



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

February 27, 2008

Mr. Thomas Macchiarella, Code 06CA. TM
Department of the Navy
Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, CA 92108-4310

**Re: Review of the Draft Feasibility Study Report, IR Site 24, Alameda Point,
Alameda, California, November 2007**

Dear Mr. Macchiarella:

The U.S. Environmental Protection Agency (EPA) Region 9 has received the Draft Feasibility Study Report, IR Site 24, Alameda Point, Alameda, California, dated November 28, 2007. We have reviewed the aforementioned document and our comments are enclosed.

If there are any questions, please feel free to contact me at (415) 972-3002.

Sincerely,

A handwritten signature in black ink, appearing to read "Xuan Mai Tran".

Xuan-Mai Tran
Remedial Project Manager
Federal Facilities and Site Cleanup Branch

Enclosure

cc: Mary Parker, BRAC PMO, West
Dot Lofstrom, DTSC Sacramento
John West, SFRWQCB
George Humphreys, RAB Co-Chair
Peter Russell, Russell Resources, Inc.
Suzette Leith, EPA
John Chesnutt, EPA
Anna-Marie Cook, EPA

**Review of the Draft Feasibility Study Report, IR Site 24,
Alameda Point, Alameda, California
November 2007**

GENERAL COMMENTS

1. Alternative 2, Institutional Controls (ICs) of the Draft Feasibility Study Report, IR Site 24 (the FS Report), assumes that natural processes will accomplish ecological risk reduction with time; however, it is unclear how this alternative would be effective for ecological receptors since none of the legal and administrative controls described in Section 4.3.2 are effective for ecological receptors. Also, it is unclear how the effectiveness of the natural processes will be evaluated to determine if ecological risk at Site 24 has been minimized without monitoring. While ICs would be effective as an interim strategy with other remedial process options, it is unclear how it is a stand-alone remedy. Please include additional information in the FS Report to detail how natural processes will accomplish ecological risk reduction with time and how this will be determined or revise the text in Sections 5, 6, and on Tables 5-2 and 6-1 to clarify that ICs are not effective for ecological receptors. Also, please revise the text and Tables 5-2 and 6-1 to clarify that natural recovery cannot be assumed for Alternative 2 because there is no monitoring to verify this process.
2. Section 4.3.5, Containment, states that, "For IR Site 24, cap armoring would not be necessary for protection against erosional forces due to the absence of strong currents, boat wakes, propeller scour, and large-boat anchoring;" however, page ES-1 states that, "Under the proposed future reuse plan, IR Site 24 will be developed as a commercial marina along with the adjacent Seaplane Lagoon; there are currently no plans to remove the piers." It is unclear why cap armoring would not be necessary for protection against erosional forces when under the proposed future reuse plan, IR Site 24 will be developed as a commercial marina. Please revise the FS Report to clarify why IR Site 24 will not require protection from erosional forces from strong currents, boat wakes, propeller scour, and large-boat anchoring or to include cap armoring.
3. The remediation goals for Site 24 were adopted from the *Final Record of Decision, Site 17, Seaplane Lagoon*, dated October 2006 (Site 17 ROD) for IR Site 17 (Seaplane Lagoon); however, a preliminary remediation goal (PRG) was not established for lead at IR Site 17. As such, a PRG for lead has not been established. According to Section 3.4 (Sediment Goals for Protection of Ecological Receptors), "The spatial distribution of sediment lead concentrations in the AOEC [area of ecological concern] at IR Site 24 is similar to that of cadmium (Figure 3-2); therefore, the preliminary RG for cadmium is expected to reduce potential ecological risk due to lead concentrations as well." This was true for the Seaplane Lagoon, but Table 2-2 indicates that there are locations where lead is present above the effects range-median (ER-M), but cadmium is below the ER-M. Also, it appears that RGs for dieldrin, chromium, copper, silver, and zinc should be developed. Please revise the FS Report to develop RGs at Site 24 for lead, chromium, copper, silver, and zinc.

