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LETTER AND COMMENTS FROM U S EPA REGION I ON DRAFT FINAL FEASIBILITY STUDY GOULD ISLAND OPERABLE UNIT 6 (OU6) NS NEWPORT RI
2/15/2013
U S EPA REGION I

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I
5 Post Office Square, Suite 100
Boston, MA 02109-3912

February 15, 2013

Ms. Maritza Montegross
NAVFAC MIDLANT (Code OPNEEV)
Environmental Restoration
Building Z-144, Room 109
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Draft Final Feasibility Study for Gould Island, OU6

Dear Ms. Montegross:

Thank you for the opportunity to review the Draft Final Feasibility Study for Gould Island dated December 2012 (FS). This FS updates the Draft FS to include additional media of concern for which remedial alternatives are presented. For each medium of concern the FS identifies representative treatment technologies and process options and presents the development and evaluation of remedial alternatives for that medium. Detailed comments are in Attachment A.

Please correct figure references and grammatical errors throughout the FS.

Only one viable alternative has been offered for groundwater and it does not include remediation of groundwater impacted by manganese concentrations exceeding the EPA health advisory. The only background well, 301S/B, has no exceedance of the health advisory in either shallow of bedrock groundwater. The Navy has not provided reasonable justification for dismissing manganese contamination of groundwater as a site-related contaminant of concern.

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of the Derecktor Shipyard Gould Island. Please do not hesitate to contact me at (617) 918-1385 should you wish to arrange a meeting.

Sincerely,

Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Pam Crump, RIDEM, Providence, RI
Deb Moore, NETC, Newport, RI

David Peterson, USEPA, Boston, MA
Chau Vu, USEPA, Boston, MA
Bart Hoskins, USEPA, Boston, MA
Ken Finkelstein, NOAA, Boston, MA
Steven Parker, Tetra Tech-NUS, Wilmington, MA

ATTACHMENT A

Page	Comment
p. ES-1, ¶3	The Site should be described as the extent of the area where soil and groundwater remediation (*i.e.,* area requiring LUCs) is proposed and where sediment remediation is required. Is this consistent with the statement in the second sentence of the fourth paragraph that Site 17 is approximately 6 acres?
p. ES-3, RAOs	Change the groundwater RAO to the text agreed to for Tank Farm 4: "Prevent site use of groundwater until risk-based and ARAR-based groundwater PRGs, as described elsewhere in this document have been achieved." Add an additional Soil RAO: "Prevent future migration of soil contaminants either to groundwater or adjacent sediments at concentrations that cause unacceptable risk."
p. ES-4, ¶2	The third sentence refers to two areas where exceedances of leachability criteria occurred, but identifies three areas. The fourth sentence inappropriately refers to the sixth area without discussing the first five. Please correct.
p. ES-4 thru ES-5	As noted in EPA's general comment, the discussion of manganese in groundwater needs to be revised since the Navy has not shown that manganese exceedances are below natural background (and therefore will require remedial action).
p. ES-5 & 6	Explain why SO2, which is limited excavation, is more expensive than SO4, which is full excavation.
p. ES-6, bullet 2	Please refer to leachability concentrations rather than criteria because the RIDEM leachability criteria only apply in the vadose zone. Make the same correction in Section 4.0 for SO2 and SO3 and elsewhere in the FS where applicable.
p. ES-6 & 7	For Alternative SD-3 and SD-3A change "dredging to 4 feet" to "dredging to remove all sediments exceeding PRGs."
p. ES-7	For Alternative GW-2, change the first bullet to "Implement MNA until risk-based and ARAR-based groundwater PRGs have been achieved."
p. 1-20, ¶2	As noted in EPA's general comment, the discussion of manganese in groundwater needs to be revised since the Navy has not shown that manganese exceedances are below natural background (and therefore will require remedial action).
p. 1-25, §1.10, ¶1	The second sentence refers to six receptor groups, but only lists five. Please clarify that the potential future resident/unrestricted residential user is included (addressed in Section 2).

