



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
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September 1, 2004

Mr. Thomas Macchiarella  
BRAC Operations, Code 06CA.TM  
Department of the Navy, Southwest Division  
Naval Facilities Engineering Command  
1230 Columbia Street, Suite 1100  
San Diego, CA 92101

**RE: Revised Draft Site Investigation Report, Transfer Parcel EDC-5, Alameda Point**

Dear Mr. Macchiarella:

EPA has reviewed the above referenced document, prepared by Bechtel Environmental, Inc. and submitted by the Navy to the agencies on June 30, 2004. This letter and enclosed final comments are a follow-up to the draft comments sent by EPA via e-mail to the Navy on August 30, 2004.

The SI Report did an excellent job of compiling a large amount of information and data from multiple sources, including EBS documents, removal actions and data gap sampling investigations. The information was tabulated and presented in easy to read and easy to cross walk format which greatly facilitated understanding EBS Parcel site characteristics and potential data gap problems. The risk assessment was done well and performed in accordance with the agreements reached by the BCT and provided a very conservative estimate of risk for the parcels with adequate data to support a risk assessment.

The major problem encountered in review of the SI Report is that there is little to no data available for some EBS parcels where past activities suggest that soil and/or groundwater contamination may be a problem. Without these data gaps being addressed, it is difficult to determine whether a parcel is suitable for transfer or whether it should be carried forward into a Remedial Investigation study. The enclosed comments contain a detailed list of EBS parcels in the EDC-5 SI with such potential data gap problems. We look forward to resolving these issues with you, and determining the most expeditious way to move forward with this SI Report.

Please call me at (415) 972-3029 to discuss this further.

Sincerely,

A handwritten signature in cursive script that reads "Anna-Marie Cook".

Anna-Marie Cook  
Project Manager  
Federal Facility Cleanup Branch

enclosure

cc list: Darren Newton, SWDiv  
Marcia Liao, DTSC  
Judy Huang, RWQCB  
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Karla Brasaemle, TechLaw Inc  
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Lea Loizos, ARC Ecology  
Jean Sweeney, RAB Co-chair  
Doug Biggs, APC

**EPA Review of the Revised Draft Site Inspection Report Transfer Parcel EDC-5, Alameda Point, Alameda California, June 2004**

**GENERAL COMMENTS**

1. The EBS Parcels that do not contain a risk number should have an accompanying explanation as to why there is no risk calculated, e.g. there are no data available for that particular parcel. Without an accompanying explanation, it gives the impression that the parcels are without risk which may not be the case.
2. When Figure 4-2, Sampling Locations in Transfer Parcel EDC-5, is compared to Table 3-1, Buildings, Structures, and Open Spaces in EBS Parcels, Table 3-2, Potential Sources of Contaminants From EBS Investigations, and Table ES-1, Risk Results by Decision Area/EBS Parcel, it appears that the sampling coverage and/or contaminant analyses are inadequate. This comparison was only done for parcels where the site use description suggests that there could be potential contamination; other parcels, like those used for barracks, were not evaluated. In addition, groundwater samples have only been collected from 2 DAs and 13 EBS parcels. The following EBS Parcels have data gaps that need to be addressed before risk assessment decisions can be made:

Parcels not listed in Table ES-1:

- Parcel 45 was used for drum storage, but the only samples collected from this area were analyzed for polynuclear aromatic hydrocarbons (PAHs). In addition, Table 3-1 indicates that this parcel was used for dry cleaning, but it is unclear if the portion of Building 2 used for dry cleaning is now Parcel 45A or if this area is still included in Parcel 45. Samples should be collected and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and metals. If soil contamination is found or if the dry cleaning plant is still part of Parcel 45, groundwater samples should also be collected.
- Parcel 78 was used as a washdown area, a garage, and hobby shop. The only samples collected in this parcel were the two samples analyzed for lead (this was identified as a data gap). Buildings 73A, 73B, and 607 were identified as a hobby shop. The areas outside the buildings were used as washdown areas, parking areas, and for disposal. On military bases, the term "hobby shop" often referred to a facility used by service personnel to service their vehicles. Buildings 73A and 73B were constructed in 1941 and demolished in 1989. Building 607 was constructed in 1980. It is probable that this area was used for vehicle maintenance prior to construction of Building 608 (IR-16), which was constructed in 1980. Contaminants found in soil and groundwater in the vicinity of Building 608 may also be present in Parcel 78 soil and groundwater; these contaminants include tetrachloroethene (PCE), trichloroethene (TCE), 1,2-dichloroethene (1,2-DCE), vinyl chloride, cadmium, nickel, and lead. Some pesticides, like alpha-chlordane and heptachlor epoxide were also detected in

groundwater near Building 608. It is recommended that soil and groundwater at Parcel 78 be analyzed for VOCs, semi-volatile organic compounds (SVOCs) including PAHs, pesticides, polychlorinated biphenyls (PCBs), and metals.