4. It is unclear from the text how dredged volumes were classified by existing data. Sections 6.6.1.3 (Off-Site Disposal) and B2.4 (Alternative 5 – Dredging) state that, “For FS purposes, it is assumed based on review of existing data for sediment in AOEC that 65 percent of the dredged volume would be managed as Class II nonhazardous waste, 10 percent would be classified as RCRA hazardous waste due to metal concentrations and would require stabilization to meet RCRA land-disposal restrictions, and 25 percent would be classified as California hazardous waste.” It is unclear if volumes were assumed based on a distance from an existing boring location or if some other method was used. Please revise the FS Report to clarify how dredged volumes were classified for off-site disposal.
5. Many sections of the document discuss the duration of the alternatives, and often Alternatives 2, 3 and 4 are all stated to have an expected duration of 30 years (e.g. page 7-1). In some places, it is specifically stated that the 30 years is for costing purposes, and we do not object to estimating cost based on 30 years duration for all three of these alternatives. However, simply stating that the duration of all three alternatives is 30 years is misleading. It would be helpful for the reader to know, in summary pages such as page 7-1 and the executive summary, how long ICs are actually expected to be needed (as discussed below, we think this might be in perpetuity); how long the monitored natural recovery (MNR) would be expected to take (as discussed below, this would appear to be a little over 30 years, assuming the need for a 12-inch cover as discussed regarding the capping alternative); and how long the capping would take (2.5 months, according to Section 6.5.2.5).

SPECIFIC COMMENTS

1. **Executive Summary, Table ES-1, Page 1 of 1:** For compliance with ARARs, Alternative 1 should be “not applicable” rather than “yes”.
2. **Section 2.2, Site Description and Operations, Page 2-2:** According to Section 2.2, “Storm drain lines leading to Outfalls K and L were replaced with polyvinyl chloride (PVC) piping in 1991. The storm drain line leading to Outfall J was cleaned and inspected in 1991 (TtEMI 1996).” It is unclear from Section 2.2 whether storm drain lines leading to Outfalls J, K and L have been cleaned and inspected since 1991. As such, it is unclear if there are still potential contaminants within the storm drain lines that could recontaminate IR Site 24. Please revise the FS Report to include additional information regarding the storm drain lines and the potential to impact IR Site 24.
3. **Section 2.6.1, Nature and Extent of Contamination, Page 2-11:** The next to last sentence in this section states: “The range of COPEC concentrations is presented in Table 2-3;” however, Table 2-3 (Range of Concentrations of Chemicals of Potential Ecological Concern [COPECs]) presents the ranges of COPECs only in surface sediment samples. Higher concentrations were found in several deeper sediment samples, as shown in Table 2-2 (2005 and 2006 Sediment Results for Chemicals of Potential Ecological Concern). Please revise Table 2-3 to include the deeper sediment concentration ranges.

4. **Section 2.6.1.1, Metals, Page 2-12:** It is unclear why the text states that silver is “likely naturally occurring.” Silver is used in photographic chemicals, as electrical conductors, for water purification, in dental fillings, in various medical and scientific equipment, and for silver plating. Given the wide range of uses of silver and the fact that IR Site 24 received industrial discharges, it should not be concluded that silver is naturally occurring, unless it can be demonstrated that there were no industrial, dental or medical uses of silver in the area where storm sewers discharged to IR Site 24. Please delete the statement that silver is “naturally occurring.”
5. **Section 2.7.1, Human Health Risk Assessment, Pages 2-14 and 2-15:** (a) This section finds no human health risk because shellfish habitat and gathering of shellfish are unlikely. However, there is no discussion of risk to humans through consumption of finfish, as there was in the neighboring Site 17 ROD. The only apparent explanation in the text of the FS Report is that access to the area for recreation is difficult due to currently-existing piers. However, unless there are ICs prohibiting removal of the piers, it cannot be assumed that they will remain in place. More explanation should be given why there is no risk to humans from fishing. (b) Section 6.2.2.1 (evaluation of the no action alternative) on page 6-6 states that there are no complete human-health exposure pathways, but “future development of the site would not be restricted under this alternative; therefore, exposure routes could develop in the future without land-use restrictions.” This suggests that there could be human health risk in the future if there are no ICs restricting land use. This appears to contradict the conclusions in Section 2.7.1.
6. **Section 3.1, Affected Media and Chemicals of Concern, Page 3-1:** The first paragraph of Section 3.1 states that, “No continuing sources of sediment contamination from land (such as flow of contaminated groundwater or ongoing discharge of contaminated sediment) have been identified at IR Site 24;” however, according to Section 2.2 (Site Description and Operations), storm drain lines leading to Outfalls J, K and L have not been cleaned and inspected since 1991. As such, it is unclear if potential contaminants exist within the storm drain lines. Please revise the FS Report to include additional information regarding the storm drain lines and the potential to impact IR Site 24.
7. **Section 3.1, Affected Media and Chemicals of Concern, Page 3-2 and Figure 3-1, Area of Ecological Concern with Exceedances of Preliminary Remediation Goals:** Given the uncertainties associated with the risk to ecological receptors and the finding of the highest concentration in surface sediment of dieldrin (22.35 micrograms per kilogram [ug/kg]) and six low molecular weight polynuclear aromatic hydrocarbons (LPAH6 - 25,727 ug/kg) at location PA C-22, this location should be included in the footprint of the AOEC. The concentration of LPAH6 is more than 8 times the ER-M. Please include location PA C-22 within the AOEC footprint.
8. **Section 3.2, RAO bullets, Page 3-4:** Based on the same concerns as stated in our question regarding Sections 2.7.1 and 6.2.2.1, should there be an RAO similar to the RAO for Site 17 to reduce potential biomagnifications of total PCBs in organisms higher in the food chain to reduce potential human health risks from the consumption of fish.
9. **Section 4.3.2, Institutional Controls, Page 4-3:** (a) The potential ICs include restrictions on dredging; however, page 2-2 states that in the past, the area was dredged