p. 1-25, §1.10.1 Correct "His" to "HIs."

p. 1-29, §1.10.5, ¶1Please add the following for the potential future vapor intrusion pathway: "Should there be any future development at the Site, a mitigation system will be installed during the construction time or a full vapor intrusion study will be conducted."

p. 2-4, §2.1.4.1, ¶3Please edit the second sentence to cite that leachability standards are based on federal groundwater classification (potable, except for saline areas) and at end of the sentence insert "… or depth of the vadose zone soil." In the last sentence of the paragraph, remove "and leachability." Human health risk also needs to be compared to federal risk-based standards that should be derived using the TBC guidances cited in the ARARs Tables (this last comment also applies to the fourth paragraph).

p. 2-4, §2.1.4.1, ¶6 The water in the sumps may be separate from groundwater, but that does not apply to water in test pits that are not physically isolated from soil and groundwater. The groundwater standards would apply to water that is found in test pits.

p. 2-5, §2.1.4.1, ¶2 Remove the last sentence since ARARs pertaining to the handling and disposal of contaminated water are action-specific standards.

p. 2-5, §2.1.4.1, ¶4 Rewrite this paragraph to remove references to state groundwater classifications and instead state that federal potable groundwater standards apply to the Site, except in areas where the groundwater is saline.

p. 2-6, §2.1.4.1, ¶2 Which guidances were used to derive site-specific sediment criteria to address shellfish consumption risk? Discuss here and cite in the ARARs tables.

p. 2-6, §2.1.4.1, ¶1 In the fifth sentence, change " of navigable" to "for navigable."

p. 2-8, §2.2.1 ¶1 In the first bullet, soil is a media of concern because of exceedances of leachability standard that pose a risk of contaminant migration into groundwater/sediment. At the end of the fourth bullet, remove "and TPs."

p. 2-8, §2.2.2.1 ¶1 Regarding the last sentence, please clarify why risk-based PRGs for soils were not developed. Any contaminant that poses a risk to unrestricted use needs to be identified and addressed by the proposed remedial alternatives.

p. 2-9, §2.2.1.2, ¶2Please delete the phrase "to these receptors" in the third sentence because the risks discussed only apply to the subsistence fisherman.

p. 2-10, §2.2.1.3 As noted above, the sump water is not groundwater because the sumps are not connected to the underlying groundwater, but the water that collects in test pits is groundwater.

p. 2-10, §2.2.1.4 Remove the last sentence, since the water that accumulated in test pits should be treated as groundwater (so there should not be separate PRGs).

p. 2-12, §2.2.2.2, ¶3 As noted in EPA's general comment, the discussion of manganese in groundwater needs to be revised since the Navy has not shown that manganese exceedances are below natural background (and therefore will require remedial action).

p. 2-16, §2.3.1 Change the groundwater RAO to the text agreed to for Tank Farm 4: "Prevent site use of groundwater until risk-based and ARAR-based groundwater PRGs, as described elsewhere in this document have been achieved."

Add an additional Soil RAO: "Prevent future migration of soil contaminants either to groundwater or adjacent sediments at concentrations that cause unacceptable risk."

p. 2-17, §2.4 Include an estimate for the volume of contaminated groundwater that will be subject to remedial action. The FS needs to have an estimated volume of manganese contaminated groundwater in order to assess the groundwater alternatives under the NCP criteria.