- Parcel 91 was used for drum storage, but only two samples were analyzed for pesticides and PCBs and several samples were analyzed for PAHs. Samples should be collected for analysis of VOCs, SVOCs, and metals. Also, if this parcel was used for pesticide or PCB storage, additional samples should be analyzed for pesticides and PCBs. If soil contamination is found, groundwater samples should also be collected.
- Parcel 94 was used for metal plating, but no samples have been collected from this parcel. Since solvents were used at most plating shops and PCBs were added to cutting oils, soil and groundwater samples should be collected and analyzed for VOCs, SVOCs, PCBs, cyanide, and metals.
- Parcel 102 was used for drum storage, as a washdown area and for disposal, but only limited sampling was done in this parcel. Soil samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. Since this area was used as a washdown area, groundwater samples should be collected for VOC, SVOC, and metals analysis.

Of those listed in Table ES-1 as Total Risk Levels Equal to or Less than Target Risk Levels:

- Parcel 82 had a utility plant, a heating plant, and equipment storage, but only one sample was collected onsite; this sample was only analyzed for TPH and non-PAH SVOCs. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be collected.
- Parcel 205 was used for battery charging and seaplane docking and repair, but the samples collected from this parcel were analyzed only for PAHs. At a minimum, additional samples should be collected for VOC and metals analysis. Due to the proximity of this parcel to Seaplane Lagoon, if soil contamination is found, groundwater samples should be collected for VOC and metals analysis.

Of those listed in Table ES-1 as Incremental Risk Level Equal to or Less than Target Risk Level:

- Parcel 70 had a building and a warehouse used for unknown purposes and a storage tank, but only 5 samples were analyzed for metals and 1 sample was analyzed for pesticides and polychlorinated biphenyls (PCBs). The two samples collected within the building footprint were only analyzed for total petroleum hydrocarbons (TPH). Additional samples should be collected within the building footprints for analysis of VOCs, SVOCs, pesticides/PCBs, and metals.
- Parcel 79 also had a shop onsite but only Pb samples around the radio antenna and one PAH sample were collected; the remainder of the site was not sampled.

Additional samples should be collected within the building footprints for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should be collected and analyzed.

- Parcel 83 included a dental clinic and a medical clinic, which could be a source of silver, chromium, potassium, copper, cyanide, and uranium salts (all used in developing or toner solutions), and mercury (used in amalgam for fillings), but only one sample was analyzed for selected metals. The comment in Table 3-1 also states that visual inspection was assumed. Additional samples should be collected for metals, cyanide, and uranium analysis along drain lines. If contamination is found, groundwater samples should be collected and analyzed.
- Parcel 84 was used for drum storage but was only sampled for PAHs. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.
- Parcel 85 had a washdown area but only one PAH sample was collected onsite. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. Since this area was used as a washdown area, groundwater samples should be collected for VOC, SVOC, and metals analysis.
- Parcel 92 was used for material storage and disposal but only two locations were analyzed for PAHs. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.
- Parcel 93 was also used for material storage and disposal but only two locations were analyzed for PAHs. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.
- Parcel 96 had a washdown area and was used for disposal but only two locations were sampled for PAHs. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. Since this area was used as a washdown area, groundwater samples should be collected for VOC, SVOC, and metals analysis.
- Parcel 110 included hazardous materials storage, but no samples were collected within the building footprint. Samples should be collected within the building footprint for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.
- Parcel 111 was the site of an industrial waste pump station but samples were collected only on the northern border; one sample was only analyzed for TPH, one for PCBs and PAHs, and three for PAHs. Additional samples should be collected for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.

Of those listed in Table ES-1 with Incremental Risk Level Greater than Target Risk Level:

- Parcel 71 had two storage sheds with unknown use, and an Airframes shop but samples have not been collected within the building footprints. Additional samples

potentially should be collected within the building footprint for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.