periodically. Also, Section 7.1 (p. 7-2) states that future site use would consist of docking large-scale ships such as ferries, cruise ships, or historical landmark vessels. The FS Report should discuss whether restrictions on dredging are compatible with the probable future reuse of the site. (b) The potential ICs do not include restrictions on high-energy forces such as boat wakes, propeller scour, keel drag, or large-boat anchoring. While the document at page 4-8 states that the area is protected from these forces, this is not explained, although it could be inferred from elsewhere in the document that this is because of the pilings for the wharf road. We recommend that the Navy consider including ICs of this type or explain why they are not necessary.

10. **Section 4.3.4, Monitored Natural Recovery, Page 4-7:** Could the monitoring itself induce disturbances in the sediment that could affect the effectiveness of MNR?
11. **Section 5.1.2, Alternative 2 – ICs, Page 5-3:** What is the rationale for prohibiting removal of the wharf road as a way of preventing contaminated sediment from being disbursed into the open water?
12. **Section 5.1.5, Alternative 5 - Dredging, Page 5-5; Section 5.1.6, Alternative 6 – In Situ Grouting, Page 5-6; Section 6.6.1.5, Reviews and Reporting, Page 6-20; and Appendix B, Cost Development Summaries:** The text states that a five-year review is assumed not to be required because the remedies are expected to be complete in one year, but a five-year review is still required to record that a remedy has been completed and that it is protective, since contaminants will remain in place in the remainder of Site 24. Please revise the text and cost estimate to include a five-year review for each of these alternatives.
13. **Section 5.1.6, Alternative 6 – In Situ Grouting, Page 5-6:** The text states that no long-term monitoring is required for Alternative 6. However, in situ grouting is an emerging technology in the early stages of development. As such, it is unclear why long-term monitoring along with bench-scale and pilot-scale treatability testing has not been proposed for Alternative 6 to evaluate the effectiveness of in situ grouting. Please revise Alternative 6 to include long-term monitoring to evaluate the effectiveness of in situ grouting.
14. **Section 5.2, Screening of Remedial Alternatives, Page 5-6:** This section states that Alternative 6, in-situ grouting, is eliminated from further consideration, in part because it would be expected to have a significant negative impact to the benthic community. Elsewhere the document indicates that both the thin-layer cap and dredging would destroy existing habitat. Why this is apparently considered to be a larger problem with Alternative 6 than with the other alternatives?
15. **Section 5.2, Screening of Remedial Alternatives, Page 5-6:** Since ICs alone will not address the ecological concerns at this site, how can Alternative 2, ICs alone, be a viable alternative? As discussed elsewhere, we also question whether this alternative meets the threshold protectiveness criterion. We note that ICs alone were not included as one of the alternatives for Site 17, Seaplane Lagoon. Additionally, the discussion of general response actions on page 4-1 states that ICs reduce potential human hazards, but does not mention ecological risks.