For soil, include an estimate of the volume of soil that would potentially be subject to LUCs to prevent residential use, as well as the volumes of soils that might be addressed through active remedial alternatives.

p. 3-10, §3.3.2 Please correct the partial sentence at the top of the page. The details for the groundwater monitoring plan should be provided in a Long-Term Monitoring Plan completed after the decision document is issued, not in the Record of Decision.

p. 3-10, §3.3.4, ¶2 In the last sentence after "slab foundation," add "with a barrier layer laid down so that contaminated material does not contact the foundation."

p. 3-12, §3.3.5 Please correct the first sentence in the last paragraph (*i.e.,* mobilized should be immobilized).

p. 3-15, bullet 2 In the Implementability text, describe how off-loading facilities will be developed at the Site to load contaminated material onto vessels (within containers or as bulk material) so that it can be transported to off-site disposal facilities.

p. 3-13, §3.3.5 Please correct the conclusion because both *in situ* and *ex situ* solidification /stabilization have been retained and incorporated into the proposed alternatives.

p. 3-15, §3.3.7 The title should refer to "Soil and Sump Debris."

p. 3-17, §3.4.2.1 The discussion focuses on the applicability of Monitored Natural Attenuation (MNA) for the Stillwater Area with little or no discussion of the relevance to the Northeast shoreline. Please discuss applicability to the Northeast shoreline considering that MNA via degradation of organic contaminants could be effective. Ultimately the applicability could depend on the types of contaminants present that cause excess risk. The conclusion regarding applicability should

address the Stillwater Area and the Northeast Shoreline.

p. 3-19, §3.4.2.3	This section concludes that LUCs are not retained as process options to support other active sediment remedial processes such as capping, covering, or treating, or MNR. LUCs need to be implemented for any cap or cover alternative. The Navy has authority to prevent access by shellfisherman (and all trespassers) to the island, so it has the authority to restrict more than ship traffic. LUCs to prevent shellfishing also need to be established for MNR alternatives. The table in Section 3.4.6 process options lists LUCs as a process option. Please clarify that some of the listed process options can only be used in combination with other remedial options.
p. 3-22, §3.4.3.1	Regarding implementability, there may be habitat mitigation issues if shallow areas are converted from subtidal habitat to intertidal habitat because of the added thickness of the cover. There would be implementabilty issues with installing a cover over the eelgrass areas.
p. 3-24, §3.4.4.3	Geotubes should also be identified in the filtration discussion because they have been commonly used for sediment dewatering and are mentioned in the alternatives discussion as a potential dewatering option.
p. 3-31, §3.4.6	As discussed above, the sediment Process Option Table should include MNR, particularly for the Northeast Shoreline.
p. 3-38, §3.5.4	Retain a treatment alternative to compare to MNR in light of the manganese exceedances.
p. 3-40, §3.6	Under SO2 and SO3, please clarify if the sump material be removed and disposed off-site and the sumps filled in. Alternative SO3 should also include *ex situ* solidification/stabilization. For SD-3 and SD-4, the Northeast Area needs to be MNR rather than just Monitoring.
p. 3-41, §3.6	For the Groundwater Alternatives, retain a treatment alternative to compare to MNR.
p. 4-1, §4.0	Incorporate previous comments concerning Soil and Sump Debris. SO-4 is not "Full Excavation" only "Excavation of All Soil Exceeding Industrial Standards."
p. 4-2, §4.1	Note in the text that the sump component of the alternatives also includes cleaning and backfilling the sumps with clean material.
p. 4-2, §4.1.1	SO-1 should include statutorily required five-year reviews.
p. 4-3, §4.1.1	Confirmatory sampling should be conducted for any sumps that are found, after

debris removal, not to have fully intact side walls and bottom. For any leaking sumps additional soil removal below the breached areas may be required.

p. 4-3, §4.1.2 The first sentence in the last full paragraph should refer to "Soil from Areas 3, 4, and 5 ...." Area 6 should be deleted.

p. 4-4, §4.1.2 Regarding the first sentence of the second paragraph, will it be necessary to excavate some of the sumps by hand, rather than using excavation equipment? Regarding the last sentence, are there any wetland resource areas within the proposed excavation areas?

p. 4-4, §4.1.2 Please clarify in the third paragraph that any TPH that would be remediated is co-located with CERCLA contaminants. TPH confirmatory sampling should not be part of a CERCLA remedial action.

p. 4-9, §4.1.4 Please delete the redundant "Sump Debris Excavation" section.

p. 4-9. §4.1.4 In the last sentence in the second full paragraph, please delete "until the Site boundary or other limiting site feature is reached" because the Site is the area where contamination exists and remediation is necessary.

