3
TMETAL (mg/kg)	LEAD	221	220	120	53.6	35.4	9.1	30.8
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	184 J2	95.1 J3	89.3 J3	77.9 J3	109 J3
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.11 J	0.061 J	0.066 J	0.045 J	0.22 U
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.18 J0	0.054 J0	0.047 J0	0.074 J0	0.22 UJ0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.17 J0	0.084 YJ03	0.064 YJ03	0.13 YJ03	0.028 YJ03
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.19 J0	0.19 UJ0	0.2 UJ0	0.23 UJ0	0.22 UJ0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.01 U	0.01 U	0.012 U	0.014

TABLE 7-1 (Continued)

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SSE		0071SSF		0071SWA		0071SWB		0071SWC	
Sample Number:				9849B192	9849B193	9849B177	9849B178	9849B179					
Sample Depth (feet bgs):				8.5	4	4	4	4					
Sample Date:				11/30/98	11/30/98	11/30/98	11/30/98	11/30/98					
TMETAL (mg/kg)	ARSENIC	11.1	11	2.3	J1	5.8		2.4	J1	4	J1	9.3	
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02	U	0.02	U	0.19	J	0.02	U	0.02	U
TMETAL (mg/kg)	COPPER	157.3	160	13.6	J3	56.2	J3	91.8	J3	54.1	J3	33.6	J3
TMETAL (mg/kg)	LEAD	221	220	46.5		45.4		1330		426		69.2	
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA		NA		NA		NA		NA	
TMETAL (mg/kg)	ZINC	365.4	370	46.6	J3	158	J3	528	J3	394	J3	155	J3
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA		NA		NA		NA		NA	
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA		NA		NA		NA		NA	
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA		NA		NA		NA		NA	
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA		NA		NA		NA		NA	
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.012	J0	0.065	J3	0.11	J	0.046	J	0.013	J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.027	J0	0.069	J03	0.086	J0	0.051	J0	0.021	J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.031	YJ03	0.14	YJ037	0.2	YJ03	0.097	YJ03	0.033	YJ03
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA		NA		NA		NA		NA	
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.19	UJ0	0.22	UJ0	0.18	UJ0	0.19	UJ0	0.19	UJ0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA		NA		NA		NA		NA	
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA		NA		NA		NA		NA	
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA		NA		NA		NA		NA	
PAH (mg/kg)	FLUORENE	105	2600	NA		NA		NA		NA		NA	
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA		NA		NA		NA		NA	
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA		NA		NA		NA		NA	
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA		NA		NA		NA		NA	
PAH (mg/kg)	PYRENE	123	2300	NA		NA		NA		NA		NA	
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA		NA		NA		NA		NA	
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01	U	0.011	U	0.054		0.01	U	0.01	U

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SWD	0071SWE	0071SWF	0071SWG	0071SWH
Sample Number:				9849B180	9849B181	9849B182	9849B183	9849B184
Sample Depth (feet bgs):				4	4	4	8.5	8.5
Sample Date:				11/30/98	11/30/98	11/30/98	11/30/98	11/30/98
TMETAL (mg/kg)	ARSENIC	11.1	11	1.3 J1	3 J1	5.2	4.6	3.7 J1
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U
TMETAL (mg/kg)	COPPER	157.3	160	24.8 J3	49.4 J3	43.5 J3	85 J3	74.3 J3
TMETAL (mg/kg)	LEAD	221	220	86.4	133	69	865	884
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	270 J3	1430 J3	102 J3	405 J3	364 J3
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.14 J	0.05 J0	0.024 J0	0.038 J0	0.038 J0
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.16 J0	0.071 J0	0.046 J0	0.074 J0	0.043 J0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.29 YJ03	0.1 YJ03	0.073 YJ03	0.11 YJ03	0.096 YJ03
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.19 UJ0	0.18 UJ0	0.19 UJ0	0.2 UJ0	0.2 UJ0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.009 U	0.01 U	0.048	0.016

