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ALAMEDA POINT
SSIC NO. 5090.3

July 15, 2005

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: Draft Proposed Plan for Soil and Groundwater, Estuary Park and the Coast Guard Housing Area, Operable Unit 5 (Coast Guard Housing/Annex IR02 (FISC))

Dear Mr. Macchiarella:

EPA has reviewed the above referenced document, submitted by the Navy to the regulators on May 31, 2005. Enclosed for your review are comments from EPA's Federal Facilities Cleanup Program, EPA's Office of Regional Counsel and EPA's Office of Community Involvement.

We look forward to discussing and resolving with you the issues brought up in our comments. Please call me at (415) 972-3029.

Sincerely,

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

Anna-Marie Cook
Remedial Project Manager

enclosure

cc: Darren Newton, SWDiv
Marcia Liao, DTSC
Henry Wong, DTSC
Judy Huang, RWQCB
Suzette Leith, EPA
Sophia Serda, EPA
David Cooper, EPA
John Chesnutt, EPA

EPA Comments on Draft Proposed Plan for Soil and Groundwater, Estuary Park and the Coast Guard Housing Area, Operable Unit 5 (Coast Guard Housing/Annex IR02 (FISC))

EPA Program Comments:

General Comments:

1. The Proposed Plan should be separated into two separate plans: one covering the groundwater component, the other the soil component. The Proposed Plan as it is currently written is difficult to read and understand. There is too much information presented in too much detail. Moreover, the two proposed remedies do not relate to each other in any way. The groundwater component of the Proposed Plan lies beneath both the Annex and the Point, so there are two bases being covered in this portion of the PP, and the contaminants requiring remediation are benzene and naphthalene. The soil component of the Proposed Plan covers only PAH contamination at Site 25 on Alameda Point, and the soil contamination has no connection to the groundwater contamination. Further, there is little overlap in footprint between Site 25 and the underlying contaminated groundwater that comprises OU 5. Considering that the RI/FS process was performed entirely separately for the OU 5 groundwater and the Site 25 soil, it would make sense to continue keeping them apart and split the Proposed Plans into two separate plans. Separating the contaminants, the area covered and the proposed remedies, and eliminating unnecessary details would greatly enhance the readability and comprehensibility of the Proposed Plans.
2. EPA does not believe that it is necessary to impose an institutional control on soil below two feet in unimproved areas at Site 25. The risk assessment, when taking into account the derivation of the toxicity of PAHs, does not support this restriction and we believe it would be an unnecessarily burdensome restriction on residents and workers at the site. Less data has been taken below four feet and that fact, coupled with the presence of the Marsh Crust at greater depths, makes it prudent to place a dig restriction on soil below four feet.

Specific Comments

1. **Proposed Plan Title:** The title of the Proposed Plan is not accurate. Soil contamination is covered in Site 25 which consists of Estuary Park, the USCG Housing Maintenance Office and the North Village Housing area. It does not cover Marina Village Housing which is also Coast Guard Housing. Similarly, OU 5 is not correctly described in the title. The plume extends under Marina Village Housing, a portion of North Village Housing, the Woodstock Child Development Center, the Miller Elementary School, and Alameda Annex IR01 as well as IR02.

