

Arc Ecology

Environment, Economy, Society, & Peace

June 1, 2004

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Re: Draft Addendum to the Final Petroleum Hydrocarbon Corrective Action Plan, Parcel B, Hunters Point Shipyard, San Francisco, California, dated April 14, 2004

Dear Mr. Forman:

Thank you for providing Arc Ecology with the opportunity to review the *Draft Addendum to the Final Petroleum Hydrocarbon Corrective Action Plan, Parcel B, Hunters Point Shipyard, San Francisco, California*, dated April 14, 2004. Arc Ecology has the following comments:

- 1) Section 1.1 *Scope and Purpose* states, “The scope of this addendum is to re-evaluate TPH sites identified in the Final Petroleum Hydrocarbon CAP for Parcel B (Tetra Tech 2001b) as well any additional TPH sites identified by using the revised TPH screening criteria.” Based on the addendum, it is not clear how and/or why the total petroleum hydrocarbon (TPH) screening criteria have changed from those set forth in the final corrective action plan (CAP). Therefore it would be helpful to the community reader to have the original CAP criteria presented and the addendum changes clearly stated and compared.
 - a. Please revise the addendum to include a table summarizing the screening criteria as set forth in the final CAP, the screening criteria set forth in this CAP addendum, and the rationale for the revisions, including associated health risks.
 - b. Please revise all 2.1 *TPH Criteria* subsections to specify if each screening criterion is being revised relative to the CAP and, if so, the rationale for the revision. The rationale should include an explanation of how the revised screening level was derived and should cite any references used as a basis for the determination.
 - c. The CAP addendum repeatedly references the Navy’s February 2004 “Concurrence Letter for Revised TPH Criteria at Hunters Point Shipyard, Hunters Point Shipyard, San Francisco, California.” Please include a copy of this letter as an appendix or attachment to the CAP addendum.

- d. Re-evaluation of TPH suggests that the recommendations for individual sites may have changed, but this information is not provided. Please include information on the previous site recommendations under the CAP. For example, a summary table of the original CAP recommendations and the CAP addendum recommendations could be provided for easy comparison.
- 2) Arc Ecology recognizes that the soil aesthetic screening criteria presented in the CAP addendum are more conservative (i.e., more protective of human health and the environment) than those presented in the CAP and that the highly subjective criteria of “visual and olfactory inspection” have been removed. However, the original CAP stated that soils exceeding the soil aesthetic criteria would be removed. The CAP addendum Section 2.1.3 states that deed restrictions may be used to address soil aesthetic criteria exceedances. What is the rationale for this change? While the screening criteria are more conservative, how does the use of deed restrictions rather than removal or remediation fully address earlier community concerns, since deed restrictions could, in effect, simply leave the TPH of concern in place, as is?
- 3) Section 2.1.3 *Soil Aesthetic Criteria* states, “Any future deed restrictions applied to TPH sites exceeding the aesthetic criteria will result in a reevaluation of these sites.” Please explain what a “reevaluation” will entail.
- 4) It is unclear how sites where TPH is mingled with hazardous substances exceeding CERCLA screening criteria are being dealt with. Section 2.1.1 *CERCLA Exclusion* states that sampling locations where concentrations of CERCLA hazardous substances exceeding screening criteria are intermingled with TPH at concentrations exceeding either the soil source or aesthetic criteria are recommended for evaluation under the CERCLA program and are not evaluated for TPH in the addendum. However, this statement appears to be inconsistent with the addendum’s actual recommendations and conclusions. For example, IR24 Fuel Line A Area 4600B67 had TPH intermingled with a CERCLA hazardous substance (benzo(a)pyrene), yet the Navy recommends no further action for TPH.
- a. In sites where TPH is mingled with hazardous substances exceeding CERCLA screening criteria, is the TPH being screened according to the criteria in the TPH CAP addendum and the site is being referred to the CERCLA program for evaluation of the CERCLA hazardous substances? Or is the site being referred to the CERCLA program for evaluation and possible action on both CERCLA hazardous substances and TPH? Please clarify the process, as explained in Section 2.1.1, and ensure that all recommendations conform with the screening process.
- b. Also, if these sites are referred to the CERCLA program for evaluation and possible action on both CERCLA hazardous substances and TPH, please include in Section 2.1.1 a statement as to what screening criteria would be used for TPH being addressed through the CERCLA program.
- 5) The Navy recommends excavation or additional soil sampling at several sites. When will these activities take place and where will the results be documented?
- 6) Section 3.4 *IR-24*
- a. Fuel Line B Area, Building 130: The addendum states that samples from 0249B0A did not exceed aesthetic soil criteria. This is accurate only because the criteria