16. **Section 6.3.2.1, Overall Protection of Human Health and the Environment, Page 6-7:** This section states that Alternative 2, ICs, is considered protective of human health and the environment. It appears that this conclusion is based on the assumption that natural recovery would reduce ecological exposure. However, with this not being monitored, it cannot be assumed that this will happen, as suggested by the discussion regarding the no action alternative (Section 6.2.2.1). EPA questions whether Alternative 2 – ICs alone -- meets this threshold criterion.
17. **Section 6.3.2.3, Long-Term Effectiveness and Permanence, Page 6-8 and Section 6.4.2.3, Long-Term Effectiveness and Permanence, Page 6-11:** The actual sedimentation rate at IR Site 24 is unknown. For the purposes of the FS Report, the sedimentation rate at Site 24 is assumed to be at least one-half of the sedimentation rate estimated for the Seaplane Lagoon, but it is unclear from the text whether Site 24 features (e.g., piers, quay road, foundations and pilings) as well as the presence or absence of sediment sources from onshore run-off have been incorporated into the assumed sedimentation rate. Please revise the descriptions of Alternatives 2 and 3 to include an evaluation of the sedimentation rate at Site 24.
18. **Section 6.3.2.4, Reduction of Toxicity, Mobility, or Volume Through Treatment, Page 6-8:** The text states that the “toxicity, mobility, or volume of COCs [contaminants of concern] in sediment would be reduced through time through passive natural processes,” but this cannot be assumed for Alternative 2 (ICs) because there is no monitoring to verify that this would occur. Further, monitored passive natural processes are part of Alternative 3, so Alternative 2 should be less effective than Alternative 3. Please delete the quoted statement or revise the text to clarify that since reduction of toxicity, mobility, or volume cannot be verified, it cannot be assumed to occur.
19. **Section 6.4.1.1, Predesign Investigation, Page 6-9:** It is unclear how collection of one homogenized sediment sample from each location can be used to estimate the sedimentation rate. Please provide information to clarify how the sedimentation rate will be determined.
20. **Section 6.4.1.2, Sediment Monitoring Program, Page 6-9:** This paragraph states that sufficient sediment data are not currently available to predict the duration of the MNR program. When will such data be available? Are there adequate data to predict whether MNR would be a viable alternative?
21. **Section 6.4.1.2, Sediment Monitoring Program, Page 6-10:** The first full paragraph on page 6-10 states that approximately 10 inches of fresh sediment would be deposited at the site in a 30-year period, so 30 years is used as the duration of this alternative for cost-estimating purposes. However, there is no discussion of whether this is anticipated to meet the RAOs, or whether the other parts of the MNR remedy would be expected to be achieved within that time. There is also some confusion because Page 6-14 states that a 12-inch cap is considered sufficient. While the difference between 10 and 12 inches may not translate into many years (about 7, at the rate of 0.3 inches per year mentioned on page 6-10), the inconsistency is somewhat confusing. EPA’s preference would be for the

document to state that the actual time for MNR would be the time it takes to achieve a 12-inch cover, although 30 years could still be used for cost estimating.

22. **Section 6.4.1.2, Sediment Monitoring Program, Page 6-10:** The last paragraph of the section states that, "The MNR program would include periodic bathymetric surveys and sediment sampling and analysis." However, details regarding the sediment sampling and the analysis program have not been included in the text. Please revise the text to include details (i.e., sampling depth, number of sampling locations and analysis parameters) regarding the sediment sampling analysis program or reference the information provided in Table B-1 (Cost Estimate Assumptions for IR Site 24 Remedial Alternatives).
23. **Section 6.4.2.1, Overall Protection of Human Health and the Environment, Page 6-11:** This section indicates that ICs would be implemented during remediation. Wouldn't the ICs also need to remain in place after the MNR period has been completed in order to ensure that the natural cover is not being eroded or significantly compromised by external forces (as discussed with regard to the constructed cap in Section 6.5.1.4)?
24. **Section 6.4.2.3, Long-Term Effectiveness and Permanence, Page 6-11:** (a) This states that it is assumed that the sediment exposure interval for ecological receptors is 10 inches. Since the discussion of the thin-layer capping assumes a 12-inch cap (Section 6.5, page 6-12), shouldn't MNR goal also be a 12-inch natural cover? (b) The last paragraph on page 6-11 states that Alternative 3 assumes that ICs would be implemented for 30 years. Is that just for costing purposes, or is it actually expected that no ICs will be needed after 30 years. If the latter, does that mean that no ICs would be necessary to protect the expected 10-inch natural cover? (c) Doesn't there need to be monitoring in perpetuity to make sure the natural cover is not being eroded or significantly compromised by external forces, as is contemplated for the constructed cap alternative (Section 6.5.1.4)?
25. **Section 6.4.2.5, Short-term Effectiveness, Page 6-12:** The short-term effectiveness of Alternative 3 is unclear from this section. The text states, "Implementation of the components of Alternative 3 would not be expected to have adverse effects on site workers, the surrounding community, or the environment. ICs could be put in place in a short period of time to prohibit disturbance of sediment in the AOEC." This does not address short-term effectiveness. Please revise Section 6.4.2.5 to clarify the short-term effectiveness of Alternative 3. Also, the duration of the remedy is considered a component of short-term effectiveness and should be mentioned here.
26. **Section 6.5, Alternative 4 - Thin-Layer Capping With ICs, Page 6-12:** The description of this alternative does not discuss whether the existing sediment would support the sand used for a thin-layer cap (i.e., that the sand would not fall through fine-grained sediment) or provide justification for the assumption that the biologically active zone is only four to six inches. Some worms burrow to depths of 24 to 36 inches. Please clarify whether the existing sediment is sufficiently solid to support a thin layer cap and to justify the assumption about the thickness of the biologically active zone.

