Alameda Point Restoration Advisory Board
OU-2B Focus Group

C/O Lea Loizos, 833 Market Street, Suite 1107, San Francisco, CA 94103

July 6, 2004

Glenna M. Clark
Department of the Navy
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

RE: Draft OU-2B Remedial Investigation Report, Sites 3, 4, 11, and 21, Alameda Point, Alameda, CA

Dear Ms. Clark:

On behalf of the community members of the Restoration Advisory Board, the OU-2B focus group is submitting the following comments on the *Draft OU-2B Remedial Investigation Report, Sites 3, 4, 11, and 21, Alameda Point, Alameda, CA,* dated April 1, 2004. We would like to thank you and your contractors for taking the time to attend our focus group meeting and for the detailed presentation. We have reviewed the document and our notes from the focus group meeting and have several comments and suggestions. Please note that some of the general comments on this RI are the same as comments presented on the OU-1 RI. We would like to suggest that a meeting be scheduled with the RAB to resolve these issues at this stage of the process and to avoid repetitious commentary on every RI produced. In particular, a meeting to discuss the background data sets and how they were derived seems appropriate at this time.

General Comments

1. The groundwater plume of volatile organic compounds that extends beneath the entire operable unit is over 1600 feet in length and reaches up to 77 feet deep at points. Concentrations of TCE are as much as 200,000 ppb. As far as we can tell, the plume extends into the Seaplane Lagoon, creating an on-going violation of the Clean Water Act. The potential health hazards for current and future users of this area, as well as for aquatic species in the Lagoon are substantial. It is unfortunate that only now, after 10 years of cleanup at Alameda Point, the Remedial Investigation for this site is being conducted. We believe that OU-2B should be given higher priority in the cleanup schedule. The Navy should address the potential need for a removal action to mitigate the hazards from the plume while the final remedy is being developed.

2. Background –
    a. We have concerns regarding the data set that was used to establish background levels of metals at Alameda Point. Specifically, it appears as though many of the samples taken to establish background levels were taken within what are now IR Sites. Please provide an explanation of how the sites were chosen for the background study and what assurances we have that these data are truly representative of background.
    b. It appears as though the same data set is used to determine background for the original island soils (i.e., pre-1887) and the soils that were filled from 1942-1946. Please provide an explanation of how it was decided that two very different soil areas have similar background concentrations of metals.
    c. Regarding background levels for arsenic, Craig Hunter reported at our meeting that these levels are typical for soil/rock in the East Bay hills and that the concentrations at Alameda Point reflect those of alluvial deposits from these hills. Can data and references be provided that support this explanation?
    d. There are several references made to "ambient" levels of polynuclear aromatic hydrocarbons (PAHs) in the document. The community has never agreed to an ambient level of PAHs, nor have the regulating agencies to the best of our knowledge. PAHs are not naturally occurring in the environment, as they are generally created through human activity. Therefore, we believe that levels of PAHs should never be considered as ambient and we request that any such references be removed from the document. Furthermore, as part of the community acceptance criteria of the NCP, the final cleanup level for PAHs should be based on health risk and be developed with community input.

3. Human Health Risk Assessment (HHRA) –
    a. We are pleased to see that the risks from soil and groundwater have been added together in this RI to produce a total site risk.
    b. All sites found to have a carcinogenic risk above $1*10^{-6}$ or a non-carcinogenic hazard quotient above 1 should be carried forward to a Feasibility Study to allow community input on an appropriate remedy for the site.
    c. It is unclear why only a portion of the available data set was used in the HHRA. We have not bothered to conduct a thorough review of the HHRA, however judging by the amount of validated data collected for these sites that was left out of the risk assessment, it is clear that the HHRA is insufficient as prepared. Saying that the data does not meet the data quality objectives for this investigation is not an acceptable response. A more thorough explanation of why such a large percentage of available data was left out of the HHRA is required.
    d. The risk from all chemicals of concern should be evaluated in the HHRA, not just those seen as risk drivers.
    e. According to Section 3.5.5.3, page 3-23, "Given the scarcity of San Francisco Bay Area residential land, projected redevelopment reuse at Alameda Point is not likely to include land-intensive pathways, such as residential gardening." We disagree with this statement and other arguments given for not including the homegrown produce consumption pathway in the risk assessment. All of

the sites included in this RI have at least a portion of the site slated for residential or mixed re-use in the redevelopment plan, meaning residences are possible at all sites. It is inappropriate at this time to make assumptions about the availability of land for gardening in these areas. The health risks associated with the consumption of homegrown produce at these sites needs to be included in the risk assessments.