specify samples from within 10 feet below ground surface. However, a sample taken at 11.75 feet below ground surface had a TTPH of 1,983 mg/kg, primarily comprising TPH-d. In addition, this sample appears to be discussed under both the discussion of Fuel Line B Area (p.20, paragraph #3) and the discussion of Fuel Line C Area (p.20, paragraph #5).

- b. The Navy recommends no further action at Fuel Line B Areas 460BC41, 460BC42, 460BC43, and 4600B76 and Fuel Line C Areas 4600B78 and 2408BC1 because the areas were excavated and backfilled with clean fill to a depth of 10 feet below ground surface. Most of the samples were taken from three to five years ago. Given that the TTPH concentrations at the bottom of the excavations exceeded soil source criteria at that time, has the Navy sampled the backfill in those locations to confirm that the petroleum hydrocarbons have not migrated into the backfilled area?
 - c. Fuel Line B Area IR24GB006B: The Navy recommends excavation of material around IR24GB006B, where TTPH samples exceeded soil source criteria.
 - i. Has the source of the high TTPH concentrations at IR24GB006B been identified and removed?
 - ii. How has the Navy determined the lateral extent of the proposed excavation?
 - iii. The Navy states that it recommends extending the excavation to the seawall. Hasn't proximity to the sea wall been a problem in previous excavations? If so, how does the Navy intend to address previous problems in order to extend this excavation to the sea wall?
- 7) Section 3.5 *IR-26*: The Navy recommends resampling locations IR26B033 and IR26B034, yet recommends no further action for IR26B026 even though the TTPH was measured at higher levels at IR26B026 than at IR26B033 or IR26B034. Please explain the rationale for the difference in approach, since no reasoning is given for the no further action recommendation for IR26B026.
- 8) Section 3.6 *IR-62*
- a. Section 3.6.2.2 *IR-62 Soil Source Criteria* states, "TTPH concentrations detected in soil samples collected from IR-62 did not contain TTPH concentrations exceeding the soil source criteria." However, the third paragraph of section 3.6 states that a soil sample from the "clean" backfill in the footprint of removed UST S-135 had TTPH levels of 4,340 mg/kg (UT02B007, 4.75 ft bgs, 3/29/2001), but that the Regional Water Quality Control Board has approved closure of this site. Please revise section 3.6.2.2 to accurately reflect this information.
 - b. Section 3.6.2.4 *IR-62 Groundwater Criteria*: While the most recent groundwater samples did not exceed groundwater criteria, the August 1994 and June 1995 data show great variability in the TPH levels, including a June 1995 TTPH of 23,640 µg/L (including TPH-g of 17,000 µg/L and TPH-d of 6,000 µg/L) and another sample taken the same day with a TTPH of 6,380 µg/L. These measurements were preceded almost a year earlier by significantly lower TTPH levels of 4,040 µg/L and 6,000 µg/L. To what does the Navy attribute such variable TTPH levels, and, given that history of variability, how can the infrequent data samples collected since then

be interpreted to definitively demonstrate adequate degradation of the petroleum hydrocarbon plume in this area?

Minor comments:

- 9) Section 3.3 *IR-23* mentions that another UST was removed near Berth 64 at IR-23 during Parcel B remedial actions conducted in 1999 and references Figure 4. However, Berth 64 is not shown on Figure 4.
- 10) When referencing a specific soil excavation or removal of an underground storage tank, please specify the date of the action. This information is provided inconsistently in the report. In general, it is helpful to have the information for reference when looking at changes in TPH levels that may be associated with degradation after source removal.

Arc Ecology appreciates having the opportunity to review this document. If you have any questions about our comments, please contact me at (415) 495-1786.

Sincerely,

Cian B. Dawson
Staff Scientist

Cc (electronic):

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