UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

March 24, 2994

Mr. Bill Radzevich
Remedial Project Manager
Mail Code: T4A1WR
Western Division
Naval Facilities Engineering Command
900 Commodore Drive
San Bruno, CA 94066-2402

Dear Mr. Radzevich:

We have reviewed the Draft Parcel D Site Inspection Report for the Hunters Point Annex Superfund site. We are providing the attached comments to you. These comments include recommendations for some additional sampling which should be addressed in a work plan addendum. They also point to the need to: 1) assess whether the data collected for Parcel D will be adequate for the preparation of the Parcel RI/FS, 2) give more focus to ecological issues, and 3) more thoroughly address hydrogeologic conditions.

Our comments on Parcel D are similar to those on Parcels B and C, and point to important issues which require resolution at this time, in order for us to be in agreement on what the scope of the Parcel RI's will be. We would like to meet with you to discuss our comments and concerns on these reports. This could be done now or after the Parcel E review is completed. You may contact me at (415) 744-2394.

Sincerely,

Roberta Blank
for **RAYMOND SEID**
Remedial Project Manager
Federal Facilities Cleanup Office

Attachments:
(1) Comments prepared for U.S. EPA by Bechtel Environmental Inc.
(2) Memorandum from Matthew Hagemann, Hydrogeologist, 3/16/94
(3) Memorandum from Alydda Manglesdorf, 3/23/94

cc: Cyrus Shabahari, DTSC
Barbara Smith, RWQCB
Amy Brownell, SFDPH
Ray Ramos, BEC, NAVFAC WESTDIV

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RECEIVED

Comments on the U.S. Navy's
Draft Parcel D Site Inspection Report
Naval Station Treasure Island, Hunters Point Annex, San Francisco, California
Prepared by Bechtel Environmental Inc., for the U.S. Environmental Protection Agency

General Comments

1. Associated with several of the PA sites are separate underground storage tank (UST) closure program sites. The SI describes the proposed scope of work for additional investigation at each of the UST sites. The SI should provide supporting data used to develop the proposed UST scope of work at each UST closure site in Parcel D.

2. The Navy should describe in more detail how risk levels for the commercial receptors will be used to determine the limits of exploratory excavations.

3. The Navy should update the status of the south east portion of the Regunning Pier (area bounded by Berths 16 through 20). Is a preliminary assessment planned for this area?

4. There are several buildings in Parcel D not included in this SI. The SI report should include a brief explanation of why they were not included in the SI.

5. In proposing additional work, the SI report does not assess whether this additional work is sufficient to prepare a parcel remedial investigation (RI) report. The Navy should include an assessment whether this additional data and existing data are sufficient to prepare a parcel RI report, public health and environmental evaluation, and feasibility study.

6. A significant portion of Parcel D is bordered by San Francisco Bay. In some parts of Parcel D the facility boundary extends several hundred feet into San Francisco Bay. There are many potential pathways of contaminant migration, either from Parcel D contaminant sources or through Parcel D from other Parcel sources which may contribute to risk to those biota which reside in or rely on the bay and/or its shorefront. For example, there are storm drains and potentially sewer lines discharging to the bay from Parcel D which have a history of illicit contaminant disposal to them. There are steam lines, storm drains, sewer lines, and utilidors which may act as natural conduits transporting contaminated surface water or groundwater from contaminant sources to areas of communication with the bay. And, there is a shallow tidally-influenced aquifer to which Parcel D source contaminants may be transported via infiltration.

The RI work plan should be integrated with the Ecological Risk Assessment, where possible. It should identify criteria to screen on-shore data for its potential to cause ecological risk to the intertidal and near-shore ecosystems. And, it should include sampling locations appropriate for determining the extent to which shore-based contaminants have migrated to the bay.

Specific Comments

1. Section 2.2, "Previous Investigations" states that waste chemicals from building sites 411, 351, 351A, 366, 530, 435, 436 and 302 were disposed of in the storm drain system. The type and quantity of waste chemicals thought to have been disposed of at these locations should be identified, as well as the time period during which disposal is suspected to have occured.