f. Please explain why dermal contact with groundwater and inhalation of vapors in a trench are not considered complete exposure pathways for a construction worker. Considering the high level of VOCs in groundwater at OU-2B, we believe these pathways should be evaluated.

4. We are greatly concerned about the possible risks from exposure to indoor air for those working in buildings located over the plume. Several buildings on OU-2B, including 162, 163, and 398 are occupied and are above the VOC plume. Has any indoor air sampling been done to assess the health risks posed to these workers? Have they been informed of the existence of a VOC plume beneath their building and the possible risks from inhalation of indoor air? It is imperative that the health and safety of those working in these buildings be the first priority in determining a remedy for this area.

5. Throughout the document, there are references to the "action level" of 0.62 mg/kg for PAHs (e.g., Section 7.5.1, page 7-28). Please be reminded that the community has not agreed to this action level. We understand that this screening level was developed by the BCT to put an end to the background/ambient discussion and to facilitate the cleanup process. We expect, however, that the final cleanup level for PAHs will be based on health risk and will be developed with community input.

6. Future Land Use – The "future land use" descriptions for Sites 3, 11, and 21 all include the following statement: "Housing could include artists' lofts, apartments for low- to moderate- income families, and townhouses consistent with Measure A and the City Charter (Navy 1999a)." As of now, no plans for the types of housing on Alameda Point have come before the public. We do know that there can only be single-family and duplex housing and each lot must have 2000 square feet per unit; townhouses are not allowed. Until housing plans are finalized, the cleanup should not make assumptions about the types of housing that will be available nor the amount of land associated with each unit.

7. Please include a table of the specific data quality objectives for this investigation in the document.

8. Please include a detailed summary of the pilot studies and removal actions conducted at each of the sites, as appropriate, including a summary of the results thus far. In order to gain a complete understanding of what is happening at this operable unit, please include actions taken under both the CERCLA and TPH programs.

Site-specific Comments

Site 3

1. Lead in Soil and Groundwater – A more thorough discussion/investigation of the source of the lead in soil and groundwater at Site 3 is needed.
   It seems like more than coincidence that the elevated levels of lead in the soil are directly above the lead groundwater plume. The report references geochemical data that show basic conditions in both the soil and groundwater. Therefore, according to the report, the lead in soil should be stable and it is unlikely that lead will migrate. While this may be true, it does not provide an explanation for the plume of lead in the groundwater.
   The document also states, "It is unknown if the storm sewer in this area is in contact with groundwater or not, but during the Storm Sewer investigation a significant sag was found directly west of the manhole 6H-5" (pg. 5-20). However there is no discussion of further investigations to determine if the storm sewer is acting as a conduit. More information is needed.
   Finally, there is very little discussion of the source of the lead in the soil. Please provide a more thorough explanation of the source of the lead in both soil and GW at Site 3.

2. Section 5.4.4, Fate and Transport – This section, as written, does not satisfy the stated purpose to "determine whether chemicals driving risk at Site 3 […] (1) have migrated or degraded, (2) are being released from a continuing source of contamination, and (3) are likely to be transported through groundwater or other potential pathways."
   a. There is no discussion of the potential for arsenic, lead, or PAHs in soil to be transported by wind. Please include a discussion of this potential pathway.
   b. The assessment of migration is based on geochemical data only; there are no long-term sampling data provided that show migration or degradation trends of the lead in groundwater. A more thorough discussion of migration and degradation potential needs to be provided, including sampling data that show the plume over time.

