



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

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San Francisco, CA 94105-3901

N00217.003692
HUNTERS POINT
SSIC NO. 5090.3

December 22, 1997

Mr. Richard Powell
Mail Code 1832
Engineering Field Activities West
900 Commodore Drive
San Bruno, CA 94066-2402

**SUBJECT: DRAFT FINAL PARCEL E REMEDIAL INVESTIGATION REPORT,
HUNTERS POINT NAVAL SHIPYARD**

Dear Mr. Powell:

The Environmental Protection Agency (EPA) has completed review of the subject document. Overall, the Navy did a good job of addressing EPA's comments on the Draft RI report. We do have some minor comments included in the attachment. If you have any questions regarding these comments, please call me at (415) 744-2387.

Sincerely,

A handwritten signature in cursive script that reads "Sheryl Lauth".

Sheryl Lauth
Remedial Project Manager

cc: Mr. Chein Kao, DTSC
Mr. David Leland, RWQCB
Mr. Jim Sickles, Tetra Tech EMI
Ms. Luann Tetirick, Navy
Ms. Karla Braesemle, Weston

**COMMENTS ON PARCEL E
REMEDIAL INVESTIGATION
DRAFT FINAL REPORT
HUNTERS POINT SHIPYARD**

NEW COMMENTS

1. **Table of Contents.** The titles of Figures 1.3-3 and 3.7-4 do not match the Table of Contents.
2. **Figure 4.1-30.** The TPH-d in groundwater contour lines do not match the contour lines in the new Figure 4.27-4. Please update Figure 4.1-30 to match Figure 4.27-4.
3. **Figure 4.27-5.** The TPH-mo groundwater contour lines along the south-western side of the site do not appear to be based on sampling data. These contour lines should be dashed. The contour lines more likely extend into IR-01/21 as seen in Figure 4.27-4. The contour lines also do not match the contour lines on the parcel wide figure (4.1-32). Please revise Figure 4.1-32 to match Figure 4.27-5.
4. **Appendix R, Section 4.12.3.2, p. 4-521.** The table located on this page incorrectly lists the concentration units as $\mu\text{g/L}$ instead of $\mu\text{g/kg}$.
5. **Appendix R, Section 4.12.4.1, p. 4-531.** Concentrations of copper, lead, and zinc were detected at concentrations exceeding HPALs at the 2.25 foot sample at PA36B006 and at the 3.75 foot sample at PA36MW03A suggesting that sandblast grit may have been disposed of in these areas. Please update the text accordingly.
6. **Appendix R, Section 4.13.4.1, p. 4-585.** Copper, lead, mercury, and zinc concentrations exceeding soil HPALs had similar distributions, indicating that sandblast grit is a potential source of metals contamination. Please update the text to indicate the areas where sandblast grit is a potential contaminant source.
7. **Appendix R, Section 4.14.4.1, p. 4-649.** A discussion of product saturated soil was to be added to this page in the Parcel D Draft Final Report (See p. 14 of Response to EPA Comments on the Parcel D Remedial Investigation Draft Final Report). Please include the information on product saturated soil.

Copper, lead, mercury, and zinc concentrations exceeding soil HPALs had similar distributions, indicating that sandblast grit is a potential source of metals contamination. Please update the text to indicate the areas where sandblast grit is a potential contaminant source.

RESPONSES TO COMMENTS

SECTION 3.8 COMMENTS

1. **Comments 9 and 17.** The anomalous nature of the high TDS value needs to be discussed in the text to avoid future confusion.
2. **Comment 18.** A note needs to be added to Figure 3.8-8 stating that the TDS values are maximum concentrations (except for the IR01MW43A anomaly).

SECTION 4.1 COMMENTS

1. **Comment 11.** This change was not made to the text as discussed in the response.
2. **Comment 14.** It is unclear why the additional data analysis presented in the comment response was not integrated into Section 4.1.2. This information should be included in the main text, not just in the comment responses where it may not be seen by most readers. The extent of total Aroclor contamination must be carried forwarded to the FS.
3. **Comment 17.** It is unclear why the discussion of TPH-mo horizontal concentration trends at IR-13, IR-39, and IR-56 were removed from the text.

SECTION 4.2 COMMENTS

1. **Comment 8.** The text was not changed as indicated in the last sentence of the response. Also, if sandblast waste was disposed of outside the debris zone, then there is a correlation between hazardous waste disposal and the extent of copper and lead detected in soil, even though this sandblast waste disposal occurred outside the debris zone.
2. **Comment 17.** Text describing the distribution of samples that contained arsenic or nickel at concentrations exceeding the HPAL was not found (see the last sentence of the comment response). Please add the additional text or indicate where it was inserted.

SECTION 4.3 COMMENTS

1. **Comment 8.** The text was not revised as stated in the comment response. Please provide the revised text.

SECTION 4.6 COMMENTS

1. **Comment 1.** The text was not revised as stated in the comment response. It is important to cite the correct capacity of the ponds. Please revise the text.

2. **Comment 2.** According to the text on p. 4-475 (paragraph 3), Triple A "allegedly transported mixtures of waste oil, solvents, bilge water...". Solvents should be added to the list of potential sources.

SECTION 4.7 COMMENTS

1. **Comment 7.** The extent of PCBs in the vicinity of test pit IR04TA07B was drawn based solely on the detected level of PCBs in that test pit and in test pit IR01TA07A, located west-northwest of IR04TA07B. No samples were collected south of these two locations, so the extent of PCBs extending southwest from IR04TA07B into IR01/21 is speculation. It should also be noted that the detected concentration of total PCBs is 370,000 $\mu\text{g}/\text{kg}$, more than twice the detected concentration of Aroclor 1260. It will likely be necessary to collect more samples to define the extent of PCBs in this area during remedial design.