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SWI	0071SWJ	0071SWK	0701BC1	0701BC10
Sample Number:				9849B185	9849B186	9849B187	0701BC1	0701BC10
Sample Depth (feet bgs):				8.5	8.5	8.5	10	10
Sample Date:				11/30/98	11/30/98	11/30/98	10/10/00	12/05/00
TMETAL (mg/kg)	ARSENIC	11.1	11	4.4 J1	3.4 J1	3.5 J1	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	0.02 U	0.02 U	0.02 U	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	44.5 J3	36 J3	30.3 J3	12.6	125
TMETAL (mg/kg)	LEAD	221	220	107	247	80.6	6.3	2160
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	161 J3	220 J3	112 J3	25.8	904
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	3.5 J
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	0.69 J
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	10 U
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	10 U
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.025 J0	0.035 J0	0.56	0.21 U	10 U
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.037 J0	0.034 J0	0.77 J0	0.21 U	10 U
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.064 YJ03	0.047 YJ03	0.98 YJ03	0.21 U	10 U
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	10 U
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.19 UJ0	0.19 UJ0	0.19 UJ0	0.21 U	10 U
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	0.85 J
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	6.7 UJ7
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	0.98 J
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	0.77 J
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	6.7 U
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	2.4 J
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	2 J
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	0.85 J
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	0.01 U	0.01 U	0.01 U	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC11	0701BC12	0701BC13	0701BC14	0701BC15
Sample Number:				0701BC11	0701BC12	0701BC13	0701BC14	0701BC15
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				12/05/00	12/05/00	12/05/00	12/06/00	12/06/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	57.8	85.7	37.3	225	118
TMETAL (mg/kg)	LEAD	221	220	335	1520	165	4790	2820
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	207	547	531	1560	954
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	6.8 U	7.5	7.2 U	4.9 J	1.6 J
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	10 U	11 U	11 U	14 U	12 U
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	10 U	11 U	11 U	14 U	12 U
PAH (mg/kg)	ANTHRACENE	967.9	22000	10 U	11 U	11 U	0.52 J	12 U
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	10 U	11 UJ9	11 U	14 U	12 UJ9
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	10 U	11 UJ9	11 U	14 U	12 UJ9
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	10 U	11 UJ9	11 U	14 U	12 UJ9
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	10 U	11 UJ9	11 U	0.56 J	12 UJ9
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	10 U	1.2 J9	11 U	14 U	12 UJ9
PAH (mg/kg)	CHRYSENE	0.33	3.3	6.8 U	1.7 J09	7.2 U	3.3 J	1.1 J9
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	6.8 UJ7	7.1 UJ79	7.2 UJ7	9.2 U	7.9 UJ9
PAH (mg/kg)	FLUORANTHENE	157.5	2000	6.8 U	1.3 J	7.2 U	1.9 J	0.59 J
PAH (mg/kg)	FLUORENE	105	2600	6.8 U	0.86 J	7.2 U	0.95 J	7.9 U
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	6.8 U	7.1 UJ9	7.2 U	9.2 U	7.9 UJ9
PAH (mg/kg)	NAPHTHALENE	68.8	56	6.8 U	4.4 J	7.2 U	2.3 J	7.9 U
PAH (mg/kg)	PHENANTHRENE	127.2	15000	6.8 U	2.5 J	7.2 U	2.6 J	0.77 J
PAH (mg/kg)	PYRENE	123	2300	6.8 U	0.97 J09	7.2 U	3.5 J	1.1 J9
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC16	0701BC17	0701BC18	0701BC19	0701BC2
Sample Number:				0701BC16	0701BC17	0701BC18	0701BC19	0701BC2
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				12/06/00	12/06/00	12/07/00	12/11/00	10/10/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	55.1	329	997	118	12.6
TMETAL (mg/kg)	LEAD	221	220	203	866	610	218	6.5
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	142	343	656	171	23
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	0.45 U	4.1 U	NA	0.01 J7	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	0.68 U	6.2 U	NA	0.2 U	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	0.68 U	6.2 U	NA	0.2 U	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	0.68 U	6.2 U	NA	0.2 U	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.044 J	6.2 U	NA	0.02 J	0.032 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.039 J	6.2 U	NA	0.021 J	0.043 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.085 J	6.2 U	NA	0.019 J	0.03 J
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	0.026 J	6.2 U	NA	0.2 U	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.68 U	6.2 U	NA	0.019 J	0.035 J
PAH (mg/kg)	CHRYSENE	0.33	3.3	0.046 J	0.22 J	NA	0.028 J	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	0.45 U	4.1 U	NA	0.2 U	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	0.059 J	4.1 U	NA	0.043 J	NA
PAH (mg/kg)	FLUORENE	105	2600	0.45 U	4.1 U	NA	0.2 U	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	0.45 U	4.1 U	NA	0.2 U	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	0.45 U	4.1 U	NA	0.2 U	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	0.023 J	4.1 U	NA	0.03 J	NA
PAH (mg/kg)	PYRENE	123	2300	0.064 J	0.25 J	NA	0.038 J	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC20	0701BC20	0701BC21	0701BC22	0701BC23
Sample Number:				0701BC20	0701BC24	0701BC21	0701BC22	0701BC23
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				12/13/00	12/13/00	12/12/00	12/12/00	12/04/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	27.7	28.9	21.6	35.5	63.1
TMETAL (mg/kg)	LEAD	221	220	12.6 J2	16.9 J2	31.6	108	649 J3
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	40.9 J24	55.2 J24	54.4	100	370 J4
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	0.22 UJ7	0.23 UJ7	0.24 U	0.043 J	6.8 U
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	0.22 U	0.23 U	0.24 U	0.048 J	6.8 U
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	0.22 U	0.23 U	0.24 U	0.04 J	6.8 U
PAH (mg/kg)	ANTHRACENE	967.9	22000	0.22 U	0.23 U	0.24 U	0.18 J	6.8 U
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.22 U	0.23 U	0.24 U	1	0.81 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.22 U	0.23 U	0.24 U	1.4	0.72 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.22 U	0.23 U	0.24 U	0.73	1.1 J
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	0.22 U	0.23 U	0.24 U	0.84	6.8 U
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.22 U	0.23 U	0.24 U	1.1	6.8 U
PAH (mg/kg)	CHRYSENE	0.33	3.3	0.22 U	0.23 U	0.24 U	1.3	0.88 J
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	0.22 U	0.23 U	0.24 U	0.26	6.8 U
PAH (mg/kg)	FLUORANTHENE	157.5	2000	0.22 U	0.23 U	0.24 U	1.6	1.5 J
PAH (mg/kg)	FLUORENE	105	2600	0.22 U	0.23 U	0.24 U	0.081 J	6.8 U
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	0.22 U	0.23 U	0.24 U	0.72	6.8 U
PAH (mg/kg)	NAPHTHALENE	68.8	56	0.22 UJ3	0.23 UJ3	0.24 U	0.1 J	6.8 U
PAH (mg/kg)	PHENANTHRENE	127.2	15000	0.22 U	0.23 U	0.24 U	0.9	1.2 J
PAH (mg/kg)	PYRENE	123	2300	0.22 U	0.23 U	0.24 U	2.4	3 J
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC25	0701BC26	0701BC3	0701BC4	0701BC5
Sample Number:				0701BC25	0701BC26	0701BC3	0701BC4	0701BC5
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				01/18/01	03/20/01	10/10/00	10/10/00	10/10/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	72	11.2	16.7	15.6
TMETAL (mg/kg)	LEAD	221	220	11.9 J23	256	6.4	13.2	6.1
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	143	27.2	40.5	30.1
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	0.2 UJ7	0.2 UJ3	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	0.2 U	0.033 J3	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	0.2 U	0.016 J3	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	0.01 J	0.064 J3	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.032 J	0.27 J3	0.22 U	0.21 U	0.21 U
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.035 J	0.3 J3	0.22 U	0.21 U	0.21 U
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.023 J	0.15 J	0.22 U	0.21 U	0.21 U
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	0.025 J	0.25	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.03 J	0.27 J3	0.22 U	0.21 U	0.21 U
PAH (mg/kg)	CHRYSENE	0.33	3.3	0.038 J	0.34	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	0.2 U	0.059 J	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	0.062 J	0.5	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	0.2 U	0.04 J3	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	0.02 J	0.2 J	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	0.2 U	0.051 J3	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	0.061 J	0.35 J3	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	0.078 J	0.56	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC6	0701BC7	0701BC8	0701BC9	0701E1A
Sample Number:				0701BC6	0701BC7	0701BC8	0701BC9	0701E1A1
Sample Depth (feet bgs):				10	10	10	10	4.25
Sample Date:				10/10/00	10/10/00	12/04/00	12/05/00	05/23/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	22	17.2	65.2	43.4	76.5 J4
TMETAL (mg/kg)	LEAD	221	220	43.1	7.1	709 J3	213	NA
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	58.9	35.4	278 J4	131	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	3.3 U	3.1 U	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	3.3 U	4.7 U	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	3.3 U	4.7 U	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	3.3 U	4.7 U	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.23 U	0.18 U	0.51 J	4.7 U	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.23 U	0.18 U	0.39 J	4.7 U	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.23 U	0.18 U	0.64 J	4.7 U	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	3.3 U	4.7 U	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.23 U	0.18 U	3.3 U	4.7 U	0.095 J0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	0.52 J	3.1 U	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	3.3 U	3.1 U	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	0.87 J	3.1 U	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	3.3 U	3.1 U	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	3.3 U	3.1 U	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	3.3 U	3.1 U	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	0.85 J	3.1 U	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	1.9 J	3.1 U	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1A	0701E1B	0701E1C	0701E1C	0701E1E
Sample Number:				0701E1A2	0701E1B	0701E1C1	0701E1C2	0701E1E
Sample Depth (feet bgs):				8.25	7.25	3.25	8.75	9.25
Sample Date:				05/23/00	06/12/00	05/23/00	05/23/00	05/24/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	29.4 J4	14.6	19.8 J4	7 J4	NA
TMETAL (mg/kg)	LEAD	221	220	NA	NA	NA	NA	NA
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	NA	NA	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	2.8	0.2 U	0.19 J0	0.19 U	2.4
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	3.6	0.2 U	0.11 J0	0.19 U	2.5
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	1.8	0.2 U	0.093 YJ0	0.19 U	1.4
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	3.2	0.2 U	0.17 UJ0	0.19 U	2.8
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1G	0701E1H	0701E1H	0701E1J	0701E1J
Sample Number:				0701E1G2	0701E1H1	0701E1H2	0701E1J2	0701E1J1
Sample Depth (feet bgs):				8.25	5.25	8.75	8.25	3.75
Sample Date:				05/24/00	05/24/00	05/24/00	05/24/00	11/16/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	NA	36.7 J4	393 J4	76.5 J4	59