2. **Page 3, second column, first paragraph:** Define here what PAHs are, i.e. the byproducts of incomplete combustion from refinery and coal gasification processes. Also, the Marsh Crust remedy is not selected in a Marsh Crust Record of Decision, but in a Marsh Crust RAP/ROD. The Marsh Crust RAP/ROD does not address soil contamination other than the Marsh Crust contamination for Alameda Annex IR02, or for any other site. The IR02 final soil remedy is in a separate document and contains a selected remedy for clean up of PCBs, cadmium and lead. The remedy for IR02 specifically states that PAH contamination is excluded and that it will be addressed in a later final remedy specifically for PAHs in the industrial portion of IR02.
3. **Page 4, first column, first full sentence and third full sentence:** Please replace “soils” with “soil”.
4. **Page 4, first column, second full paragraph:** It would be more helpful to the reader and answer an obvious question to first state that the soil has been tested for all contaminants. As currently written, the wording raises immediate questions as to whether VOCs and PCBs/pesticides were sampled for.
5. **Page 4, second column, last paragraph:** At a minimum, the wording should include that the groundwater is slowly undergoing natural degradation. At greater depths the degradation appears stalled.
6. **Page 5, first column, last paragraph:** The description of lateral and vertical extent given here is confusing. The vertical extent was not defined by the 1.8 mg/kg. Two feet vertical excavation depth was chosen because it would afford adequate protection to residents, did not interfere with utilities located at three feet and below and was not cost prohibitive. The 1.8 mg/kg was used as a cutoff value to identify the Decision Areas that most needed the interim removal action. DAs 4, 5 and 7, and Parcels 182 and 183 had a significant number of samples with concentrations of PAHs over 1.8 mg/kg in the upper two feet of soil and thus these areas were deemed in need of a removal action. The removal action removed all soil in the unimproved areas of DAS 4, 5 and 7 and Parcels 182 and 183, including soil with PAH concentrations below 1.8 mg/kg.
7. **Page 5, first column, last sentence:** It is unclear what the purpose of reporting a PCB hit in the backfill is without giving further explanation. The backfill was tested for all chemicals prior to emplacement at Site 25. Arsenic forms the bulk of the risk, which should be acknowledged and a risk number given here for arsenic, as well as the PAHs. It should be stated also that no VOCs were found and only one sample showed a hit of PCB and give the concentration.
8. **Page 5, second column, Step 2, and Table 1:** This section is confusing. It appears that only current potential exposure pathways are being evaluated for soil and groundwater.

Table 3 is future potential risk, which includes the ingestion of homegrown produce yet this exposure pathway is not discussed anywhere in the text.

9. **Page 6, Table 2:** EPA disagrees with the assertion the risk between 1×10^{-4} and 1×10^{-6} is generally allowable.
10. **Page 7, Table 3, second column:** The word “equivalent” is broken up here and the column width should be adjusted slightly. Also, the risk given for Parcels 182 and 183 for the top two feet is the residential risk, and not the recreational risk.
11. **Page 8, last paragraph:** Add one or two sentences supporting the statement, i.e giving the rationale that lead to the determination, that chemicals found in indoor air are likely due to sources unrelated to vapors from groundwater. As it is currently written it seems that a potential indoor air problem is being dismissed without any justification. The vapor barrier argument alone is not sufficiently strong since it is questionable whether the barriers are still effective beyond their five year lifetime use.
12. **Page 10 (which is missing a number), first bullet carried over from Page 9:** It may be useful to add that establishing a baseline condition is required under CERCLA as a comparison for all other alternatives.
13. **Page 11, first column, Groundwater, second sentence:** Replace “summarize” with “summarized”.
14. **Page 11, first column, Groundwater, first bullet:** Suggest wording first sentence here “No action is required to be evaluated as an alternative to establish a baseline from which to compare the other alternatives.”
15. **Page 11, first column, Groundwater, second bullet, second sentence:** Suggest “However, due to reduced natural oxygen in groundwater at this site, natural degradation of the contamination...”
16. **Page 16, second column, Criterion 5:** Alternatives 3 and 4 appear to have been left out of this evaluation.

EPA ORC Comments

General Comments:

1. I found it distracting to have certain terms in bold, because I instinctively thought those were the more important terms, and jumped to the conclusion that the GW remedy was to be ICs without an active component. I'd recommend that if the Navy really wants to

specially identify certain terms, they could leave them in italics without bolding them. But it also appears that the terms that are bold are those with an acronym, and I don't see why those terms need to be called out. At first I thought the bold terms were those in the glossary, but some of them (e.g. "operable unit") are not.

2. The introduction indicates that there will be a limited soil removal as part of the soil remediation; however, page 16 indicates that the preferred soil alternative is alternative 2, ICs. This is confusing, because alternative 3 is the alternative that involves excavation. It appears that the Navy is not stating that alternative 3 is selected because the preferred alternative will excavate a smaller amount of soil (about 3000 cubic yards v. 14,000, if I have it right). After all the detailed discussion of the alternatives, it is confusing that essentially a new alternative is selected, with very little discussion. EPA recommends a clearer discussion of why this new alternative is preferred over all the alternatives that received the more thorough analysis. EPA also recommends a more transparent comparison between the selected alternative and alternative 3, including a comparison of amounts of soil that will be removed, and a clearer discussion of what areas would have had excavation under alternative 3 but will not under the preferred alternative. I'd also recommend that the PP express the preferred alternative as a combination of alternatives 2 and 3, rather than just alternative 2. That way, it's clearer on the face of the document that there will be some active remediation. That would also enable the Navy to perform the hot-spot excavation under this ROD rather than having to develop separate documents to perform it as a separate removal.