In the Off-Site Disposal paragraph, clarify whether contaminated soil will be loaded in containers for shipment or bulk loaded from the foundation staging area into barges. If the latter, there needs to be more discussion of the process, in particular information on the bulk off-loading facilities that will need to be developed to prevent release of contaminated material into the water or on land during the process of loading the bulk contaminated material onto barges.

p. 4-10, §4.2.1 Discuss that the alternative includes five-year reviews.

p. 4-11, §4.2.2 The second last sentence in the last full paragraph should refer to Area 6, not 4.

p. 4-12, §4.2.2 The last sentence in the partial paragraph at the top of the page should refer to Area 6, not 4.

p. 4-14, §4.2.3 Please replace the second sentence in the last paragraph with: "The contaminated soil and debris would be permanently removed from the sumps and Area 2 and disposed off-site, while S/S would be implemented for the remainder of the site to bind and stabilize ...."

p. 4-15, §4.2.3 Please correct the second full sentence on the page because S/S does not reduce COC concentrations, it immobilizes it and makes direct contact effects less likely. Therefore, COC concentrations would not be reduced to below industrial PRG levels except where soil was excavated.

p. 4-15, §4.2.3 Please correct the discussion in the penultimate paragraph. Implementation of SO3 would take more than one year considering the effort discussed in the subsequent sentence and the treatability study required but not mentioned. Also, please make this timeframe consistent with that identified for SO2.

p. 4-16, §4.2.4	Please edit the second sentence in the last full paragraph to refer to industrial PRGs and leachability criteria.
p. 4-16, §4.2.4	The ARARs discussion should refer to tables 4-10, 4-11, and 4-12. Clarify that this alternative is not full excavation, only excavation of soil exceeding industrial standards. Clarify why SO-4 costs less than SO-3 (which has more excavation).
p. 4-17, §4.2.4, ¶5	The timeframe indicated for this alternative is not consistent with that indicated for SO2. Please correct.
p. 4-19, §4.3	Please acknowledge in the discussion that SO4 would have the greatest long-term effectiveness because of the uncertainty regarding the long term effectiveness of S/S used in SO3.
p. 4-20	In the Comparison Table, add five-year review costs for SO-1.
p. 5-1, §5.0	Incorporate the previous comments regarding sediment, including that for SW-2 and SW-3. The alternatives need to incorporate MNR for the Northeast Shore area (the text for each alternative need to identify how long it will take MNR to reach PRGs) and the Navy needs to include LUCs to prevent shellfishing until sediment PRGs are achieved. If the containerized sediment is shipped from the island to anywhere other than the Newport Naval Base (including Davisville/Quonsett), it needs to be manifested before it leaves the island.
p. 5-2, §5.1.1	SW-1 includes statutorily required five-year reviews.
p. 5-2, §5.1	The reference in the first full paragraph should be to Sections 5.1.1 to 5.1.4. There is no Section 5.1.5.
p. 5-4, §5.1.2, ¶4	The last sentence should also refer to additional inspections and surveys following significant storm events that could damage or disturb the cap.
p. 5-4, §5.1.2, ¶6	More than four sampling locations will be required for monitoring the Northeast shoreline. This can be resolved when the monitoring plan is developed. Edit the last sentence to read: "… at which time the results would be assessed and the need for continued monitoring would be evaluated."
p. 5-5, §5.1.3, ¶1	Area-average assessment of the remediated area will be taken under advisement. Hot spots and statistical assessment of the area average will also have to be included in the assessment. Details to be provided in the work plan.
p.5-5, §5.1.3, ¶2	Please correct figure references. Rather than restricting sediment management to on-shore, please acknowledge that on-barge management of sediment may also be implemented. On barge management would minimize handling and may be preferable and more cost

effective.