2. Section 2.4.2, "Geology" and Section 2.4.3 "Hydrogeology." Maps showing surficial geology and a vertical geologic cross-section through the parcel would greatly enhance the clarity of this discussion.

3. Section 3.3, "Data Evaluation Methods" states that interim ambient levels (IALs) were used for inorganic contaminant comparisons. The IALs used in the SI were not approved by the agencies. The Navy should ascertain changes to its recommendations which might arise from a comparison of the SI data to the new IALs which were recently approved in concept.

4. Section 5.1, "PA-45 Steam Lines." Historically the steam lines may have been used to transport waste oil and PCB-containing oils. The detection of total oil and grease in the steam lines confirms this suspected historical use of the steam lines. Table 4 indicates that in addition to several other analyses, steam line samples were analyzed for CLP pesticides/PCBs and TPH as gasoline. Results of these analyses are not reported in Appendix F. The SI should state whether the oil within the steam lines contains PCBs.

5. Section 5.1, "PA-45 Steam Lines." The fifth bulleted item under Summary of Results states "Oil in the utilidor along Manseau Street apparently did not migrate west of Cochrane Street because of sand backfill (possibly sandblast material) in the utilidor. As a result, oil may have migrated back into the utilidor vaults along Cochrane Street..." This statement is confusing and its significance is not apparent.

6. Section 5.1, "PA-45 Steam Lines." It is not clear whether the petroleum products and PCBs detected in soils around the steam pipe lines are thought to have been released from the steam pipe lines. The SI should include a discussion of whether a release to the environment from the steam pipe lines has occurred.

7. Section 5.1, "PA-45 Steam Lines" states that the proposed RI field activities will include draining the steam lines, removing oil-containing steam lines, and removing accessible friable asbestos. However, Table 6, Proposed Work Plan, PA-45 Steam Lines, indicates that these activities will not be included in the RI. Table 6 should specify which steam pipe lines are proposed for the RI activities.

8. Section 5.3.1, "Storm Drain System." One of the stated objectives of the Storm Drain System study was to evaluate whether storm drain contaminants have been released to San Francisco Bay. Based on the storm drain sediment analytical results, a potential for contaminants to have been released to San Francisco Bay from the storm drain system exists. Storm drain outfalls are considered potential point source locations. As discussed in General Comment 6, recommendations for the proposed RI activities should include sampling and analysis of bay sediments around storm drain outfalls. Additionally, sampling and analysis should include storm water outfalls.

9. Section 5.3.1, "Storm Drain System." The Navy recommends that contaminated sediments be removed from the storm drain system. It is not clear whether "contaminated sediments" refers to sediments with any detectable concentrations of contaminants or if it refers to a specific level. The term "contaminated sediment," as applied in this context, should be defined.

10. Section 5.3.1, "Storm Drain System." Contaminants were detected in sediments from all the sampled storm drains and catch basins described in PA-50. Plates 12 and 13 indicate that additional storm drains within Parcel D are present which were not included in the PA-50 the sampling program. Based on existing storm drain sediment analytical data, it is likely that the additional storm drains will contain sediments with detectable concentrations of contaminants. The recommended sediment removal program should include a study of any remaining storm drains and catch basins in Parcel D.

11. Table 2 indicates the presence of one transformer at Building 414 and three transformers at Building 505. Potential releases from these transformers were not evaluated.

12. Table 2 indicates the presence of two transformers at Building 400 and that one of these transformers was observed to be leaking. However, further investigation of this potential point source release was not performed. The Navy should provide supporting rationale (i.e., protective of human health and environment) for not recommending additional investigation of this leaking transformer.

13. Section 5.4, "PA-51, Former and Current Transformer Sites." Table 11 indicates that at the South Pier, Substation O, abundant staining was observed on the concrete at the former transformer location and throughout the substation area. However, sampling was not performed because the area is located over the bay. This location should be considered as a potential point source for a PCB and oil release to San Francisco Bay. Appropriate sampling and analysis should be performed. As discussed in General Comment 6, following further assessment of this leaking transformer, the data should be integrated with the Ecological Risk Assessment.