Specific Comments:

1. The discussion on page 2 in **Site Background** of what areas are included in this PP could be clearer, for example:
 - In first paragraph on Site Background, make clear that the four sites overlying OU-5 include 3 in Alameda Point and 1 in the Annex. Should probably briefly mention what the Annex is, and that it's not on the NPL.
 - Statement in same paragraph that the remedial decisions in the PP address the GW "beneath all the sites" should be changed to say that the decision addresses the GW "in OU5." ("Beneath all the sites" sounds like all the sites in the Alameda Point NPL site.)
 - It's not clear why there is mention of the property south of Site 31; is this because OU5 includes GW under that area? Does "property south of Site 31" also include property that looks on the map to be south of Annex Site 2?
 - Discussion of the Marsh Crust on pages 2 and 3 is somewhat confusing and its relevance isn't easily apparent. If the Marsh Crust is discussed, the Navy should clarify whether it underlies all of the sites in this FS. Also, the statement that the Marsh Crust remedy "addressed removal of soil within Alameda Annex IR Site 02" is confusing, as it could be read that the Marsh Crust remedy included a removal; it should be clarified that the Marsh Crust remedy was ICs governing removal of soil from the Marsh Crust. Finally,

the statement on page 2 that the soil remedy for Annex Site 2 was picked in the Marsh Crust RAP/ROD is incorrect. The soil remedy for IR02 is in a different RAP/ROD.

2. **Page 4, last paragraph before the groundwater section**, says that the RI concluded that the Navy's past practices had not contributed to the concentrations of metals at the site, implying that that is the reason the metals contamination was not subsequently addressed. However, what really matters is whether there are any unacceptable risks.
3. **Page 5, first column, last line**, the phrase "EPA and Cal/EPA cancer" should be changed. As written, it sounds as if there are types of cancer called EPA cancer and Cal/EPA cancer.
4. **Page 6, risk range table**. EPA does not agree with the characterization of health risks in the risk management range as "generally allowable". As discussed in the NCP preamble, EPA's preference is to select remedies that are at the more protective end of the risk range. EPA would prefer that "generally allowable" be changed to "risk management range." Similarly, EPA objects to the statement in the first paragraph on page 7 that when the carcinogenic site risk is less than 10^{-4} , action generally is not warranted. We consider the last sentence in that paragraph to more appropriately describe actions to be taken when the risk is in the risk management range, and we recommend that the sentence regarding "action generally is not warranted" be removed.
5. **Page 7 and elsewhere**, Decision Area 7, area with cancer range of 3×10^{-4} and HI of 2. It appears that the contamination is mainly below four feet, and it will be covered by ICs under alt. 2, but would not be removed under alt. 3. We suggest that this risk be discussed separately since this is the one place that the PP shows contamination outside the risk range, and the PP needs to be clearer on what the preferred alternative is for addressing that contamination.
6. **Page 8**. In two places -- the first paragraph on the page and the first paragraph in the second column -- the FS states that "based on the beneficial use agreed to by the BCT, the drinking water exposure is not a reasonable maximum exposure because human consumption of groundwater is not likely to occur." This is a potentially misleading statement from which one could possibly infer that the BCT agrees that the consumption pathway doesn't need to be addressed. This is especially problematic given that this section points out that if the GW were consumed, the HI could be as high as 145. Additionally, the statement that drinking water exposure is not a reasonable maximum exposure raises the question of why the preferred alternative includes cleaning up the GW to numbers equivalent to the MCL and health advisory. Elsewhere in the document, the Navy mentions the concern with accidental exposure, and I would recommend that they also do so here. I would also recommend that the PP state here that even though GW consumption may not be likely, ICs are included in the preferred alternative to make sure that consumption does not occur (rather than implying, as the current text does, that there will be no remedy to address this pathway).