SECTION 4.8 COMMENTS

1. **Comment 2.** The text was not revised as stated in the comment response. Please provide the revised text.

SECTION 4.11 COMMENTS

1. **Comment 6.** The presence of floating product on the groundwater table is a significant feature of this site and as such needs to be discussed in the conclusions section (4.11.7). Add a discussion of the floating product to Section 4.11.7.

SECTION 4.20 COMMENTS

1. **Comment 3.** The real issue is whether there is sufficient data to define the extent of contamination for the FS (i.e., how much soil would have to be excavated to clean up this site). EPA does not believe that the data is sufficient to accurately estimate the volume of soil that might require remediation, however, this information could be gathered during design (or during remediation, if the Navy is prepared for the possibility that the volume of soil to be remediation might be much greater than estimates based on single point samples, spaced 200 to 300 feet apart).

SECTION 4.24 COMMENTS

1. **Comment 1.** The EPA disagrees with the comment response. The scale of Figure 3.1-1 is too small to be useful in locating the fuel and storm drain lines on Figure 4.24-1.

SECTION 4.26 COMMENTS

1. **Comment 6.** Figures 4.27-4 and 4.27-5 do not support this response. These figures show a single plume. Also, the part

of the original comment about the pattern of the plume being biased because no samples were collected along the western edge of the site was not addressed.

2. **Comment 7:** The new figures (4.27-4 and 4.27-5) and p. 4-1344 contradict the last sentence of paragraph 5, p. 4-1330. Please revise p. 4-1330, paragraph 5, so that it is consistent with the rest of the section.

SECTION 5.0 COMMENTS

1. **Comment 11.** A discussion of the soil and groundwater data gap that was due to the detection of PCE in IR12B001 (Section 4.10, Comment 4) has not been added to Section 5.1.9. This data gap was also identified in Section 5.6. The site summary should discuss the data in enough detail so that a reader has some idea why the data gap was identified.
2. **Comment 12.** It is unclear why the presence of vanadium is attributed to sandblast waste. Vanadium is frequently found in petroleum products, so the presence of this metal is more likely associated with petroleum releases from the former service station.
3. **Comment 36. IR-04.** see comment 1. under Section 4.7.

IR-40. Please clarify whether there is any soil in the vicinity of the former transformers.

IR-52. see comment 1. section 4.20.

APPENDIX C SPECIFIC COMMENTS

1. **Comment 1.** This change was not made; the text still states that barometric pressure was measured.
2. **Comment 3.** The text in section 1.2.2 was not modified as indicated in the comment response.
3. **Comment 7.** The response does not address the original comment. Please address why and when the Bouwer and Rice method can be used for a confined aquifer, and define the type and magnitude of error(s) associated with using this method for a confined aquifer. This information should both be discussed in the response and incorporated into the Appendix C text.
4. **Comment 8.** The response did not address the original comment. Please discuss conditions under which methods designed for analysis of pumping tests in confined aquifers can be used for unconfined aquifers. Also discuss errors that will result when these methods are used for unconfined aquifers. This information should be included in the response and incorporated into the Appendix C text.

5. **Comment 10.** Unless this information has been presented in another document, it should be supplied in the Parcel E RI Report. If the information has been published, cite the document in which it was published.
6. **Comment 13.** The response did not address the original comment. The response and text in Appendix C should address the following questions: Are the lithologic logs correct for these wells? Were the slug tests and analyses performed correctly for these wells?

APPENDIX F COMMENTS

1. **General Comment 1.** It will be important for EPA and the Navy to agree as to what a validation study would entail. In addition, data collection and evaluation should lead to cleanup numbers that could be used for these areas of the site, rather than a determination of the potential for health risks (as the Navy has noted, the ecological risk assessment has already established that risks to terrestrial receptors exist).

These discussions should focus on decision-making for the areas of the site that will not be excavated or capped. This seems appropriate, given that the screening assessment suggests that risks to terrestrial receptors may possibly occur. Major revisions to the screening assessment approach are unlikely to change this outcome, therefore effort to this end does not seem warranted.

2. The Navy should review the appendix one more time to ensure that the stated text changes were actually made. As an example, the Navy stated it would remove aluminum from the list of COPCs that were dropped from the assessment because they were essential nutrients. However, review of page F-12 (Section 4.2) shows that aluminum is still included in the essential nutrient list.

APPENDIX O SPECIFIC COMMENTS

1. **Comment 9.** Page O-46, paragraph 4, of the Draft Final report is not complete. Please provide the completed text.
2. **Comment 10.** Full citations were not provided as indicated in the comment response. Please provide an updated References section.

APPENDIX Q SPECIFIC COMMENTS

1. **Comment 3.** This correction was apparently not made to the text, because updates for Appendix Q were not supplied to EPA.

COMMENTS FROM DR. STRALKA REGARDING THE RISK ASSESSMENT

1. The use of the default value for Cr^{+6} of 0.99% is not substantiated. We have previously set up a clear way of incorporating the speciation results into the RI, as in parcel B, the highest proportion of $\text{Cr}^{+6}/\text{Cr}_{\text{total}}$ will be used as a health protective determination for all those samples where speciation was not done. For those samples where speciation was done, the analytical results are to be used. This process had been agreed to by the Navy and regulators during Parcel B and should be carried through to all the parcels.
2. Several of the comments refer to a previous agreement that the screening values used, Region 9 PRG's, are frozen in time to the 1994 tables. We must use the most current toxicity evaluations at the time of the report, anything less is unacceptable.