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	NA	NA	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	0.19 U	8.2	0.25 U	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.088 J	0.19 U	7.8 J0	0.25 U	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.051 J	0.19 U	7.3 J0	0.25 U	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.071 J	0.19 U	7.7 J0	0.25 U	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1K	0701E1L	0701E1M	0701E1M	0701E2A
Sample Number:				0701E1K	0701E1L	0701E1M1	0701E1M2	0701E2A
Sample Depth (feet bgs):				6.25	9.25	3.25	7.75	8.25
Sample Date:				11/16/00	11/16/00	11/16/00	11/16/00	06/09/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	130 J4	19 J4	NA
TMETAL (mg/kg)	LEAD	221	220	35	48	NA	NA	NA
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	NA	NA	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	0.022 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	0.023 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	0.012 J
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	0.022 J
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E2D	0701E2E	0701E2F	0701E2F	0701E2G
Sample Number:				0701E2D2	0701E2E2	0701E2F1	0701E2F2	0701E2G
Sample Depth (feet bgs):				8.25	9.75	4.25	9.25	8.25
Sample Date:				06/12/00	06/09/00	06/12/00	06/12/00	06/22/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	NA	NA	NA	NA	NA
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	NA	NA	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.2 U	0.19 U	NA	NA	0.037 J
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.2 U	0.19 U	0.19 U	0.21 U	0.042 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.2 U	0.19 U	0.19 U	0.21 U	0.033 J
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.2 U	0.19 U	0.19 U	0.21 U	0.031 J
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E2H	0701E2H	0701E2I	0701E2I	0701E3H
Sample Number:				0701E2H1	0701E2H2	0701E2I2	0701E2I1	0701E3H1
Sample Depth (feet bgs):				5.25	8.75	7.75	2.25	5.25
Sample Date:				07/13/00	07/13/00	06/09/00	11/16/00	06/22/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	106	0.95 U1	24	57	137
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	NA	NA	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.054 J	0.19 U	0.18 U	NA	0.18 U
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.032 J	0.19 U	0.18 U	NA	0.01 J
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.031 YJ	0.19 U	0.18 U	NA	0.18 U
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.18 U	0.19 U	0.18 U	NA	0.012 J
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E3H	0701E3H	0701N1A	0701N1A	0701N1B
Sample Number:				0701E3H2	0701E3HX	0701N1A1	0701N1A2	0701N1B
Sample Depth (feet bgs):				8.75	8.25	3.75	8.25	7.25
Sample Date:				06/22/00	06/22/00	05/23/00	05/23/00	05/23/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	19.6 J4
TMETAL (mg/kg)	LEAD	221	220	10.4	7.5	3260	3730	22.5
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	727 J4	1220 J4	69.1 J4
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.2 U	0.01 J	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.2 U	0.011 J	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.2 U	0.22 U	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.2 U	0.22 U	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1C	0701N1C	0701N1D	0701N1F	0701N1F
Sample Number:				0701N1C1	0701N1C2	0701N1D	0701N1F1	0701N1F2
Sample Depth (feet bgs):				7.75	9.75	9.25	4.75	8.75
Sample Date:				05/23/00	05/23/00	05/23/00	05/23/00	05/23/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	27.3 J4	37 J4	169 J4	649 J4	15.6 J4
TMETAL (mg/kg)	LEAD	221	220	55.8	139	358	NA	NA
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	41 J4	869 J4	423 J4	413 J4	38.3 J4
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1H	0701N1H	0701N1J	0701N1J	0701N1K
Sample Number:				0701N1H1	0701N1H2	0701N1J1	0701N1J2	0701N1K
Sample Depth (feet bgs):				5.25	8.25	4.25	8.25	5.25
Sample Date:				12/12/00	12/12/00	12/07/00	12/07/00	01/04/01
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	190	154	48	315	320 J3
TMETAL (mg/kg)	LEAD	221	220	516	85.7	1140	5240	430
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	642	422	380	1510	380
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1L	0701N1L	0701N2A	0701N2A	0701N2A
Sample Number:				0701N1L	0701N1L@1	0701N2A1	0701N2A2	0701N2AX
Sample Depth (feet bgs):				5.25	5.25	3.75	8.25	3.25
Sample Date:				01/04/01	01/04/01	06/09/00	06/09/00	06/09/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	34	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	14	NA	3060	3620	4190
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	0.068	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	83	NA	825	913	421
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	0.013 U	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N2E	0701N2E	0701N2H	0701N2H	0701N2J
Sample Number:				0701N2E1	0701N2E2	0701N2H1	0701N2H2	0701N2J
Sample Depth (feet bgs):				4.75	8.75	5.25	8.25	5.25
Sample Date:				06/09/00	06/09/00	12/12/00	12/12/00	12/07/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	47.6 J4	31.3 J4	771	16.7	113
TMETAL (mg/kg)	LEAD	221	220	NA	212	960	20.5	3110
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	363	114	480	45.3	883
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N2K	0701N2L	0701N2L	0701N3A	0701N3A
Sample Number:				0701N2K	0701N2L1	0701N2L2	0701N3A1	0701N3A2
Sample Depth (feet bgs):				2.25	4.25	8.25	4.25	8.25
Sample Date:				01/04/01	03/29/01	03/29/01	06/30/00	06/30/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	52 J3	15.2 J14	8.6 J14	NA	NA
TMETAL (mg/kg)	LEAD	221	220	28	NA	NA	2140	1170
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	72	NA	NA	630	320
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N3A	0701N3B	0701N3B	0701N3C	0701N3C
Sample Number:				0701N3A2X	0701N3B1	0701N3B2	0701N3C1	0701N3C2
Sample Depth (feet bgs):				7.75	3.25	7.25	7.75	9.75
Sample Date:				06/30/00	06/30/00	06/30/00	07/13/00	07/13/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	14.5	11.2
TMETAL (mg/kg)	LEAD	221	220	2610	2570	4800	58.7	24.1
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	1140	776	1330	57.6	48.5
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N3C	0701N3D	0701N3J	0701N3J	0701N4A
Sample Number:				0701N3CX	0701N3D	0701N3J1	0701N3J2	0701N4A1
Sample Depth (feet bgs):				9.25	9.25	3.25	9.25	3.25
Sample Date:				07/13/00	07/13/00	12/07/00	12/07/00	07/13/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	30.7	398	123	215	NA
TMETAL (mg/kg)	LEAD	221	220	40.6	331	1940	6160	5690
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	46.5	258	652	1880	724
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N4A	0701N4A	0701N4B	0701N4B	0701N4D
Sample Number:				0701N4A2	0701N4AX	0701N4B1	0701N4B2	0701N4D1
Sample Depth (feet bgs):				8.25	2.75	7.25	9.75	4.75
Sample Date:				07/13/00	07/13/00	07/13/00	07/13/00	07/25/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	182
TMETAL (mg/kg)	LEAD	221	220	4940	2910	5400	4500	346
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	1660	694	1690	1670	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N4D	0701N4D	0701N4J	0701N5A	0701N5A
Sample Number:				0701N4D2	0701N4DX	0701N4J	0701N5A1	0701N5A2
Sample Depth (feet bgs):				7.75	7.25	4.25	3.25	8.25
Sample Date:				07/25/00	07/25/00	12/07/00	08/24/00	08/24/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	98.9	108	241	329 J2	13.6 J2
TMETAL (mg/kg)	LEAD	221	220	203	271	4300	1660 J2	16 J2
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	NA	NA	1680	592	30.7
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	0.077 J	0.057 J0
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	0.1 J	R0
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	0.11 J	R0
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	0.084 J	R0
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	0.12 J	0.26 J0
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	0.036 J3	R0
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	0.079 J	R0
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N5B	0701N5B	0701N5J	0701N5J	0701N6A
Sample Number:				0701N5B1	0701N5B2	0701N5J1	0701N5J2	0701N6A1
Sample Depth (feet bgs):				3.25	8.25	5.25	8.25	4.25
Sample Date:				08/24/00	08/24/00	12/07/00	12/07/00	07/25/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	11400 J2	21.4 J2	108	32.4	NA
TMETAL (mg/kg)	LEAD	221	220	982 J2	149 J2	1080	126	2190
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	856	47.6	499	110	877
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.027 J	0.37 UJ3	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.037 J	0.37 UJ03	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.032 J	0.37 UJ03	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.03 J	0.37 UJ03	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	0.038 J	0.059 J3	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	0.011 J3	0.37 UJ03	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	0.026 J	0.37 UJ0	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N6A	0701N6A	0701N6B	0701N6B	0701N6C
Sample Number:				0701N6A2	0701N6AX	0701N6B1	0701N6B2	0701N6C1
Sample Depth (feet bgs):				8.25	7.75	3.25	8.25	3.25
Sample Date:				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	190	55.9	37.7
TMETAL (mg/kg)	LEAD	221	220	5530	5230	1480	102	246
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	2240	1840	NA	NA	110
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.96 J0	3.2	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.66 J03	1.9 J3	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.74 J0	2.5	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.65 J03	1.5 J3	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N6C	0701N6J	0701N7A	0701N7A	0701N7B
Sample Number:				0701N6C2	0701N6J	0701N7A1	0701N7A2	0701N7B1
Sample Depth (feet bgs):				7.25	3.25	4.25	7.75	3.25
Sample Date:				07/25/00	12/07/00	07/25/00	07/25/00	07/25/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	15.5	57.8	NA	NA	24.7
TMETAL (mg/kg)	LEAD	221	220	15.4	624	28.2	123	67.7
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	29.3	321	46.1	146	NA
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	0.034 J	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	0.04 J3	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	0.028 J	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	0.039 J3	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N7J	0701N7J	0701N8A	0701N8A	0701N9A
Sample Number:				0701N7J1	0701N7J2	0701N8A1	0701N8A2	0701N9A1
Sample Depth (feet bgs):				4.25	8.25	3.25	6.25	3.25
Sample Date:				12/07/00	12/07/00	08/02/00	08/02/00	08/24/00
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	86.9	62.3	NA	NA	24.1 J2
TMETAL (mg/kg)	LEAD	221	220	465	633	19.8	323	57.7 J2
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	285	234	34.6	178	61.1
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	0.49 J0
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	0.39
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	0.67 Y
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	0.18 U
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	0.54 J0
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	0.092 J3
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	0.21
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N9A	0701W1A	0701W1A	0701W1B	0701W1B