3. We are pleased to see that the soil and groundwater will both be evaluated further in the feasibility study (FS). It is unclear, however, why lead is the only chemical of concern listed for soil in the final recommendations. Section 5.5.2.1, page 5-32, states, "Based on the background comparison, arsenic is statistically different from background; however, there is no known source or spatial pattern for the sampling locations where elevated concentrations were detected." This type of logic is unacceptable. While the Navy is not required to remediate metals that are at or below background, metals that are clearly above background should be evaluated for remediation, whether or not a source or pattern is discernable. Removal of these hot spots may prove to be a very cost effective way of significantly reducing the health risks posed by the site.

Section 5.5.2.1 goes on to say, "Because of the use of sediments to construct the base, an ambient concentration of PAHs also exists at Alameda Point." Please see comment 1b regarding the RAB's concerns with "ambient" levels of PAHs. Furthermore, Section 5.4.3.2 acknowledges that "Elevated PAH concentrations at depths of less than 4 feet bgs around the former USTs likely are related to petroleum releases that occurred from the USTs or from activities related to the refueling of aircraft trucks" (page 5-20). We urge the Navy to evaluate remedies for all chemicals of concern in soil at Site 3 in the FS.

4. Figure 5-11: The groundwater plume boundaries do not match the sampling data provided.

Site 4

1. Section 6.4.4, Fate and Transport – This section, as written, does not satisfy the stated purpose to "determine whether chemicals driving risk at Site 4 […] (1) have migrated or degraded, (2) are being released from a continuing source of contamination, and (3) are likely to be transported through groundwater or other potential pathways." There is no discussion of the potential for arsenic, cadmium, copper, or PAHs in soil to be transported by wind. Please include a discussion of this potential pathway.

2. There has been some concern about the risk to children playing soccer on the field located within Site 4. While most detections of PAHs were below the screening level, the screening level of 0.62 mg/kg is above the PRG of 0.062 mg/kg for benzo(a)pyrene. There was also a detection of copper in surface soil at twice the screening level. This may be considered an isolated hit, but there was very limited sampling done in this area. Please include an analysis and discussion of the current risk to children who play on this field and whether or not more sampling is required.

3. We disagree with the recommendation to not evaluate soil at Site 4 further in the FS. See General Comments 1b and 2a.

Site 11

1. Section 7.4.4, Fate and Transport – This section, as written, does not satisfy the stated purpose to "determine whether chemicals driving risk at Site 4 […] (1) have migrated or degraded, (2) are being released from a continuing source of contamination, and (3) are likely to be transported through groundwater or other potential pathways." There is no discussion of the potential for copper, lead, or PAHs in soil to be transported by wind. Please include a discussion of this potential pathway.

Groundwater Plume

1. Please include a map that shows the TPH plume in relation to the VOC plume.

2. Why is groundwater data used to determine indoor air concentrations rather than actual indoor air samples from buildings located over the plume? We understand that most of the soil gas data could not be used because of the high detection limits from those samples. However, it is unclear why no indoor air samples have been taken

from structures above the plume to evaluate risk from exposure to indoor air, especially considering the fact that some of these buildings (e.g., Buildings 162, 163A, 360) are currently being leased.

3. The summary of the ecological risk assessment provided in Section 9 is insufficient. Please provide a more thorough explanation of how the hazard quotients for TCE, chromium, and nickel were derived, including the screening criteria that were used.

Minor Comments

1. Section 8.1.1, page8-4: There is a reference made to former NADEP employee Lyn Stirewalt. The report refers to the employee as Mr. Stirewalt. Assuming this is the same Lyn Stirewalt who sits on the Alameda Point RAB, please correct the gender reference.

The OU-2 Focus Group appreciates the opportunity to review and comment on this document. We would also like to thank you for granting an extension on the comment deadline in order to allow adequate time for review of the document. If you would like to discuss our comments further, please contact me at lealoizos@mindspring.com or Jean Sweeney at jean_sweeney@juno.comT.

Regards,

Lea Loizos
Arc Ecology

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