7. **Page 8, first paragraph under Ecological Risk Assessment**, “habit” should be “habitat.”
8. **Page 8, last paragraph**. We recommend adding that the GW cleanup will take care of any potential vapors from GW.
9. **Page 9 and elsewhere, discussion of remedial alternatives**. There is much discussion of soil alternatives 4 and 5, which were not completely evaluated in the FS. This is confusing, and EPA recommends that the PP better explain the FS process, how the Navy started with five remedies but only fully evaluated three of them, and the reasons for not fully analyzing the more extensive remedies.
10. **Page 9, GW cleanup levels**. This is the first time these levels are given, and there are brief references to “the drinking water standard” and “the health advisory.” I’d recommend clarifying that “The benzene remediation goal is equivalent to the State drinking water standard (which is more stringent than the USEPA standard), and the naphthalene goal is equivalent to the USEPA health advisory for naphthalene.”
11. **Page 10** is missing its page number.
12. **Page 10, discussion of Soil Alternative 2 (ICs)**. There is discussion of the ICs regarding the hardscape but not of the ICs that are designed to limit human contact with the PAH-contaminated soil. There should be a brief discussion of what the substance of the ICs would be (no digging, no digging without a permit, controls on excavated soil, etc.).
13. **Page 10, soil alts. 3 and 4**. Should state that the ICs will be the same as for alt. 2, assuming that is true
14. **Page 10, box on ICs**, the bullet saying “protect wells” should be changed to “protect monitoring wells”. It is confusing to indicate that wells will be protected when part of the IC will be to prohibit installation of drinking water wells.
15. **Page 11, discussion of costs**—are these total costs, or net present value? This is also a question for Table 8 on Page 15 and for the discussion of cost on page 16. Also, if the costs given are net present value, there should be a brief explanation of what NPV is. (Another recent Navy document included the following definition of NPV: “the amount of money that, if invested in the initial year of the remedial action at a given interest rate and dispersed as needed, would be sufficient to cover all costs associated with the alternative”).
16. **Page 11, discussion of GW remedies**; should give more details on the ICs for all the alternatives.

17. ARARs comments (pages 13-14):

- P. 14: "BAQMD" should be "BAAQMD."

- Page 13, CAA requirements: It is unclear what Clean Air Act requirements are considered to be ARARs (the citation may be wrong), and why it is necessary to have both the CAA and the BAAQMD requirements that are discussed on page 14. Also, the FS included BAAQMD regulation 2, rule 2-301, as relevant and appropriate for the active GW remedies; why was this requirement omitted in the PP?

-Page 13 and 14, the discussions of MCLs as ARARs on these two pages are not entirely clear or consistent:

- On page 13, the PP states that the MCLs are not relevant or appropriate because the GW is unlikely to be used as a DW supply. EPA requests that this be changed to, "The Navy does not consider the MCLs to be relevant or appropriate because the GW is unlikely to be used as a DW supply." EPA considers MCLs to be ARARs for this GW.

- The PP should note that there is no MCL for naphthalene, and the MCL for benzene to which the risk-based cleanup level is compared is a State MCL.

- On page 14, the PP states that the State MCL for benzene has "been determined to be" a state chemical-specific ARAR. However, our understanding is that the Navy is not treating the MCL as an ARAR, but, rather, is picking a risk-based criterion for GW remediation. This should be clarified.

18. Page 14, last paragraph (overall protection of HH & the environment): As written, this paragraph could be read that all the remedies are unprotective. I'd recommend editing it as follows: "Alternative 3, limited excavation, is also protective; ~~however,~~. Although the PRGs would not be attained in all areas, ICs would effectively limit exposure of residents...."

19. Page 15, Table 8, and paragraph discussing criterion 4 (reduction of toxicity, etc.): The discussion says that none of the alternatives include treatment; however, alternative 3 gets one plus mark for this criterion. Why?

20. Page 15, Table 8: More explanation of the state acceptance criterion might be needed. Does the State in fact accept either alternative 2 or 3?

21. Page 18, in the sentence, "Alternative 4 is assumed to shorten remediation time by one year," I'd recommend adding, "compared to the other active remedies".

22. Page 21, definition of MNA: This definition erroneously suggests that MNA includes containment.

Comments from EPA's Office of Community Involvement

A perspective

The following comments are meant to assist the Navy in producing the most readable, accurate and focused proposed plan possible, within the confines of the technical information that must be conveyed. Because this draft is challenging, I want to provide a framework for my comments.

First and most important, EPA understands that there is no exact way to write a proposed plan fact sheet, so most of the choices in the Navy's draft are neither right nor wrong. However, as the choices add up, they may take a fact sheet in a direction that is less readable and understandable.