p.5-7, §5.1.3, ¶1	Please edit the last sentence to read: "… at which time the results would be assessed and the need for continued monitoring would be evaluated."
p.5-7, §5.1.3, ¶2	Please edit the first sentence to read: "Based on the most recent analytical data, no contaminants exceeding PRGs would remain after …."
p. 5-7, §5.1.4, ¶2	Rather than restricting sediment management to on-shore, please acknowledge that on-barge management of sediment may also be implemented. On barge management would minimize handling and may be preferable and more cost effective.
p.5-8, §5.1.4	Please edit the discussion under Dredging at NE Shoreline. Because PRG exceedances have occurred at historical locations other than the four identified locations, this alternative should also include confirmation sampling of multiple locations along the Northeast shoreline to provide better documentation that historical hot spots have been addressed. Details to be provided in the work plan.
p.5-9, §5.1.4, ¶2	Please correct the text to state that "No contaminants exceeding PRGs would remain…." There may be short-term restoration monitoring costs associated with restoring disturbed eel-grass beds.
p.5-9, §5.2	Please add "For Sediment" to the title of this section.
p. 5-9, §5.2.1	SW-1 includes statutorily required five-year reviews.
p.5-11, §5.2.2, ¶1	In the first sentence, please correct the reference to Section 5.1.2.
p.5-11, §5.2.2, ¶3	If only monitoring is done in the Northeast Shoreline, the alternative does not achieve ARARs. It may meet ARARs if MNR can be demonstrated to achieve PRGs.
p.5-14, §5.2.3, ¶1	If only monitoring is done in the Northeast Shoreline, the alternative does not achieve ARARs. It may meet ARARs if MNR can be demonstrated to achieve PRGs.
p.5-16, §5.2.4, ¶2	For clarity, please edit the text to: "… at the four stations noted above (three 2010 stations plus G32-SD-305D) are still …."
p.5-18, §5.2.4, ¶1	Please change 18 months to 21 months based on subsequent text.
p.5-20, §5.3, ¶2	In the second sentence, please clarify that SD3 would be less protective in the short term than SD2.
p.5-20, §5.3, ¶4	If only monitoring is done in the Northeast Shoreline, then alternatives SW-2 and SW-3 do not achieve ARARs. It may meet ARARs if MNR can be demonstrated to achieve PRGs.

p.5-20, §5.3, ¶5	Please edit the first two sentences to reconcile the inconsistency (do both SD3 and SD3A have the same long-term effectiveness?). The second sentence should refer to long-term effectiveness (not protection) or it should be relocated to the discussion on page 5-19 (which states that SD3 is the most protective).
p. 6-1, §6.0	Incorporate previous comments concerning Groundwater. Specifically, incorporate the comment that an additional groundwater treatment alternative needs to be added to assess whether MNA is reasonable (particularly for manganese).
p. 6-2, §6.1.1	GW-1 should include statutorily required five-year reviews.
p. 6-2, §6.1.2	The text needs to identify how long MNA will take for all contaminants.
p. 6-2, §6.1.2, ¶5	As noted in EPA's general comment, the discussion of manganese in groundwater needs to be revised since the Navy has not shown that manganese exceedances are below natural background (and therefore will require remedial action).
p.6-3, §6.1.2	The last paragraph incorrectly states that the existing monitoring well network will be sufficient for groundwater monitoring. All proactive soil alternatives include the excavation of soil to a 12-foot depth at MW306S. Therefore, at a minimum, a replacement will be required. However, because the groundwater flow divides at this location it would be appropriate to install three monitoring wells at this location or use the 200 series wells if appropriate to ensure adequate groundwater monitoring at this area. Additional discussion will be required when the long-term monitoring plan is developed.
p.6-7, §6.2.2, ¶2	The alternative will not meet ARARs if MNA cannot achieve all groundwater cleanup standards within a reasonable time period.
Table 2-2, p. 1	Change "Permits for Structures or Work in or Affecting Navigable Waters of the United States" to "Rivers and Harbors Act, Section 10"; the citations should be "33 U.S.C. 403; 33 C.F.R. Parts 320-323."
Table 2-2, p. 4	Remove the State Endangered Species citation since the two sturgeon species are only on the State list as formerly occurring in the State.
Table 2-5A	Footnote (1) is missing – see naphthalene.
Table 3-3	Include active treatment technologies/process options (particularly for manganese).
Table 3-5	Retain MNA (for the Northeast Shore area).
Table 3-6	Retain at least one active treatment technologies/process options (particularly for manganese).
Table 4-4	Revise the second sentence of each TBC or ARAR's Action to be Taken text by