27. **Section 6.5, Alternative 4, Thin-Layer Capping with ICs, Page 6-12:** As with the MNR alternative, the document should discuss whether ICs, and monitoring of those ICs, would be necessary after the cap is installed in order to protect it.
28. **Section 6.5.1, Description of Alternative, Page 6-13:** The first bullet states that propeller scour is not expected to be a concern because the AOEC is primarily under the wharf road and sediment disturbance by boat propellers is not expected to cause significant mobilization of contaminated sediment into the open water. This suggests that the IC prohibiting removal of the road would be needed in perpetuity. There should be more explanation of how the road protects. Is it actually the pilings underneath the road that are considered protective? If the pilings supporting the road need repair, would there be a potential for disturbance to either a cap installed under Alternative 4 or the natural cover anticipated by Alternative 3?
29. **Section 6.5.1.4, Monitoring, Page 6-14:** Alternative 4 includes both construction and performance monitoring, but it is unclear what measures have been put in place to ensure the construction and performance monitoring does not damage the thin-layer cap. Please revise the FS Report to specify necessary measures to ensure construction and performance monitoring would not damage the thin-layer cap.
30. **Section 6.5.1.4, Monitoring, Page 6-14:** Wouldn't the performance-monitoring have to be done in perpetuity?
31. **Section 6.5.2.1, Overall Protection of Human Health and the Environment, and Section 6.5.2.3, Long-Term Effectiveness and Permanence, Page 6-15:** Is the assumed duration of ICs 30 years for costing purposes, or in perpetuity? Wouldn't they have to be in effect in perpetuity in order to protect the cap?
32. **Section 6.6.1.1, Predesign Investigation, Page 6-18:** Section 6.6.1.1 does not discuss the inclusion of information on construction and stability of Site 24 structures (i.e., wharf road, quay wall, piers, foundations and pilings) in and near the proposed dredging area. Please revise Section 6.6.1.1 to include an evaluation of the stability of Site 24 structures in and near the proposed dredging area to aid in preparing detailed design documents.

Also, it is unclear whether predesign sampling would also evaluate the horizontal extent of contamination. Please clarify whether predesign sampling will also evaluate the horizontal extent of contamination or explain why this is not necessary.
33. **Section 7, Comparative Analysis of Remedial Alternatives, Page 7-1:** As discussed in the general comment, it is misleading to simply state in the bullets that Alternatives 2, 3 and 4 all have an assumed duration of 30 years.
34. **Section 7.1, Overall Protection of Human Health and the Environment, Page 7-2:** Since the only difference between Alternatives 1 and 2 are ICs, it is unclear why it has been assumed that Alternative 2 will meet the threshold criterion of protection of human health and the environment. ICs are not effective for ecological receptors and there is no mitigation, treatment or monitoring in Alternative 2. Please revise the text to state that

Alternatives 1 and 2 will not be protective of ecological receptors or explain how administrative and legal controls would protect these receptors.