14. Section 6.3.1, PA-33, "North Portion (Buildings 302, 302A, and 304)" states that Section 5.3.1 describes the proposed additional investigation to be performed at storm drain location PA33SW12. This proposed work is not described in Section 5.3.1.

15. Section 6.3.1, PA-33, "South Portion (Buildings 364, 411, and 418)." Aroclor 1254 was detected in soil at sample point PA33BO53 at concentrations above the Health Based Limits (HBLs). The Navy states that this is not a point source release and recommends no further investigation. The Navy should provide supporting rationale (i.e., protective of human health and environment) for not recommending additional investigation other than the determination made that the contamination was not from a point source.

16. Section 6.4, "PA-34, (Buildings 351 and 366)" Aroclor 1260 was detected at sample point PA34SS14 at a concentration above the HBLs. There is no discussion or recommendations regarding this sample point. The Navy should provide supporting rationale (i.e., protective of human health and environment) for not recommending additional investigation at this sample point.

17. Section 6.6.3 "South Portion (Buildings 406, 413, and 414)" states that a soil sample from soil boring PA36B015 was found to contain TCE at concentrations above the HBLs. However, Plate 36 indicates that TCE was not detected at PA36B015.

18. Section 6.6.3 "South Portion (Buildings 406, 413, and 414)" states that a point source release of TCE and other organics to shallow soil and groundwater near building 406

is indicated. The other organic compounds included in the point source release should be identified.

19. Section 6.7, "PA-37 (Buildings 401, 435, and 436)" states that storm drain sediments at PA37SW01 are a potential contaminant source and that storm drain system recommendations are presented in Section 5.3.1. However, Section 5.3 does not include recommendations for PA37SW01.

20. Section 6.7, "PA-37 (Buildings 401, 435, and 436)." Surface soil sample PA37SS09 contains total oil and grease and Aroclor 1260 at concentrations above HBLs. The Navy considers this a point source release of total oil and grease and recommends further investigation. There is no discussion as to whether this is a potential point source release of PCBs and there are no recommendations to investigate the PCBs. The Navy should provide supporting rationale (i.e., protective of human health and environment) for not recommending further investigation of the apparent point source release of PCBs.

21. Section 6.7, "PA-37 (Buildings 401, 435, and 436)." Surface soil sample PA37SS04 contains total oil and grease above HBLs. The Navy considers this a nonpoint source release and recommends no further action. The Navy should provide supporting rationale (i.e., protective of human health and environment) for not recommending additional investigation other than the determination made that the contamination was not from a point source.

22. Section 6.10, "PA-44 (Buildings 408, 409, 410, 438, and a Large Unnumbered Metal Shed)." A composite of sediments from storm drains in the vicinity of Building 408 (PA44SW02) was found to contain detectable concentrations of PCBs, petroleum hydrocarbons, and metals. Plate 44 identifies a single storm drain, PA44SW02, as the composite sample point. All the storm drains included in the composite sampling should be identified on Plate 44. Analytical data from PA44SW02 suggest a potential for the individual storm drains included in the composite sample to contain PCBs, petroleum hydrocarbons, and metals at concentrations above HBLs. Discrete sampling of sediments from these storm drains should be performed to identify potential point source releases. These storm drains should then be considered for the RI activities described in Section 5.3.1.

23. Section 6.11, "PA-53 (Buildings 525 and 530)." Antimony was detected at nine soil sample locations at concentrations above HBLs. Sample depths ranged from 1 foot to 10.25 feet below ground surface. The Navy recommends that an additional soil boring be drilled to verify the presence of antimony in soil. The data suggests that

this area may be a point source of antimony. Additional data should be collected to characterize the vertical and lateral extent of antimony in soil.