One of the best insights that DOD has provided its writers (not specific to cleanup programs) is the concept of "bottom line up front." A number of EPA's fact sheets and many DOD proposed plan fact sheets (and other documents) have been modified to give the reading public the most important information closer to the front. This is different from the typical scientific/engineering "weight of evidence" approach which requires the reader to hold all of the background information in their head before reading the conclusion, e.g., the preferred alternative.

Because this plan, as drafted, is long and the print is small, it could be fairly intimidating to the lay audience. It is not my intent to imply that the document is inaccurate or that the elements discussed are not important. It's just that, in some cases, it's better to have fewer words, even if the existing information, on a sentence-by-sentence basis, is clear.

Some of the material reads as if it was taken from other, technical documents, rather than being written from scratch as a document for the lay public. This is true with some of the apparent redundancies.

Some of the Navy's text could be interpreted as defensive, such as the last sentence of the fact sheet's first paragraph (where the Navy defends its process), and the first sentence of Page 2 (where the Navy defends the logic of its preferred choice).

Another way to explain my concern about length is that technical documents don't have specific size issues, whereas documents for the public, in order to be most readable, have size issues. A perfectly acceptable description or explanation in an RI or FS might be too long for a fact sheet.

Whenever we work on a proposed plan, we try to determine which items are the most important ones for the public to know in order to be able to provide public comments. The other support information works better after the key information is delivered. And in all cases, we are mindful that the public is much more likely to read a ten-page document than a 20-page one, so we try to make those first pages really count and try to reduce page counts as much as practical given the technical material.

As a final reminder, the Proposed Plan should be focused on only the information that will provide a useful basis for the public stating a preference for one Alternative over another. All other information, i.e., RI, risk assessment, prior actions, etc., should be geared to that end. Nothing should be in the proposed plan “just for the record” or “just because people asked.”

General Comments

1. It would be best if the proposed plan was under 20 pages.
2. It would be more readable if many of the paragraphs were shorter and the point size larger.
3. During the RI discussion, stay focused on two things: what did the RI find *that needs to be cleaned up* and how will the alternatives address those contaminants that need to be cleaned up?
4. Shorten the lengthy Risk Assessment section and tie the information to the different ways the alternatives address risk scenarios, so readers will be able to express a preference.
5. When I talk about redundancy, I’m not usually talking within a paragraph, but between sections.
6. I would remove the TCRA jargon. TCRA is about the “color of money,” i.e., funding source. All of the contamination at Alameda NAS has been in place for a long time, so there are no time-critical actions. “Time critical” suggests a crisis or imminent health threat and that isn’t the case. Better to just use the term “removal” or “interim cleanup action.”
7. Where tables and figures are not on the page that references them, give the page number in parenthesis.

Specific Comments

1. Suggest simplifying the Heading. Suggest deleting the OU5 and IR-02 reference. That can be covered in the text. The heading reference to the specific contaminants might be deleted, if there are no other remedies planned for this portion of the site.
2. Suggest a more direct Headline: “Navy Requests Comments on Cleanup Plan.” The headline should not be chiefly about the RI; that information should have already been covered in other fact sheets.
3. **Page 1.** There is too much information on this page and the order of presentation is not optimal.

- 4. Page 1.** The items in bold need to be identified as being listed in the glossary. First usage should have an asterisk. Bottom should have a footnote.
- 5. Page 1.** The first sentence on column two seems redundant to information in the first column.
- 6. Page 1.** Suggest moving the second paragraph to the section on Site Investigations.
- 7. Page 1.** The second column second sentence is very long and includes some information that is better suited for the more complete alternative description later in the document (i.e., the explanation of what the ICs will accomplish). The reference to the interim action is better suited to a different section, perhaps “Completed Removal Actions” or “Other Removal Actions.”
- 8. Page 1.** The “Key Items” is a good idea, but to save space, I would only list the most important ones. This reads more like a table of contents, which is not necessary. Suggest deleting at least the Introduction, the BCT concurrence, “where are we in this project,” and the glossary (you could note the glossary’s location in the footnote). The key elements are: Summary of Cleanup Alternatives, Comparison of Cleanup Alternatives, the Navy’s Preferred Alternative, and Community Involvement. Another possibility would be to move it to the second page – most Tables of Contents appear on the second page of periodicals (or later).
- 9. Page 1.** Suggest saving space in the 30-day Comment Period box by deleting the redundant reference to the public meeting, which is covered in the next section. Further space could be saved by displaying only the comment period dates and directing them to Page 19.
- 10. Page 1.** Suggest saving space in the Public Meeting section by deleting such elements as the site reference and the meeting details. Again, directing them to Page 19 saves space.
- 11. Page 1.** There should also be language to encourage people to comment on all cleanup options and the RI/FS.
- 12. Page 2.** The first sentence is not necessary. The second sentence is redundant with the information in the first paragraph, Page 1.
- 13. Page 2.** The second and third paragraphs contain important information which should appear on the first page, near the beginning of the document, and could allow the deletion of all the text in the Page 1 box highlighting the Comment Period and Public Meeting – this could allow the highlight box to simply state the Comment Period and the Meeting, with their dates, which is a common EPA approach. Neither is right or wrong, but this illustrates again how much redundancy is built into the draft fact sheet and how much space could potentially be saved.