Sample Number:				0701N9A2	0701W1A1	0701W1A2	0701W1B	0701W1BX
Sample Depth (feet bgs):				6.75	5.25	8.25	4.25	3.75
Sample Date:				08/24/00	04/30/01	04/30/01	04/30/01	04/30/01
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	96.6 J2	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	554 J2	2580	1680	3180	2400
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	257	560	427	1230	777
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.058 J	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.082 J	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.12 YJ	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.2 U	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	0.087 J	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	0.027 J	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	0.059 J	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701W1C	0701W1C	0701W1D	0701W1D	0701W1E
Sample Number:				0701W1C1	0701W1C2	0701W1D1	0701W1D2	0701W1E1
Sample Depth (feet bgs):				5.25	9.25	4.25	8.25	4.25
Sample Date:				04/30/01	04/30/01	04/30/01	04/30/01	04/30/01
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	252	187	359	235	163
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	465	413	204	178	222
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701W1E	0701W1F	0701W1F	0701W1G	0701W1G
Sample Number:				0701W1E2	0701W1F1	0701W1F2	0701W1G	0701W1GX
Sample Depth (feet bgs):				8.25	5.25	9.25	4.25	3.75
Sample Date:				04/30/01	04/30/01	04/30/01	04/30/01	04/30/01
TMETAL (mg/kg)	ARSENIC	11.1	11	NA	NA	NA	NA	NA
TMETAL (mg/kg)	BERYLLIUM	0.8	140	NA	NA	NA	NA	NA
TMETAL (mg/kg)	COPPER	157.3	160	NA	NA	NA	NA	NA
TMETAL (mg/kg)	LEAD	221	220	34.1	40.3	13.4	51.9	78.9
TMETAL (mg/kg)	MERCURY	2.3	2.3	NA	NA	NA	NA	NA
TMETAL (mg/kg)	ZINC	365.4	370	46.4	67.4	35.6	98.7	85.7
PAH (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHENE	141.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ACENAPHTHYLENE	130.1	3700	NA	NA	NA	NA	NA
PAH (mg/kg)	ANTHRACENE	967.9	22000	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(A)PYRENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	NA	NA	NA	NA	NA
PAH (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	NA	NA	NA	NA	NA
PAH (mg/kg)	CHRYSENE	0.33	3.3	NA	NA	NA	NA	NA
PAH (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORANTHENE	157.5	2000	NA	NA	NA	NA	NA
PAH (mg/kg)	FLUORENE	105	2600	NA	NA	NA	NA	NA
PAH (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	NA	NA	NA	NA	NA
PAH (mg/kg)	NAPHTHALENE	68.8	56	NA	NA	NA	NA	NA
PAH (mg/kg)	PHENANTHRENE	127.2	15000	NA	NA	NA	NA	NA
PAH (mg/kg)	PYRENE	123	2300	NA	NA	NA	NA	NA
PCB (mg/kg)	AROCLOR-1260	0.009	0.21	NA	NA	NA	NA	NA
PEST (mg/kg)	4,4'-DDE	0.155	1.6	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B01	0071B02	0071B03	0071B04	0071B05
Sample Number:				9844B064	9844B065	9844B066	9844B067	9844B068
Sample Depth (feet bgs):				8.5	8.5	7	8.5	7
Sample Date:				10/28/98	10/28/98	10/28/98	10/28/98	10/28/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.009 U	0.017	0.01 U	0.009 U	0.011 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B06	0071B07	0071B08	0071B09	0071B10
Sample Number:				9844B069	9844B070	9844B071	9844B072	9844B073
Sample Depth (feet bgs):				8.5	8.5	7	8.5	8.5
Sample Date:				10/28/98	10/28/98	10/28/98	10/29/98	10/29/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.01 U	0.01 U	0.009 U	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B11	0071B12	0071B13	0071B14	0071B15
Sample Number:				9844B074	9844B075	9844B076	9844B077	9844B078
Sample Depth (feet bgs):				8.5	7	8.5	10	8.5
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.009 U	0.009 U	0.009 U	0.009 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B16	0071B17	0071B18	0071B19	0071B20
Sample Number:				9844B079	9844B080	9844B081	9844B082	9844B083
Sample Depth (feet bgs):				8.5	8.5	8.5	8.5	8.5
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.016	0.01 U	0.01 U	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B21	0071B22	0071B23	0071B24	0071B25
Sample Number:				9844B084	9844B085	9844B086	9844B087	9844B088
Sample Depth (feet bgs):				8.5	10	10	8.5	10
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.009 U				
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B26	0071B27	0071B28	0071B29	0071B30
Sample Number:				9844B089	9844B090	9844B091	9844B092	9844B093
Sample Depth (feet bgs):				10	10	8.5	10	10
Sample Date:				10/29/98	10/29/98	10/29/98	10/29/98	10/29/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071B31	0071B32	0071B33	0071B34	0071B35
Sample Number:				9844B094	9844B095	9847B172	9847B173	9849B233
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				10/29/98	10/29/98	11/17/98	11/17/98	12/01/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.022	0.009 U	NA	NA	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SEA	0071SEB	0071SEC	0071SED	0071SEE
Sample Number:				9849B225	9849B226	9849B227	9849B228	9849B229
Sample Depth (feet bgs):				4	8.5	4	8.5	4
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.013	0.01 U	0.01 U	0.011 U	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SEF	0071SEG	0071SEH	0071SEI	0071SEJ
Sample Number:				9849B230	9849B231	9849B232	9849B234	9849B235
Sample Depth (feet bgs):				8.5	4	8.5	4	8.5
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SEK	0071SEL	0071SEM	0071SNA	0071SNB
Sample Number:				9849B236	9849B237	9849B238	9849B217	9849B218
Sample Depth (feet bgs):				4	4	8.5	4	8.5
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U				
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SNC	0071SND	0071SNE	0071SNF	0071SNG
Sample Number:				9849B219	9849B220	9849B221	9849B222	9849B223
Sample Depth (feet bgs):				4	8.5	4	8.5	4
Sample Date:				12/01/98	12/01/98	12/01/98	12/01/98	12/01/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.01 U	0.01 U	0.019	0.013
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SNH	0071SSA	0071SSB	0071SSC	0071SSD
Sample Number:				9849B224	9849B188	9849B189	9849B190	9849B191
Sample Depth (feet bgs):				8.5	4	4	8.5	4
Sample Date:				12/01/98	11/30/98	11/30/98	11/30/98	11/30/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.012 J9	0.01 U	0.01 U	0.012 U	0.047
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SSE	0071SSF	0071SWA	0071SWB	0071SWC
Sample Number:				9849B192	9849B193	9849B177	9849B178	9849B179
Sample Depth (feet bgs):				8.5	4	4	4	4
Sample Date:				11/30/98	11/30/98	11/30/98	11/30/98	11/30/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.011 U	0.024 J9	0.013 J9	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SWD	0071SWE	0071SWF	0071SWG	0071SWH
Sample Number:				9849B180	9849B181	9849B182	9849B183	9849B184
Sample Depth (feet bgs):				4	4	4	8.5	8.5
Sample Date:				11/30/98	11/30/98	11/30/98	11/30/98	11/30/98
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.009 U	0.01 U	0.028 J9	0.01 U
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0071SWI	0071SWJ	0071SWK	0701BC1	0701BC10
Sample Number:				9849B185	9849B186	9849B187	0701BC1	0701BC10
Sample Depth (feet bgs):				8.5	8.5	8.5	10	10
Sample Date:				11/30/98	11/30/98	11/30/98	10/10/00	12/05/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	0.01 U	0.01 U	0.01 U	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC11	0701BC12	0701BC13	0701BC14	0701BC15
Sample Number:				0701BC11	0701BC12	0701BC13	0701BC14	0701BC15
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				12/05/00	12/05/00	12/05/00	12/06/00	12/06/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC16	0701BC17	0701BC18	0701BC19	0701BC2
Sample Number:				0701BC16	0701BC17	0701BC18	0701BC19	0701BC2
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				12/06/00	12/06/00	12/07/00	12/11/00	10/10/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC20	0701BC20	0701BC21	0701BC22	0701BC23
Sample Number:				0701BC20	0701BC24	0701BC21	0701BC22	0701BC23
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				12/13/00	12/13/00	12/12/00	12/12/00	12/04/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC25	0701BC26	0701BC3	0701BC4	0701BC5
Sample Number:				0701BC25	0701BC26	0701BC3	0701BC4	0701BC5
Sample Depth (feet bgs):				10	10	10	10	10
Sample Date:				01/18/01	03/20/01	10/10/00	10/10/00	10/10/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	8 U	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	55 M	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC6	0701BC7	0701BC8	0701BC9	0701E1A
Sample Number:				0701BC6	0701BC7	0701BC8	0701BC9	0701E1A1
Sample Depth (feet bgs):				10	10	10	10	4.25
Sample Date:				10/10/00	10/10/00	12/04/00	12/05/00	05/23/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1A	0701E1B	0701E1C	0701E1C	0701E1E
Sample Number:				0701E1A2	0701E1B	0701E1C1	0701E1C2	0701E1E
Sample Depth (feet bgs):				8.25	7.25	3.25	8.75	9.25
Sample Date:				05/23/00	06/12/00	05/23/00	05/23/00	05/24/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1G	0701E1H	0701E1H	0701E1J	0701E1J
Sample Number:				0701E1G2	0701E1H1	0701E1H2	0701E1J2	0701E1J1
Sample Depth (feet bgs):				8.25	5.25	8.75	8.25	3.75
Sample Date:				05/24/00	05/24/00	05/24/00	05/24/00	11/16/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1K	0701E1L	0701E1M	0701E1M	0701E2A
Sample Number:				0701E1K	0701E1L	0701E1M1	0701E1M2	0701E2A
Sample Depth (feet bgs):				6.25	9.25	3.25	7.75	8.25
Sample Date:				11/16/00	11/16/00	11/16/00	11/16/00	06/09/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E2D	0701E2E	0701E2F	0701E2F	0701E2G
Sample Number:				0701E2D2	0701E2E2	0701E2F1	0701E2F2	0701E2G
Sample Depth (feet bgs):				8.25	9.75	4.25	9.25	8.25
Sample Date:				06/12/00	06/09/00	06/12/00	06/12/00	06/22/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E2H	0701E2H	0701E2I	0701E2I	0701E3H
Sample Number:				0701E2H1	0701E2H2	0701E2I2	0701E2I1	0701E3H1
Sample Depth (feet bgs):				5.25	8.75	7.75	2.25	5.25
Sample Date:				07/13/00	07/13/00	06/09/00	11/16/00	06/22/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E3H	0701E3H	0701N1A	0701N1A	0701N1B
Sample Number:				0701E3H2	0701E3HX	0701N1A1	0701N1A2	0701N1B
Sample Depth (feet bgs):				8.75	8.25	3.75	8.25	7.25
Sample Date:				06/22/00	06/22/00	05/23/00	05/23/00	05/23/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1C	0701N1C	0701N1D	0701N1F	0701N1F
Sample Number:				0701N1C1	0701N1C2	0701N1D	0701N1F1	0701N1F2
Sample Depth (feet bgs):				7.75	9.75	9.25	4.75	8.75
Sample Date:				05/23/00	05/23/00	05/23/00	05/23/00	05/23/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1H	0701N1H	0701N1J	0701N1J	0701N1K
Sample Number:				0701N1H1	0701N1H2	0701N1J1	0701N1J2	0701N1K
Sample Depth (feet bgs):				5.25	8.25	4.25	8.25	5.25
Sample Date:				12/12/00	12/12/00	12/07/00	12/07/00	01/04/01
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	610	7000 U	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	12000 M	66000 M	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1L	0701N1L	0701N2A	0701N2A	0701N2A
Sample Number:				0701N1L	0701N1L@1	0701N2A1	0701N2A2	0701N2AX
Sample Depth (feet bgs):				5.25	5.25	3.75	8.25	3.25
Sample Date:				01/04/01	01/04/01	06/09/00	06/09/00	06/09/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	0.003 U	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N2E	0701N2E	0701N2H	0701N2H	0701N2J
Sample Number:				0701N2E1	0701N2E2	0701N2H1	0701N2H2	0701N2J
Sample Depth (feet bgs):				4.75	8.75	5.25	8.25	5.25
Sample Date:				06/09/00	06/09/00	12/12/00	12/12/00	12/07/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	3100 U
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	25000 M