- Parcel 97 had a water storage tank and a transformer house. This parcel is included in DA 3. It appears that the only samples collected in this Parcel were analyzed for PAHs. Samples should be collected for lead and PCB analysis.
- The building in Parcel 185 was used for Hazardous Materials Storage, but only two samples were collected within the building footprint; one sample was analyzed for selected metals and TPH and the other was analyzed for lead, PCBs, SVOCs, TPH, and trichlorobenzenes. These two samples are not sufficient to characterize potential contamination beneath a building that is more than 600 feet long and 150 feet wide. Additional samples should be collected within the building footprint for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.
- The building in Parcel 195 was used for chemical storage, but the two samples collected within the building footprint were only analyzed for TPH. Additional samples should be collected within the building footprint for analysis of VOCs, SVOCs, pesticides/PCBs, and metals. If soil contamination is found, groundwater samples should also be analyzed.
- Parcel 197 was used for unknown uses, storage, disposal, parking and as the Navy Exchange. The Navy Exchange included a dry cleaning plant. In addition, this parcel is adjacent to IR-07, where an area of metals contamination has been found. Sampling has been focused on the area south of the building. The only boring within Parcel 197 that is located south of the metals debris area at IR-07 was not analyzed for metals. This is a data gap, since it is unclear if the metals debris area could extend into Parcel 197. Some samples were analyzed for VOCs, but it is not known whether these samples were collected in the vicinity of the former dry cleaning plant. This may be a data gap. Additional sampling for metals and VOCs should be conducted.

In addition, the data gaps for PAH sampling identified in Parcels 39, 63, 80, and 194 in the letter of January 16, 2003 that summarized EPA's review of the Draft Supplemental Environmental Baseline Survey (SEBS) and Environmental Condition of Property (ECP) have not been addressed. Please discuss how and when all of the data gaps identified in this comment will be addressed.

3. It is a concern to see groundwater-associated risks in the mid- $10^{-4}$  range being attributed to the carcinogenic PAHs, which is a chemical class not given to leaching as a fate and transport pathway. Some mechanism may be liberating the carcinogenic PAHs to a significant extent, whether it be the presence of a co-mingled solvent, shallow groundwater repeatedly saturating impacted subsurface soils or the presence of extremely high concentrations in the soil which probably are not represented by the data collected to date. In any case, it is not clear whether direct or indirect exposure to groundwater is, or could be, part of a complete exposure pathway.

## Specific Comments

1. **Section 2.4.1, Regional Hydrogeology, Page 2-3:** The text concludes that there are no naturally occurring ponds at Alameda Point. Please revise the text to include the ponds at IR Site 2.
2. **Section 3.4, Fuel Line Investigations, Page 3-2:** The text does not state whether the confirmation sample analyses from the tank and pipeline removals included any compounds other than TPH, such as BTEX (benzene, toluene, ethylbenzene, xylenes) compounds. Since the data from these confirmation samples are specifically excluded from this document because the areas are now included in the petroleum program at Alameda Point, the presence of VOCs in these areas cannot be evaluated. Please discuss whether the confirmation sampling effort included VOCs and if so, discuss whether VOCs were elevated.
3. **Section 3.5, Storm Sewer Investigations, Page 3-2 and Figure 3-2, Site Features:** The text states that the storm sewer outfalls located along Seaplane Lagoon are outfalls F, G, and H, but Figure 3-2 has 2 outfalls labeled "F" and no outfalls labeled "H." Please resolve this discrepancy.
4. **Section 3.5, Storm Sewer Investigations, Page 3-3:** There were two storm sewer segments in Transfer Parcel EDC-5 that were damaged and are submerged and recommended for repair. However, it is unclear whether these repairs occurred. Please specify the location these damaged segments on a map and discuss whether repairs have occurred or summarize how the current status of these segments will be determined. Please also include more information in this section to clarify the roles these storm sewer segments could play in contaminant transport.
5. **Section 3.14, Polynuclear Aromatic Hydrocarbon Removal Action, Page 3-7:** The text states that soil from three locations with B[a]P equivalent concentrations that are above the cleanup goal could not be removed because of asphalt. Although these three areas are listed by sample ID, please also include the EBS Parcel or DA in which they are located.
6. **Section 4, Data Evaluation, Page 4-2:** The text mentions that additional screening was conducted for arsenic, iron, and lead when both the PRG and background threshold concentrations were exceeded, but there is no description of the methods used for this additional screening nor is there a reference to the section or report with this information. Please describe the nature of the additional screening performed on the data set for these three metals.
7. **Section 4.3, Semivolatile Organic Compounds, Page 4-4:** The first paragraph on this page discusses samples that were not excavated despite high B[a]P equivalent concentrations and states that a total of 6 samples at Decision Area 1 that were not