35. **Section 7.1, Overall Protection of Human Health and the Environment, Page 7-2:** As discussed above, we question how ICs alone, without any action to address the unacceptable risk to ecological receptors, meets the threshold criterion of overall protection of human health and the environment. This comment also applies to Section 7.10 on page 7-4 (Conclusions).
36. **Section 7.1, Overall Protection of Human Health and the Environment, Page 7-2:** The document should state that this criterion does not apply to Alternative 1, rather than stating that Alternative 1 meets this criterion.
37. **Section 7.5, Short-term effectiveness, Page 7-3:** We question the appropriateness of rating Alternatives 5, 2 and 3 the same. In terms of Alternatives 5 and 3, we recognize that this is a difficult criterion to “rate,” because its components are somewhat contradictory: In nearly every case, more active remedies achieve protection sooner than remedies such as MNA, but there are more potential impacts to the community. That said, given the alternatives being compared here, we think it is significant that Alternative 5 will achieve protectiveness so much sooner than Alternative 3. We would recommend giving Alternative 5 a rating more like that of Alternative 4. An alternative to changing the ratings would be to discuss Alternative 5 in a separate paragraph rather than discussing it in with the quite different Alternatives 2 and 3. We also question why Alternative 2 receives anything other than a low rating here, since “short-term effectiveness” implies that the remedy is effective, and Alternative 2 would do nothing to address the existing ecological risks.
38. **Table 5-2, discussion of effectiveness of ICs:** Should “Seaplane Lagoon” be changed to “Site 24”?
39. **Table 5-2, discussion of effectiveness of Alternative 4:** In last sentence, “confirm” should be “ensure.”
40. **Table 5-2, alternative 6, effectiveness:** It would be helpful to briefly explain why ICs would not be necessary.
41. **Table 5-2, cost column:** Wouldn’t the cost for MNR, as with ICs and capping with ICs, depend on duration of the ICs (as well as time to reach RAOs)? With all three alternatives involving ICs, wouldn’t ICs and monitoring of ICs, be necessary in perpetuity?
42. **Table 6-3, Cost Estimate Summary for Alternative 3: MNR with ICs:** The long-term monitoring (every 5 years for 30 years) operating and maintenance cost listed in Table 6-3 is \$94,800; however, it is unclear what this cost includes. Please revise the Cost Estimate Summary and Cost Estimate Assumption tables in Appendix B to include a detailed breakdown of costs.

43. **Section A4.2, Alternative 2 - ICs, Page A4-3:** Please change the next-to-last sentence in this section to the following: "U.S. EPA specifically considers sections (a)(1), (a)(2), (d), (e)(1) and (e)(2) of Cal. Code Regs., tit. 22 § 67391.1, to be relevant and appropriate."
44. **Table A2-2, Page 2:** The Navy concludes that the SIP is not an ARAR. However, it should be considered an ARAR for discharges to surface water from dewatering, as was done for Site 17.

Effluent limitations from CWA 301(b) were included as ARARs in the Site 17 ROD based on the finding that substantive provisions were potentially relevant and appropriate for the discharge of dewatering effluent. These requirements should be included here as well.

The document should discuss whether the air quality requirements identified as ARARs in the Site 17 ROD should be considered ARARs for Site 24 as well.

The document should discuss whether stormwater requirements identified as ARARs in the Site 17 ROD should be considered ARARs for Site 24 as well.

45. **Section B2.3, Alternative 4 - Thin-Layer Capping with ICs, Page B-7:** Cap construction and performance assumptions for Alternative 4 have been provided in Section B2.3; however, it does not appear that access issues have been addressed as an assumption. Please revise Section B2.3 to include an assumption that equipment is capable of accessing the area beneath the wharf road as an assumption.
46. **Section B2.3, Alternative 4 - Thin-Layer Capping with ICs, Page B-8 and Section B2.4, Alternative 5 - Dredging, Page B-10:** Alternative 4 includes surface-water monitoring for turbidity to ensure that capping operations do not disperse suspended sediment from the AOEC into the open-water area. However, costs associated with surface-water monitoring have not been included on the Cost Estimate Summary or Cost Estimate Assumptions tables. Surface-water monitoring should also be included in Alternative 5. Further, it is unclear whether the costs for the silt curtain have been included for either of these alternatives. Please revise the Cost Estimate Summary and Cost Estimate Assumption tables to include costs associated with surface-water monitoring. In addition, please revise the Cost Estimate Summary tables associated with Alternative 5 (Dredging) to include surface-water monitoring. Please also verify that costs have been included for a silt curtain for each of these alternatives.

MINOR COMMENT

1. Measurements have been provided in both metric and U.S. units throughout the FS Report text; however, only metric units have been provided on FS Report figures. Please revise the FS Report figures to present measurements in both metric and U.S. units to remain consistent with the FS Report text.