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N2K	0701N2L	0701N2L	0701N3A	0701N3A
Sample Number:				0701N2K	0701N2L1	0701N2L2	0701N3A1	0701N3A2
Sample Depth (feet bgs):				2.25	4.25	8.25	4.25	8.25
Sample Date:				01/04/01	03/29/01	03/29/01	06/30/00	06/30/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N3A	0701N3B	0701N3B	0701N3C	0701N3C
Sample Number:				0701N3A2X	0701N3B1	0701N3B2	0701N3C1	0701N3C2
Sample Depth (feet bgs):				7.75	3.25	7.25	7.75	9.75
Sample Date:				06/30/00	06/30/00	06/30/00	07/13/00	07/13/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N3C	0701N3D	0701N3J	0701N3J	0701N4A
Sample Number:				0701N3CX	0701N3D	0701N3J1	0701N3J2	0701N4A1
Sample Depth (feet bgs):				9.25	9.25	3.25	9.25	3.25
Sample Date:				07/13/00	07/13/00	12/07/00	12/07/00	07/13/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	580 U	6200 U	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	16000 M	65000 M	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N4A	0701N4A	0701N4B	0701N4B	0701N4D
Sample Number:				0701N4A2	0701N4AX	0701N4B1	0701N4B2	0701N4D1
Sample Depth (feet bgs):				8.25	2.75	7.25	9.75	4.75
Sample Date:				07/13/00	07/13/00	07/13/00	07/13/00	07/25/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N4D	0701N4D	0701N4J	0701N5A	0701N5A
Sample Number:				0701N4D2	0701N4DX	0701N4J	0701N5A1	0701N5A2
Sample Depth (feet bgs):				7.75	7.25	4.25	3.25	8.25
Sample Date:				07/25/00	07/25/00	12/07/00	08/24/00	08/24/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	3500 U	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	37000 M	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N5B	0701N5B	0701N5J	0701N5J	0701N6A
Sample Number:				0701N5B1	0701N5B2	0701N5J1	0701N5J2	0701N6A1
Sample Depth (feet bgs):				3.25	8.25	5.25	8.25	4.25
Sample Date:				08/24/00	08/24/00	12/07/00	12/07/00	07/25/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	640 U	65 U	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	1800 M	870 M	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N6A	0701N6A	0701N6B	0701N6B	0701N6C
Sample Number:				0701N6A2	0701N6AX	0701N6B1	0701N6B2	0701N6C1
Sample Depth (feet bgs):				8.25	7.75	3.25	8.25	3.25
Sample Date:				07/25/00	07/25/00	07/25/00	07/25/00	07/25/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N6C	0701N6J	0701N7A	0701N7A	0701N7B
Sample Number:				0701N6C2	0701N6J	0701N7A1	0701N7A2	0701N7B1
Sample Depth (feet bgs):				7.25	3.25	4.25	7.75	3.25
Sample Date:				07/25/00	12/07/00	07/25/00	07/25/00	07/25/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	570 U	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	1200 M	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N7J	0701N7J	0701N8A	0701N8A	0701N9A
Sample Number:				0701N7J1	0701N7J2	0701N8A1	0701N8A2	0701N9A1
Sample Depth (feet bgs):				4.25	8.25	3.25	6.25	3.25
Sample Date:				12/07/00	12/07/00	08/02/00	08/02/00	08/24/00
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	580 U	600 U	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	1500 M	2900 M	NA	NA	NA