24. Section 6.11, "PA-53 (Buildings 525 and 530)." Three groundwater monitoring wells, PA16MW17A, PA16MW16A, and PA16MW18A, were installed in the vicinity of Buildings 525 and 530 and were sampled in 1992 during PA-16. A fourth groundwater monitoring well, PA50MW08A, was installed in this same area during PA-50. The groundwater analytical data for these wells are summarized on Plate 45. However, the data are not included in Appendix F.

25. Section 6.11, "PA-53 (Buildings 525 and 530)." Inorganic groundwater analytical results for monitoring wells PA50MW08A and PA16MW17A are summarized on Plate 45 as "below IALs." Was antimony detected in groundwater at these locations below its IAL? Given that antimony was not reported to have been detected in groundwater collected from nearby monitoring wells PA16MW16A and PA16MW18A, any concentration of antimony in groundwater collected from monitoring wells PA50MW08A and PA16MW17A should be evaluated as a potential point source release. The SI should recommend additional groundwater sampling and analysis for antimony at monitoring wells PA50MW08A, PA16MW17A, PA16MW16A, and PA16MW18A.

26. Section 6.12, "PA-55 (Building 307 and Surrounding Area)" Reportedly, a former site tenant, Triple A, filled underground vaults with hazardous materials and then paved over the vaults. The SI states that these vaults were located in the area west of Building 307. However, the Navy conducted a geophysical survey and subsequent exploratory excavations east and south of Building 307. The reported location (relative to Building 307) of the suspected underground vaults should be reviewed. If the suspected vault area is confirmed to be west of Building 307, a geophysical survey and exploratory excavations for the vaults should be conducted west of Building 307.

The following comments were sent to the Navy on January 3, 1994 by the EPA but were apparently not addressed in the SI.

27. Provide the rationale for concluding that chloroform detected in the groundwater at PA32MW04A (PA-32) is not the result of a point source release. Given the past findings of EMCON for that well and the fact that chloroform was not detected in any soil borings or in the only other well nearby (PA50MW07A), we cannot understand how it was concluded that chloroform is not from a point source.

28. In the south portion of PA-33, TCE is detected in the shallow soil. Although the concentrations are below HBLs, this is but a single sampling point. Additional investigation (e.g., soil vapor gas survey) is warranted to pinpoint the hot spots of TCE in that area before utilizing the air flux chambers. Also, specify what criteria will be used to determine the number of locations and chambers.

29. For PA-34, Table 1 (Table 2 in the February 22, 1994 SI report) indicated drums of various chemicals were stored in and around Building 366 and that releases from the drums were evident. Was a response action taken at this site or do the leaking drums still exist? What specific activities is Christian Engineering currently doing at this drum location.

30. We understand that Building 274 in PA-35 involved radiation-simulation in decontamination training. Confirm that this building is included in the facility-wide radiological investigation. Also, PA35SS06 shows levels of Aroclor 1260 exceeding HBLs at Building 306, however no follow-up actions are shown on the work plan. Specify follow-up actions.

31. Where arsenic is detected above HBLs at PA36MW01A and PA36B009, and where methylene chloride is detected above HBLs at PA36B003, sound rationales (i.e., protective of human health and the environment) are needed to dismiss further investigations of these areas other than the determination that they were not point source releases.

32. In the south portion of PA-36, specify in more detail how groundwater data will be re-evaluated in the second round of Parcel D groundwater sampling in light of the heptachlor contaminant finding. Also, specify the criteria used for determining the number and locations of the air flow chambers at PA36B012.

33. Table 1 (Table 2 in the February 22, 1994 SI report) indicated the possibility of a sump being present at Building 435 in PA-37. Account for whether this sump existed or not. If so, did the site inspection work account for potential contaminants in and around the sump? Also, provide the supporting rationale for the determination made that the TOG exceeding HBLs (6,700 ppm) found at PA37SS04 is not a point source release.

34. Table 1 (Table 2 in the February 22, 1994 SI report) indicated the presence of a transformer at Building 500 in PA-38. Account for any potential releases from this transformer.