14. Page 2. Site Background. Suggest moving the bulk of the site background towards the back of the fact sheet as background.

15. Page 2. There is better language for the ROD which includes the statement that no decision will be made until all comments are received and considered. The final remedy may change based on comments received.

16. Page 2. Site Background. The first sentence is not correct. Alameda Point did not cease operations – Alameda NAS did. Alameda Point is the new name.

17. Page 2. Site Background. Much of the information in the first, long paragraph seems to be not about the background or history, but mostly a delineation of the site boundaries and where they overlap (soil vs groundwater). Suggest renaming the section to reflect its contents. There is some redundancy in the paragraph.

18. Page 2. Site Background. Upon further reading, the section covers a number of topics, which make it hard to follow the logic. The first paragraph begins with a sentence on history, changes to a site description, notes a final remedy for part of the section and concludes with a reference to property transfer. Then the section shifts back to descriptions of the individual sites (useful and visually appealing), goes back to talking about the investigations, shifts wildly to March Crust history and remedy, and finishes with groundwater flow information and an assurance that people aren't drinking water from the site. Suggest that as much site investigation information as possible be grouped in the Site Investigation Section.

19. Page 2. The map portion of Figure 1 is hard to read. Suggest making it bigger within the existing box and reducing the point size/location of the title. Alternately, if you want to keep the map itself that size, you could save space by shrinking the Figure box, in which case I might be tempted to try using it in conjunction with Figure 2 (like an exploding diagram). Also, the Site 25 identifier is in a box; the OU5 is not. I would make it consistent. Finally, the map does not match Figure 2, specifically the area of OU5, which does not appear to extend above Site 25.

20. Page 3. The map is good, but you could save space with a smaller box.

21. Page 3. Soil Investigation. The Site 25 investigation information seems more detailed than necessary. For instance, the division of Parcel 181 into decision areas does not tell readers what they need to know to comment on the remedy, yet they have to read through this material before they get to the Cleanup Alternatives section. Suggest just relating what was found, so that later readers will know what the Alternatives are trying to address. Alternatively, a more complete explanation of the RI could come after the Alternatives as support information.

22. Page 4. Groundwater Investigation. Again, to save space and move more quickly to the Alternatives, this section could be shorter. The final paragraph of the section (next

page) seems to be redundant with an earlier section with discusses drinking water. Suggest only one be used (probably this one).

23. Page 5. Completed Removal Actions. Suggest avoiding the jargon in the first paragraph (human health risk response action). Suggest: “In 2000, the Navy removed PAH-contaminated soil from the Clover Park area of Site 25 to eliminate potential exposure to children playing in the park.” Again, to save space, it is possible to delete the actual concentration/decision basis paragraph.

24. Page 5. Completed Removal Actions. The third paragraph is unnecessary because this information was already provided to the public in the EE/CA and whatever fact sheet accompanied the cleanup action.

25. Page 5. Completed Removal Action. Suggest avoiding the jargon in the fourth paragraph (TCRA references). This is about the “color of money” and does not help the reader evaluate the Alternatives. Although I would include the explanation of what was done, I would simply say that the excavation was filled with clean dirt. The key message for this section is that these action support the proposed final remedy by reducing the amount of waste that needs to be addressed.

26. Page 5. Risk Assessment. This entire section is an example of information that is meaningful to some readers but does not help the general public determine which Alternative is the best for addressing the kind of contamination present at the site. At best, it shows the justification for proposing any action at all. This is the kind of information that might be better placed after the “meat” of the document, and potentially shortened to its bare bones. Bottom line – this nearly four-page section hurts the readability of the proposed plan.