TABLE 7-1 (Continued)

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N9A	0701W1A	0701W1A	0701W1B	0701W1B
Sample Number:				0701N9A2	0701W1A1	0701W1A2	0701W1B	0701W1BX
Sample Depth (feet bgs):				6.75	5.25	8.25	4.25	3.75
Sample Date:				08/24/00	04/30/01	04/30/01	04/30/01	04/30/01
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701W1C	0701W1C	0701W1D	0701W1D	0701W1E
Sample Number:				0701W1C1	0701W1C2	0701W1D1	0701W1D2	0701W1E1
Sample Depth (feet bgs):				5.25	9.25	4.25	8.25	4.25
Sample Date:				04/30/01	04/30/01	04/30/01	04/30/01	04/30/01
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

**EXCAVATION 7-1 REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701W1E	0701W1F	0701W1F	0701W1G	0701W1G
Sample Number:				0701W1E2	0701W1F1	0701W1F2	0701W1G	0701W1GX
Sample Depth (feet bgs):				8.25	5.25	9.25	4.25	3.75
Sample Date:				04/30/01	04/30/01	04/30/01	04/30/01	04/30/01
PEST (mg/kg)	4,4'-DDT	0.04	1.2	NA	NA	NA	NA	NA
PEST (mg/kg)	GAMMA-CHLORDANE	0.0017	0.29	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	DIESEL RANGE ORGANICS		3500	NA	NA	NA	NA	NA
TPHEXT (mg/kg)	MOTOR OIL RANGE ORGANICS		3500	NA	NA	NA	NA	NA

Notes: Strike through indicates sample was removed by excavation.
 Chemicals of potential concern indicated by bolded analyte name.
 Levels exceeding 2000 ESD or total TPH cleanup goal indicated by bolded concentration. [Table 4-1](#) includes a list of data qualifier definitions.

bgs Below ground surface
 ESD Explanation of significant differences
 mg/kg Milligrams per kilogram
 NA Not analyzed
 ROD Record of decision
 TPH Total petroleum hydrocarbons