excavated. According to Section 3. 14, Polynuclear Aromatic Hydrocarbon Removal Action, only 3 soil samples with elevated B[a]P equivalent concentrations were not excavated in all of Transfer Parcel EDC-5, and of these 3, only 1 was in Decision Area 1. Please resolve this discrepancy.

8. **Section 4.5, Metals, Pages 4-4 and 4-5 and Figure 4-9, Iron Individual Value Plot:** It is not clear that iron (Fe) concentrations in EBS 17 are “similar” to background, because there is one outlier at about 35000 mg/kg. In addition, “similar” and “different” are not defined.
9. **Section 4.5, Metals, Page 4-5:** After the text states that lead in DAs 8 and 14 and in EBS Parcels 106, 107, and 197 are considered to be outside of the background range for lead, it is stated that “further statistical evaluation may show that metals concentrations in some areas are actually within the background range.” These statements conflict unless the intent is to state that some individual samples from the DAs and EBS parcels fall within the background range. Please revise the quoted sentence to clarify the intended meaning or delete it. If further statistical evaluation will be done, please explain the methods to be used and justify this evaluation.
10. **Section 5, Human-Health Risk Evaluation:** The data gap review revealed that a complete set of analytical results was not available for most parcels and that the data collected did not always address the potential contaminants in these parcels. Please provide summaries of the data available for each parcel.
11. **Section 5.4.3, Decision Areas and EBS Parcels With Risks Above the Target Risk Range, pages 5-4 through 5-11:** The individual Decision Area and EBS Parcel assessments presented within Section 5.4.3 contain statements which cannot be verified such as, “There were no chemicals reported at concentrations above detection limits in groundwater at this decision area.” Because there are no data summary tables for groundwater analyses presented it is difficult to know whether no chemicals were detected due to the absence of contamination or because elevated detection or sample quantitation limits precluded detection at environmentally significant levels. Please include data summary tables for groundwater analyses that include sample quantitation limits.
12. **Section 7, Summary and Recommendations, Page 7-1:** The path forward for the other 7 DAs and 59 EBS parcels is unclear, particularly given the data gaps. Please explain how the data gaps presented in the general comments will be addressed and discuss the path forward for the remaining DAs and EBS parcels.
13. **Figure 3-3, Lead Removal Areas - Detail:** This figure does not include the location and concentration of confirmation samples, and these data are not readily available in the document. Please considering adding this information to the figure.

14. **Figure 3-5, PAH Removal Areas:** Review of the SI would be facilitated if the locations of the areas with elevated B[a]P equivalent concentrations where soil was not removed were also included on this figure. Please consider revising this figure (or another) to present the locations where contamination remains in place above cleanup criteria.
15. **Table 3-1, Buildings, Structures, and Open Spaces in EBS Parcels:** Some parcels have prior uses that would indicate the need for a wider range of chemical analyses than just VOCs, SVOCs, PCBs/pesticides, TPH, and metals. For example, Parcel 65 was the site of an incinerator but dioxins and furans do not appear to be part of the chemical analyses. Also, Parcel 71 was the site of an X-ray lab, but there is no information that radiological surveys were done for any of Transfer Parcel EDC-5 in this document. Please reevaluate the potential contaminants associated with historic site uses, compare this with the analyses completed for each parcel, and discuss how any resulting data gaps will be addressed.
16. **Appendix A, Analytical Results, Tables A1-A25, Analytical Results for Groundwater and Soil Samples:** It is difficult to evaluate this data for PRG exceedances because concentrations that exceed preliminary remediation goals (PRGs) are not highlighted, nor are the PRGs for each chemical included in the table for quick reference. Please revise the tables to include this information.

#### **Minor Comments**

1. A different color border should be used on Figure 1-3, Transfer Parcel EDC-5 and Adjacent Areas, to help to distinguish EDC-5 from the adjacent parcels.
2. On page D-13, the reference to Figure D-8 in the second paragraph is incorrect. The referenced figure should be Figure D-5.