	adding "Contaminants posing risk will be excavated and removed off-site and remaining area left in place will have" before "LUCs."
Table 4-5, p. 3	Remove the RI Endangered Species citation.
Table 4-8, p. 3	Remove the RI Endangered Species citation.
Table 4-11, p. 3	Remove the RI Endangered Species citation.
Table 4-13	Repair of the bulkhead in Area 3 should be included in all active alternatives, but it is only included in SO4. No cost is included for bulkhead repair in any of the soil alternative cost tables in Appendix D. As an alternative to repairing the bulkhead to prevent solid migrating into the Stillwater Area, more comprehensive verification sampling should be included in this area for each alternative to confirm there will be no recontamination of the sediment by soil.
Table 4-14	Please augment in this table or add footnotes to clarify that remedial actions only address industrial exposures and exceedances of leachability criteria. Residential and recreational risks would remain for soil exposure in the absence of effective land use controls.
Table 4-14, p.4	Please edit the first row – ability to monitor effectiveness – by noting that short-term effectiveness could also be monitored by collecting confirmation samples from the remediation areas.
Table 4-14, p. 5	Include the cost of five-year reviews for SO-1.
Table 5	For the Location-specific ARARs tables for the sediment alternatives, identify which alternative is the Least Environmentally Damaging Practicable Alternative under the Federal Clean Water Act. Only one alternative can be the LEDPA. For each location-specific ARAR table for the sediment remedies change "Permits for Structures or Work in or Affecting Navigable Waters of the United States" to "Rivers and Harbors Act, Section 10"; the citations should be "33 U.S.C. 403; 33 C.F.R. Parts 320-323." For each location-specific ARAR table for the sediment remedies, remove the RI Endangered Species citation.
Table 5-4	For the Action to be Taken text for each citation, insert ", MNR," before "and LUCs."
Table 5-6, p. 1	For the EPA Sediment Guidance, identify whether the alternative (along the Northeast Shore) will meet MNR standards and how long will it take for the sediment to achieve cleanup standards.
Table 5-7	For the Action to be Taken text for each citation, insert ", MNR at the Northeast Shore area," before "and LUCs."