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC18	0701E1G	0701E1J	0701E1K	0701E1L
Sample Number:				0701BC18	0701E1G1	0701E1J1	0701E1K	0701E1L
Sample Depth (feet bgs):				10	3.25	3.75	6.25	9.25
Sample Date:				12/07/00	11/16/00	11/16/00	11/16/00	11/16/00
SVOA (mg/kg)	2,4-DIMETHYLPHENOL	27.7	29	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	ACENAPHTHENE	141.1	3700	2.4 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	ACENAPHTHYLENE	130.1	3700	2.4 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	ANTHRACENE	967.9	22000	2.4 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.19 J	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	BENZO(A)PYRENE	0.33	0.33	2.4 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.31 J	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	2.4 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.33 J	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33	27	1.6 U4	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	CARBAZOLE	0.635	0.64	3.6 U	1.8 U	1.8 U	1.8 U	2.2 U
SVOA (mg/kg)	CHRYSENE	0.33	3.3	0.18 J	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	DIBENZOFURAN	13.4	290	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	DIETHYLPHTHALATE	651.8	660	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	FLUORANTHENE	157.5	2000	0.31 J	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	FLUORENE	105	2600	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	N-NITROSO-DI-N-PROPYLAMINE	0.33	0.33	1.6 U	0.36 UJ7	0.36 UJ7	0.36 UJ7	0.44 UJ7
SVOA (mg/kg)	N-NITROSODIPHENYLAMINE	1.1	1.1	2.1 UJ7	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	NAPHTHALENE	68.8	56	1.6 U	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	PENTACHLOROPHENOL	0.8	2.6	8.3 U	1.8 UJ3	1.8 UJ3	1.8 UJ3	2.2 UJ3
SVOA (mg/kg)	PHENANTHRENE	127.2	15000	0.21 J	0.36 U	0.36 U	0.36 U	0.44 U
SVOA (mg/kg)	PHENOL	137.7	140	1.6 UJ3	0.36 U	0.36 U	0.36 U	0.44 U

TABLE 7-1 SVOA (Continued)

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1M	0701E1M	0701E2D	0701E2E	0701E2I
Sample Number:				0701E1M1	0701E1M2	0701E2D1	0701E2E1	0701E2I1
Sample Depth (feet bgs):				3.25	7.75	4.25	2.75	2.25
Sample Date:				11/16/00	11/16/00	11/16/00	11/16/00	11/16/00
SVOA (mg/kg)	2,4-DIMETHYLPHENOL	27.7	29	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	ACENAPHTHENE	141.1	3700	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	ACENAPHTHYLENE	130.1	3700	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	ANTHRACENE	967.9	22000	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	BENZO(A)PYRENE	0.33	0.33	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	0.37 U	0.37 UJ7	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33	27	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	CARBAZOLE	0.635	0.64	1.8 U	1.9 U	1.9 U	1.8 U	1.8 U
SVOA (mg/kg)	CHRYSENE	0.33	3.3	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	DIBENZOFURAN	13.4	290	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	DIETHYLPHTHALATE	651.8	660	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	FLUORANTHENE	157.5	2000	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	FLUORENE	105	2600	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	N-NITROSO-DI-N-PROPYLAMINE	0.33	0.33	0.37 UJ7	0.37 U	0.37 UJ7	0.37 UJ7	0.37 UJ7
SVOA (mg/kg)	N-NITROSODIPHENYLAMINE	1.1	1.1	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	NAPHTHALENE	68.8	56	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	PENTACHLOROPHENOL	0.8	2.6	1.8 UJ3	1.9 UJ3	1.9 UJ3	1.8 UJ3	1.8 UJ3
SVOA (mg/kg)	PHENANTHRENE	127.2	15000	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
SVOA (mg/kg)	PHENOL	137.7	140	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U

TABLE 7-1 SVOA (Continued)

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1J	0701N1J	0701N2J	0701N3J	0701N3J
Sample Number:				0701N1J1	0701N1J2	0701N2J	0701N3J1	0701N3J2
Sample Depth (feet bgs):				4.25	8.25	5.25	3.25	9.25
Sample Date:				12/07/00	12/07/00	12/07/00	12/07/00	12/07/00
SVOA (mg/kg)	2,4-DIMETHYLPHENOL	27.7	29	7.7 U	23 U	21 U	19 U	20 U
SVOA (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	7.7 U	7 J	3.5 J	19 U	18 J
SVOA (mg/kg)	ACENAPHTHENE	141.1	3700	12 U	35 U	31 U	29 U	31 U
SVOA (mg/kg)	ACENAPHTHYLENE	130.1	3700	12 U	35 U	31 U	29 U	31 U
SVOA (mg/kg)	ANTHRACENE	967.9	22000	12 U	35 U	31 U	29 U	2.4 J
SVOA (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	12 UJ1	35 U	31 U	29 U	31 U
SVOA (mg/kg)	BENZO(A)PYRENE	0.33	0.33	12 UJ1	35 U	31 U	29 U	31 U
SVOA (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	12 UJ1	35 U	31 U	29 U	31 U
SVOA (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	12 UJ1	35 U	31 U	29 U	31 U
SVOA (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	12 UJ1	3.1 J	31 U	29 U	31 U
SVOA (mg/kg)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33	27	7.7 U41	42 U4	21 U4	19 U4	27 U4
SVOA (mg/kg)	CARBAZOLE	0.635	0.64	17 U	51 U	45 U	43 U	45 U
SVOA (mg/kg)	CHRYSENE	0.33	3.3	7.7 UJ1	6.1 J	3 J	19 U	4.9 J
SVOA (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	7.7 UJ1	23 U	21 U	19 U	20 U
SVOA (mg/kg)	DIBENZOFURAN	13.4	290	7.7 U	23 U	21 U	19 U	20 U
SVOA (mg/kg)	DIETHYLPHTHALATE	651.8	660	7.7 U	23 U	21 U	19 U	20 U
SVOA (mg/kg)	FLUORANTHENE	157.5	2000	7.7 U	3.8 J	21 U	19 U	2.6 J
SVOA (mg/kg)	FLUORENE	105	2600	7.7 U	23 U	21 U	19 U	20 U
SVOA (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	7.7 UJ1	23 U	21 U	19 U	20 U
SVOA (mg/kg)	N-NITROSO-DI-N-PROPYLAMINE	0.33	0.33	7.7 U	23 U	21 U	19 U	20 U
SVOA (mg/kg)	N-NITROSODIPHENYLAMINE	1.1	1.1	9.8 UJ7	29 U	26 U	25 U	26 U
SVOA (mg/kg)	NAPHTHALENE	68.8	56	7.7 U	2.7 J	21 U	19 U	20 U
SVOA (mg/kg)	PENTACHLOROPHENOL	0.8	2.6	39 U	120 UJ7	110 UJ7	99 U	110 UJ7
SVOA (mg/kg)	PHENANTHRENE	127.2	15000	7.7 U	5.1 J	2.3 J	19 U	4 J
SVOA (mg/kg)	PHENOL	137.7	140	7.7 UJ3	23 UJ3	21 UJ3	19 UJ3	20 UJ3

TABLE 7-1 SVOA (Continued)