35. In PA-39, levels of Aroclor 1260 were detected at levels exceeding HBLs at PA39B004 and PA39B005. Provide additional supporting rationale (i.e., protective of human health and environment) for not recommending additional investigation other than the determination made that the contamination was not from a point source.

36. We understand that the investigation of the PA-16 area adjacent to PA-53 will be redone for the full chemical sweep because previous data were deemed to be unreliable. This understanding is not indicated in the discussion of PA-16 as it effects PA-53.

37. Benzo(a)pyrene exceeds HBLs at sample point PA55TA07. The Navy should provide additional supporting rationale (i.e., protective of human health and environment) for not recommending additional investigation other than the determination made that the contamination was not from a point source.

38. Limited excavation of contaminated soils may be required at Tank S-508.

39. For Tanks S-711 through S-714, some limited excavation of contaminated soils may also be warranted primarily due to the up to 17,000 ppm TPH gasoline as the up to 7,500 ppm TPH diesel found in soil.

3/16/94

MEMORANDUM

SUBJECT: Review of the Hunter's Point Parcel D Site Inspection Report

FROM: Matthew Hagemann, Hydrogeologist
Technical Support Section (H-9-3)

TO: Roberta Blank, RPM
Hunter's Point (H-9-2)

Ray Seid, RPM
Hunter's Point (H-9-2)

Stated objectives of the February 22, 1994 Draft SI include the assessment of site-specific hydrogeologic conditions and, where groundwater contamination is evident, evaluation of groundwater flow direction and gradient (Section 1.1). In my review of the SI, I found these objectives to be unaddressed. Instead, the hydrogeologic characteristics of the site are described only in qualitative and general terms.

The hydrogeologic information in the Parcel D SI is identical to that included in the Parcel B and C SIs. Therefore, the thrust of my comments in the review of the Parcel D SI are the same as general comments made in the review of the Parcel B and C SIs (see memos dated February 28 and March 11, 1994). In short, I recommend the following:

(1) Determination of tidal influence on groundwater flow rate and direction. This determination should be made using mean hydraulic gradients as described by Serfes (1991).

(2) Quantification of the fundamental characteristics of the aquifers underlying Parcel D, including hydraulic conductivity, transmissivity, porosity, and storativity.

(3) Adherence to the format of the *Recommended Content and Presentation for Reporting Hydrogeologic Data During Site Investigations* (CBEC, 1993). (The CBEC report recommends extensive quantification of hydrogeologic characteristics during SIs.)

Other objectives of the SI as stated in Section 1.1 include the identification of contaminant migration pathways and the assessment of potential public health threats. Until the fundamental hydrogeologic information as outlined above is included in the SI for Parcel D, these objectives cannot be met.

References:

California Base Closure Environmental Committee, 1993. Recommended Content and Preparation for Reporting Hydrogeologic Data during Site Investigations. August 5, 1993.

Serfes, M.E., 1991. Determining Mean Hydraulic Gradient of Groundwater Affected by Tidal Fluctuations. Groundwater, vol. 29, no. 4, pp. 549 - 555.

cc: Doug Steele, H-9-3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

MAR 23 1994

MEMORANDUM

TO: Roberta Blank

FROM: Alydda Mangelsdorf

SUBJECT: Parcel D SI Report

I have reviewed the Parcel D SI Report for consideration of ecological issues. The following are comments which should be addressed before finalizing the SI report.

General Comments:

1. Parcel D data is assessed by comparing it to the Navy's Health Based Levels (HBLs) and Interim Ambient Levels (IALs) and for groundwater to the Maximum Contaminant Levels (MCLs), as well. Through this assessment, sites are identified for removal actions, further investigation, or no further action.

   Missing from the assessment is an evaluation of the data as compared to its potential to cause ecological risk to terrestrial receptors (including plants and animals, especially avian species), and most particularly, to aquatic receptors. Without an adequate screening evaluation of SI sites for their potential to harm ecological receptors, it may be the case that some sites which do not exceed HBLs but might exceed ecological criteria will be recommended for no further action and not included in the Remedial Investigation.