27. Page 5. Risk Assessment. Suggest deleting “Site-Specific” from the title. In the first paragraph, the parenthetic notes should be something like “(causes cancer)” and “(causes other illnesses),” otherwise you’re defining a term by using the term in the sentence. In the second paragraph, delete the parenthetic reference to the EPA document. It does not add to understanding and makes it look like the Navy is being forced to do something it does not think necessary.

28. Page 5. Risk Assessment. I think it would read more logically if this section lead with the first sentence of the third paragraph, then used the two paragraphs that preceded it (edited as in my previous comment), then finished with the second sentence of the third paragraph.

29. Page 5. Risk Assessment. It is not necessary, and is counter-productive, to take the reader through the steps of the Risk Assessment. If included at all, the entire section should be limited to the relevant risk scenarios that will drive cleanup decisions, and information, as appropriate, that differentiates one Alternative from another.

30. Page 6. Step 2. This section had a lot of jargon: “Health risks for PAHs are based on EPCs as BaP equivalents” is one obvious line from the last paragraph. This same paragraph talks about soils, but the section does not give the same information for groundwater. The table is very useful, but the paragraph that follows it is not necessary to help the reader understand the proposed remedy and is not adequate to actually understand exposure calculations for risk.

31. Page 6. Table 2. The formatting needs to be fixed. The superscripts crowd up into the horizontal lines.

32. Page 7. Table 3. This Table is not necessary to help the reader state preferences about a proposed remedy. The relevant information seems to be in the first column, third paragraph, last sentence. If used at all, and I would suggest that it is outside the scope of the Proposed Plan, I would put it at the end of the document, for those who want a deeper understanding.

33. Page 9. Remedial Action Objectives. The term from the title is not defined in the following text, nor is the definition in the glossary illuminating. The text of the second paragraph (“Soil”) would be a useful part of a definition, minus the specific contaminant.

34. Page 9. Soil. In the second paragraph, it is not necessary to give the date or the attendees for the meeting where the decisions were made. Some tightening could be accomplished.

35. Page 9. Groundwater. There is some redundancy and the section can be shortened.

36. Page 9. Summary of Remedial Alternatives. I have never seen the use of the parenthetic (retained for further analysis), and this is particularly puzzling when the text clearly states that the No Action alternative is “not protective.” I would delete the parenthetic and use the more common text explanation that “The No Action Alternative is always considered and, where not protective, used only as a baseline for comparison with other Alternatives.”

37. Page 10. Soil. Regarding the use of “(not retained for further analysis),” I have never seen this approach used in the 20 or so proposed plans I have reviewed, nor have I used it in the dozen or so that I have written. First, there is an assumption that all the alternatives that have made it out of the FS process (where many are dropped from consideration due to technical reasons) and into the list of Alternatives in the proposed plan, meet in some way all five of the balancing criteria. Their various strengths and weaknesses are illustrated in the comparison table and discussed in the justification section. Second, there is absolutely no reason for the public to read about an alternative that would not be considered as a final remedy. It also seems nonsensical to say that an Alternative has not been further analyzed and then say that it’s already been costed out, as in Alternatives 4 and 5. I think that Alternatives 4 and 5 should either be dropped or retained for consideration as a final remedy.

38. Page 11. Groundwater. The cost for Alternative 2 seems difficult to believe. Further explanation seems appropriate to explain why the two active systems in Alternative 3, for instance, are identical in cost.

39. Page 12. There is an opportunity here to save half a page of space by reducing Figure 5. Alternately, since Figure 4 is quite busy and has small print embedded in colored areas, you could reverse the sizing for readability.

40. Page 13. ARARs. The two pages on ARARs are not necessary and are more appropriate to a ROD. Typically, any ARAR discussion is small and is specific to the Description of Alternatives or the Comparison of Alternatives. For example, if an Alternative does not meet an ARAR and a Technical Inpracticability Waiver is being requested, a reference will appear in the description of the Alternative and the comparison table will be so noted under Criterion Two – ARARs: “Yes – with Waiver.” Keep in mind that the alternatives presented for public consideration have to meet all ARARs, so a list of what’s being met is not necessary in the Proposed Plan. If desired, a simple sentence saying that all alternatives will meet all requirements would suffice. The only case I can think of where you would need further explanation is if one Alternative was significantly better at meeting an ARAR and *that was a useful basis for the public stating a preference for one Alternative over another.*

41. Page 15. Comparison of Alternatives. Soil. This is the heart of the fact sheet. Delete Alternative Four and Alternative Five or return them to full consideration, or explain why they were dropped before we get to this point in the document.