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N4J	0701N5J	0701N5J	0701N6J	0701N7J
Sample Number:				0701N4J	0701N5J1	0701N5J2	0701N6J	0701N7J1
Sample Depth (feet bgs):				4.25	5.25	8.25	3.25	4.25
Sample Date:				12/07/00	12/07/00	12/07/00	12/07/00	12/07/00
SVOA (mg/kg)	2,4-DIMETHYLPHENOL	27.7	29	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	10 J	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	ACENAPHTHENE	141.1	3700	35 U	13 U	13 U	11 U	12 U
SVOA (mg/kg)	ACENAPHTHYLENE	130.1	3700	35 U	13 U	13 U	11 U	12 U
SVOA (mg/kg)	ANTHRACENE	967.9	22000	35 U	13 U	13 U	11 U	12 U
SVOA (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	35 U	13 U	13 U	11 U	12 U
SVOA (mg/kg)	BENZO(A)PYRENE	0.33	0.33	35 U	13 U	13 U	11 U	0.79 J
SVOA (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	35 U	13 U	13 U	11 U	1.1 J
SVOA (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	35 U	13 U	13 U	11 U	12 U
SVOA (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	35 U	13 U	13 U	11 U	12 U
SVOA (mg/kg)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33	27	23 U4	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	CARBAZOLE	0.635	0.64	51 U	19 U	19 U	17 U	17 U
SVOA (mg/kg)	CHRYSENE	0.33	3.3	4.7 J	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	DIBENZOFURAN	13.4	290	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	DIETHYLPHTHALATE	651.8	660	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	FLUORANTHENE	157.5	2000	23 U	8.4 U	8.5 U	7.5 U	1.3 J
SVOA (mg/kg)	FLUORENE	105	2600	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	N-NITROSO-DI-N-PROPYLAMINE	0.33	0.33	23 U	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	N-NITROSODIPHENYLAMINE	1.1	1.1	29 U	11 U	11 U	9.5 U	9.7 U
SVOA (mg/kg)	NAPHTHALENE	68.8	56	3 J	8.4 U	8.5 U	7.5 U	7.6 U
SVOA (mg/kg)	PENTACHLOROPHENOL	0.8	2.6	120 UJ7	43 U	44 U	39 U	39 U
SVOA (mg/kg)	PHENANTHRENE	127.2	15000	3.8 J	8.4 U	8.5 U	7.5 U	1.1 J
SVOA (mg/kg)	PHENOL	137.7	140	23 UJ3	8.4 UJ3	8.5 UJ3	7.5 UJ3	7.6 UJ3

**EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N7J	
Sample Number:				0701N7J2	
Sample Depth (feet bgs):				8.25	
Sample Date:				12/07/00	
SVOA (mg/kg)	2,4-DIMETHYLPHENOL	27.7	29	8	U
SVOA (mg/kg)	2-METHYLNAPHTHALENE	140.7	56	8	U
SVOA (mg/kg)	ACENAPHTHENE	141.1	3700	12	U
SVOA (mg/kg)	ACENAPHTHYLENE	130.1	3700	12	U
SVOA (mg/kg)	ANTHRACENE	967.9	22000	12	U
SVOA (mg/kg)	BENZO(A)ANTHRACENE	0.33	0.37	12	U
SVOA (mg/kg)	BENZO(A)PYRENE	0.33	0.33	12	U
SVOA (mg/kg)	BENZO(B)FLUORANTHENE	0.33	0.34	12	U
SVOA (mg/kg)	BENZO(G,H,I)PERYLENE	355.3	1600	12	U
SVOA (mg/kg)	BENZO(K)FLUORANTHENE	0.33	0.34	12	U
SVOA (mg/kg)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33	27	8	U4
SVOA (mg/kg)	CARBAZOLE	0.635	0.64	18	U
SVOA (mg/kg)	CHRYSENE	0.33	3.3	8	U
SVOA (mg/kg)	DIBENZ(A,H)ANTHRACENE	0.33	0.33	8	U
SVOA (mg/kg)	DIBENZOFURAN	13.4	290	8	U
SVOA (mg/kg)	DIETHYLPHTHALATE	651.8	660	8	U
SVOA (mg/kg)	FLUORANTHENE	157.5	2000	8	U
SVOA (mg/kg)	FLUORENE	105	2600	8	U
SVOA (mg/kg)	INDENO(1,2,3-CD)PYRENE	0.33	0.35	8	U
SVOA (mg/kg)	N-NITROSO-DI-N-PROPYLAMINE	0.33	0.33	8	U
SVOA (mg/kg)	N-NITROSODIPHENYLAMINE	1.1	1.1	10	U
SVOA (mg/kg)	NAPHTHALENE	68.8	56	8	U
SVOA (mg/kg)	PENTACHLOROPHENOL	0.8	2.6	41	U
SVOA (mg/kg)	PHENANTHRENE	127.2	15000	8	U
SVOA (mg/kg)	PHENOL	137.7	140	8	UJ3

TABLE 7-1 SVOA (Continued)

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701BC18	0701E1G	0701E1J	0701E1K	0701E1L
Sample Number:				0701BC18	0701E1G1	0701E1J1	0701E1K	0701E1L
Sample Depth (feet bgs):				10	3.25	3.75	6.25	9.25
Sample Date:				12/07/00	11/16/00	11/16/00	11/16/00	11/16/00
SVOA (mg/kg)	PYRENE	123	2300	0.36 J	0.36 U	0.36 U	0.36 U	0.44 U

** EXAMPLE **

TABLE 7-1 SVOA (Continued)

** EXAMPLE **

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701E1M	0701E1M	0701E2D	0701E2E	0701E2I
Sample Number:				0701E1M1	0701E1M2	0701E2D1	0701E2E1	0701E2I1
Sample Depth (feet bgs):				3.25	7.75	4.25	2.75	2.25
Sample Date:				11/16/00	11/16/00	11/16/00	11/16/00	11/16/00
SVOA (mg/kg)	PYRENE	123	2300	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U

**** EXAMPLE ****

TABLE 7-1 SVOA (Continued)

**** EXAMPLE ****

**EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N1J		0701N2J		0701N3J					
Sample Number:				0701N1J1	0701N1J2	0701N2J	0701N3J1	0701N3J2					
Sample Depth (feet bgs):				4.25	8.25	5.25	3.25	9.25					
Sample Date:				12/07/00	12/07/00	12/07/00	12/07/00	12/07/00					
SVOA (mg/kg)	PYRENE	123	2300	7.7	UJ1	7.5	J	2.5	J	19	U	4.7	J

TABLE 7-1 SVOA (Continued)

**EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA**

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Station Number:	Analyte	1997 ROD Goal (mg/kg)	2000 ESD Goal (mg/kg)	0701N4J	0701N5J	0701N5J	0701N6J	0701N7J
Sample Number:				0701N4J	0701N5J1	0701N5J2	0701N6J	0701N7J1
Sample Depth (feet bgs):				4.25	5.25	8.25	3.25	4.25
Sample Date:				12/07/00	12/07/00	12/07/00	12/07/00	12/07/00
SVOA (mg/kg)	PYRENE	123	2300	3.2 J	8.4 U	8.5 U	0.89 J	1.5 J

TABLE 7-1 SVOA (Continued)

EXCAVATION 7-1 SVOA REMEDIAL ACTION SOIL SAMPLE RESULTS
 PARCEL B CONSTRUCTION SUMMARY REPORT ADDENDUM
 HUNTERS POINT SHIPYARD, SAN FRANCISCO, CALIFORNIA

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Station Number:	Analyte	1997	2000	0701N7J	
Sample Number:		ROD	ESD	0701N7J2	
Sample Depth (feet bgs):		Goal	Goal	8.25	
Sample Date:		(mg/kg)	(mg/kg)	12/07/00	
SVOA (mg/kg)	PYRENE	123	2300	8	U

- Notes: Strike through indicates sample was removed by excavation.
 Chemicals of potential concern indicated by bolded analyte name.
 Levels exceeding 2000 ESD or total TPH cleanup goal indicated by bolded concentration. [Table 4-1](#) includes a list of data qualifier definitions.
- bgs Below ground surface
 - ESD Explanation of significant differences
 - mg/kg Milligrams per kilogram
 - NA Not analyzed
 - ROD Record of decision
 - TPH Total petroleum hydrocarbons