Table 5-9, p. 1	For the EPA Sediment Guidance, identify if the alternative (along the Northeast Shore) will meet MNR standards and how long will it take for the sediment to achieve cleanup standards.
Table 5-10	For the Action to be Taken text for each citation, remove "and LUCs."
Table 5-12, p. 1	Change the Action to be Taken text for the EPA Sediment Guidance to " Sediment dredging, dewatering, and disposal will meet standards established in this guidance."
Table 5-13, p. 1	For consistency with the SD3 discussion, please also refer to the removal of sediment from the Northeast shoreline for the first line item – Human Health Protection. Please reconcile the discussion in the third line item with the discussion in the first line item. Is there current human health risk? SD-2 and SD-3 can only achieve Action-specific ARARs and the Protectiveness criterion if the sediment in the Northeast Shoreline area can achieve sediment cleanup standards through MNR. The Table needs to note in the "Compliance with Location-specific ARARs" row which alternative is the "Least Environmentally Damaging Practicable Alternative."
Table 5-13, p. 2	SD-1 needs to have a five-year review. Include the cost of the review on page 5.
Table 5-13, p. 3	Please edit the third line item for SD3A to identify destruction of portions of the eelgrass beds to differentiate this from SD3.
Table 6-4	The Action to be Taken text for each citation needs to state whether MNA can achieve cleanup standards for all contaminants, including manganese, as well as how long it will take.
Table 6-5	In the first line item, the last column discusses the effects of soil remedial actions, but this table is for groundwater. Please correct.
Table 6-6, p.1	Alternative GW-2 only will meet the MNR guidance standards if all contaminants will achieve groundwater cleanup standards within a reasonable time period, as defined in the guidance. Add a groundwater treatment alternative (for manganese).
Table 6-7	Include five-year reviews for GW-1 and address what criteria GW-2 may not meet if it cannot achieve MNA standards within a reasonable time period. Add a GW-3 treatment alternative.

Figure 2-2A	At TP09-02 the leachability criteria are said to be exceeded but the data box lists soil concentrations that exceed the industrial PRGs. No data is provided for leachability. If exceedance of the leachability criteria are assumed based on the 20x rule, please clarify that. This figure identifies TP-01 as exceeding the industrial surface soil PRGs, but no TP-1 surface soil data is provided in Table 2-5, only subsurface soil data and concentrations in subsurface soil do not exceed the industrial PRGs. Please clarify if there is an industrial PRG exceedance at TP-01 in surface soil and if so please add the data to Table 2-5. This figure also shows a red circle at SB336 indicating an exceedance of surface soil PRGs. It is not apparent why SB336 should be red and the other sump borings with similar contaminant concentrations are not. All the sump material is debris so perhaps the purple circle should designate debris exceeding PRGs. Please correct as appropriate.
Figure 2-2B	This figure identifies SB338 as exceeding the residential subsurface soil PRGs, however no SB338 subsurface soil data is provided in Table 2-5, only surface soil data and concentrations in surface soil do exceed the residential PRGs. Please clarify if there is a residential PRG exceedance at SB338 in subsurface soil and if so please add the data to Table 2-5.
Figure 2-9	Depict the extent of the soil residential restriction LUC that is a component of the soil alternatives.
Figure 4-1	Depict the extent of the soil residential restriction LUC that is a component of SO-2.
Figure 4-2	Depict the extent of the soil residential restriction LUC that is a component of SO-3.
Figure 4-3	Depict the extent of the soil residential restriction LUC that is a component of SO-4.
Figure 5-1	Depict the area of LUCs that will need to be established for SD-2 and SD-3.
Figure 6-1	Insert a figure that illustrates the extent of groundwater LUCs to restrict residential use, that will be established under GW-2 and for any treatment alternative developed.
Appendix D, p. 1	The text indicates that pre-excavation sampling is proposed for Areas 2 and 4, but the discussion in Section 2.4 on page 2-18 states that pre-remedial sampling will be conducted at Areas 5 and 6. Please clarify.
Appendix D, p. 4	The text should indicate what areas would be subject to pre-excavation sampling. The same comment applies to page 6.
Appendix D	None of the capital cost tables include verification sampling at the

excavation/treatment areas as required by the descriptions of the alternatives. Please address.

Table D1-2.1 Please verify the Marine Transport daily costs of $5,200 for line items 6.4 and 7.6 versus $600 daily cost for line item 4.6. These are apparently different vessels.

Is there electric power at the site or will generators be required?

App. E, Table 1 The cost backup provided in this table is grossly inadequate to allow a reasonable review of the costs. Please provide a breakdown of all the line items to show how the costs were developed for each line item.

Please clarify Note #13 that states that mechanically dredged sediment will be transported to shore hydraulically.

Why would on-shore dewatering be preferable to on-barge dewatering? Sediment will have to be handled multiple times using on-shore dewatering.