   The Parcel SI reports should re-evaluate the parcel data to determine if any of the sites exceed ecologically-based criteria and revise the recommendations and RI workplan outline accordingly. For groundwater which is in close proximity to the shore or surface water with the potential to reach to Bay (storm drains, sanitary sewer lines with poor integrity or connections to a storm drain, steam lines with poor integrity or discharges in the vicinity of the Bay, or surface impoundments with the potential to spill to the Bay), the more stringent of the Federal or State chronic marine water quality criteria should be used for screening purposes. For soils in close proximity to the Bay or sediments with the potential to reach the Bay, the more

stringent of the Federal or State Sediment Quality Criteria and NOAA's ER-Ls and ER-Ms should be employed as a screening mechanism. U.S. EPA is willing to discuss alternate ecological screening mechanisms with the Navy, if required.

Without screening of this sort prior to the RI phase, it will be incumbent upon the Navy to include in its Basewide Ecological Risk Assessment all the SI sites which were otherwise recommended for no further investigation. Should such a site then require remediation based on the Ecological Risk Assessment, the Feasibility Study, Proposed Plan, and Record of Decision process for the rest of the parcel, as well as the transfer of the parcel, may then be delayed. To avoid potential future delays, a screening of all SI data for their potential to cause ecological harm is advised at this stage.

2. Before finalizing the SI reports, all the SI data which was otherwise dismissed from further investigation under the RI based on its comparison to IALs should be re-evaluated using agency approved IALs.

3. All SI sample locations in which contaminants were detected and which might have the potential to migrate to San Francisco Bay either through surface runoff or groundwater transport should be included in the RI with additional sampling locations identified in the Bay itself as a means of determining the extent of contaminant migration.

4. Many SI data findings are dismissed from further consideration as part of the RI based on a judgement that they do not represent point source contamination. All levels of contaminants which exceed screening criteria--including ecologically-based criteria--should be considered for further investigation for the purpose of identifying a source, if possible, and characterizing the extent of contamination.

Specific Comments:

5. PA-50 includes lengths of sanitary sewer which run down Piers 2, 3, the Regunning Pier and the South Pier. The integrity of these lines should be assured before progressing to the RI.

6. PA-33 contains floor drains, sumps, floor vaults, etc. in which contaminants were detected. The potential for these contaminants to migrate to the Bay must be evaluated. For example, the Navy must determine if floor drains flow directly to the Bay, to Bay via a storm drain, to the Bay via a leaky sanitary sewer or to a septic tank or well maintained sanitary sewer. Sampling locations in the vicinity of potential Bay discharges should then be identified in the RI for the purpose of determining the

extent of contamination.

The rationale for compositing floor vault sediment samples should be included in the SI. RI samples of this sort should not be composited unless a convincing rationale is given.

7. PA-34 includes storm drains which give evidence of having received various solvents. The RI should include an investigation of the extent of contamination passing through this storm drain to the Bay.

8. PA-35 includes floor drains whose discharge location(s) are currently unknown. Future sampling should include sampling of Bay discharge points, should such points be identified.

   As above, the rationale for compositing floor drain sediment samples in PA-35 should be included in the SI. RI samples of this sort should not be composited unless a convincing rationale is given.

9. PA-36 and PA-37 includes sites from which nonpoint source releases have occurred. The Navy recommends no further action for these sites. However, the potential for nonpoint releases to impact ecological receptors can not be ignored. Non-point releases via surface water clearly represents a pathway which must be further investigated in terms of its potential to cause aquatic impact.

10. PA-38 includes measurements of Aroclor-1260 in the soil which have not been traced to a point source. Further investigation is warranted to determine the extent of contamination and the potential need for remediation.

11. PA-55 includes measurements of Benzo(a)pyrene in the soil which have not been traced to a point source. Further investigation is warranted to determine the extent of contamination and the potential need for remediation.