42. Page 15. Comparison of Alternatives. Soil. You should delete all the comparisons for the No Action Alternative after it fails the first criterion. This also saves space. Delete the same information from Table 8. I’ve seen other fact sheets put n/a or just leave the table blank.

43. Page 15. Table 7. The green sentence, “Modifying,” should read “may prompt modifications of the *final* remedy.” It has been the case at other sites that a preferred remedy has been discarded in favor of a different remedy, based on community input.

44. Page 16. Short-term Effectiveness. The analysis section is missing any reference to time-to-cleanup-goals, which is a part of Short-term Effectiveness.

45. Page 16. Short-term Effectiveness. This section makes a reference to “manageable risks” for ICs. It is important for the public to understand if they choose to support an Alternative that relies on ICs what those risks are and briefly how they would be addressed.

46. Page 16. Groundwater. After Item Number One, all references to the No Action Alternative must be deleted. Item Number Three is incorrect when it states that Alternative 1 would have long term effectiveness.

47. Page 16. Groundwater. In Item Number Three, a short explanation is necessary for why Alternatives 3 and 6 would be moderate, and 4 and 5 would be high. Otherwise the reader will not be able to make a judgment about which alternative they prefer. Item Number Four is a good, succinct example.

48. Page 16. Groundwater. Item Number Five lacks information on time-to-cleanup-goals.

49. Page 16. Groundwater. Item Number 6 makes no sense. It references Table 7 (NCP criteria) as providing the “varying degrees of implementability” for the alternatives. This item needs specifics to help the reader see if there are differences between the alternatives.

50. Page 16. Preferred Alternatives. In the first paragraph, I didn’t understand the addition of “or welfare.” That is not normally the way it’s phrased. To save more space, you could skip the first paragraph because the title says it all, plus the first sentence of “Soil” starts with “The preferred alternative...”

51. Page 17. Preferred Alternatives. In the first paragraph, last sentence, the text says that “EPA may require the future landowner to enter into an enforceable agreement.” Does this mean that the Navy would not require an enforceable agreement to maintain the protectiveness of their remedy? This is the Navy’s proposed plan, not EPA’s, so I would delete the reference to EPA.

52. Page 17. Preferred Alternatives. I don’t know how to evaluate the second paragraph, which talks about limited soil removal. Is this part of all the alternatives? If so, it should be stated. If it only applies to one, it should be listed earlier, in the description section.

53. Page 17. Table 9. The title formatting looks odd. It’s not clear if the minus signs mean n/a or if they are a failure to meet a minimum standard. There are many ways to complete this table. Sometimes “good, better, best, or 1-2-3, or fully meets/exceeds, are more clear than plus signs. In particular, the short-term effectiveness would be improved if “time-to-reach-cleanup goals” was included (people feel that this is pretty important).

54. Page 17. Groundwater. It’s important not to use pre-decisional language in a proposed plan. Some of the language here says that the Navy will do something or the remedy will consist of something. We take pains to write things like “under the proposed remedy” or “EPA proposes to do...”

55. Page 18. Summary Statement. I haven’t seen this statement used in other fact sheets in this way. The information contained in it is basically inferred in everything we do, in other words, we can’t select a remedy that fails in the criteria listed. In the interests of saving space, especially for the follow-on box, I would delete this in favor of integrated text. One last observation: Item #5 “preference for treatment as a principal element” does not apply to the preferred soil alternative, so that seems like a mistake.

56. Page 19. Public Comment Period. It would be good if people could also send their comments via e-mail. This is something we do at EPA.

57. Page 19. Information Repositories. Usually the IR sites are referred to by the site name, i.e., Alameda IR, not BRAC IR.

58. Page 20. Administrative Record. The first sentence would read better if the subject was at the front – “The Administrative Record is...” In the sentence about the AR file, the subject and verb do not match. I think it should be the AR File is located...”

59. Page 21. Glossary. Suggest shortening the glossary by eliminating items that no longer appear in the text, or are defined in the text (EBMUD, BMP, USGS, USC, MCL, etc.). Any item that appears in the glossary should have a definition or be deleted. Definitions in the glossary should not be identical to those provided in the text of the document (such as PRG)