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TRANSMITTAL LETTER AND U S NAVY RESPONSES TO RHODE ISLAND DEPARTMENT
OF ENVIRONMENTAL MANAGEMENT AND U S EPA REGION I COMMENTS ON REDLINE
DRAFT FINAL FEASIBILITY STUDY AUGUST 2013 FOR INSTALLATION RESTORATION
SITE 17 OPERABLE UNIT 6 (OU 6) BUILDING 32 AREA GOULD ISLAND NS NEWPORT RI

11/22/2013
TETRA TECH



C-NAVY-11-13-5294W

November 22, 2013

Project Number 112G03685

Ms. Kymberlee Keckler, Remedial Project Manager
U.S. EPA Region I
5 Post Office Square, Suite 100
Boston, Massachusetts 02114-3912

Ms. Pamela Crump, Remedial Project Manager
Rhode Island Department of Environmental Management
235 Promenade Street
Providence RI, 02908-5767

Reference: CLEAN Contract No. N62470-08-D-1001
Contract Task Order No. WE37

Subject: Response to Comments, Redline Draft Final Feasibility Study (August 2013),
IR Site 17 (OU6), Building 32 Area Gould Island,
Naval Station Newport, Jamestown RI

Dear Ms. Keckler, Ms. Crump:

On behalf of Ms. Maritza Montegross, US Navy NAVFAC Mid-Atlantic, I am providing to you responses to your comments to the Redline Draft Final Feasibility Study for the Building 32 Area at Gould Island, which is located in Jamestown RI, and part of the Naval Station Newport, formerly the Naval Education and Training Center (IR Site 17 and OU6) at Newport RI. This package includes responses to your comments dated October 30, 2013 (EPA) and November 6, 2013 (RIDEM).

Based on this response package, it is our intention to move forward with the Final FS. If you have any questions, please do not hesitate to contact me at 978-474-8434.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Stephen S. Parker', with a long horizontal line extending to the right.

Stephen S. Parker, LSP
Project Manager

Enclosures

c: D. Barclift, NAVFAC (w/encl.)
A. Bernhardt, Tetra Tech (w/encl.)
K. Finkelstein, NOAA (w/encl.)
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G. Glenn, Tetra Tech (w/o encl.)
D. Moore, NAVSTA (w/encl.)
M. Montegross, NAVFAC (w/encl.)
K. Munney, USF&W (w/encl.)
P. Steinberg, Mabbett Associates (w/encl.)
RDM Data Manager Tetra Tech, (w/encl.)
File 112G03685-8.0 (w/encl.), 3.1 (w/o encl.)

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**NAVY RESPONSES TO COMMENTS FROM U.S. EPA
REDLINE DRAFT FINAL FEASIBILITY STUDY
SITE 17 – GOULD ISLAND (AUGUST 27, 2013)
NAVAL STATION NEWPORT, RHODE ISLAND
COMMENTS DATED OCTOBER 30, 2013 (EPA)**

The U.S. Navy (Navy) is pleased to provide the US Environmental Protection Agency (U.S. EPA) with responses to the May 20, 2013 comments on the Draft Proposed Remedial Action Plan (PRAP) for Site 17, Building 32 at Gould Island, which is part of Naval Station (NAVSTA) Newport in Newport, Rhode Island. Comments are presented first (*italics font*), followed by the Navy's responses.

General Comment 1: As discussed on October 29, 2013, EPA believes that SD-3 is the LEDPA as it permanently removes contaminants from the environment. With SD-2, there is the risk of erosion of the cap or diffusion of contaminants through the cap. The short-term impacts associated with either burial or dredging will likely be addressed over time as the area recolonizes. This comment affects Tables 5-5, 5-8, and 5-10.

Response: It is the Navy's understanding that the document should identify the LEDPA, and alternative SD3 will be identified as such. The following will be stated: Alternative SD3 is currently identified as the least environmentally damaging practicable alternative (LEDPA) based on the understanding that removal of sediment would provide some additional disturbance than a cover system, but compensates by providing a permanent remedy by removal. There is uncertainty on the LEDPA however, with regard to extending this action to the Northeast shoreline where sensitive habitats are present, and the LEDPA goal needs to be considered carefully as further data is evaluated.

General Comment 2: EPA also assumes that the groundwater MNA alternative will be appropriately revised based on the new calculation sheets submitted yesterday (i.e., new flushing and conductivity information).

Response: Revised flushing calculations will be described and included in the revised FS.

p. ES-6 For Alternative SO-3, clarify whether long-term monitoring of the solidified/stabilized is included in the remedy to ensure the long-term protectiveness of the remedy.

Response: Alternative SO3 does not include LTM of stabilized soil.

p. 1-20, §1.8.3 The degradation of PCP presented in the graph appears to be exponential, not linear. Please revise.

Response: The chart will be reviewed, and the best fit curve will be shown.

p. 1-20, §1.8.3, ¶2 Copy the discussion from the Executive Summary (p. ES-5) that describes the source of manganese in groundwater here.

Response: The requested change will be made.

p. 1-29, §1.10.5, ¶1 Please edit the last sentence to read: "... site, design and construction will be conducted to address this data gap."



Response: The lack of vapor intrusion data is not considered a data gap since there are no buildings on site and no plan for construction of such.

p. 2-5, §2.1.4.1, ¶1 Qualify the discussion of test pit water to specify that if the test pit depth is above the groundwater elevation it is referred to as test pit water, but if the test pit depth is below the groundwater elevation it must be considered and managed as groundwater.

Response: The relative elevation to groundwater was not measured when the sample was collected. The application of groundwater ARARs to samples collected as standing water in test pits is not appropriate given the limitations on the sampling conducted. The clarification on the source and influences on the water collected from within the test pits is stated in the paragraph cited. The appropriate solution is for monitoring wells to be installed in or near these locations as part of the groundwater remedy to assure that the true groundwater at these locations meet the cleanup goals for the site in accordance with the groundwater remedy.

p. 2-5, §2.1.4.1, ¶3 Please edit the second sentence to read: “Because Rhode Island does not have an approved Comprehensive State Groundwater Protection Program, groundwater classifications from the RIDEM Groundwater Regulations are not applicable at CERCLA sites. EPA recognizes State groundwater cleanup standards for drinking water, from the RIDEM Remediation Regulations, as chemical-specific ARARs if they are more stringent than federal standards for the identified COCs considered during the identification of chemical-specific ARARs.”

Response: The change will be made as requested.

p. 2-6, §2.1.4.3, ¶1 In the fifth sentence, remove “and working within coastal zones” since the coastal zone regulations are location-specific ARARs.

Response: The change will be made as requested.

p. 2-10, §2.2.1.3, ¶1 Please clarify the last sentence to read: “... within TPs located above the groundwater elevation.” if that is correct.

Response: The relative elevation to groundwater was not measured when the sample was collected. Please see the response to comment above on page 2-5. No revision will be made.

p. 2-17, §2.4, ¶2 Change the last sentence that discusses groundwater to: “For the purposes of this FS, a contaminated groundwater volume of XX gallons has been used for evaluating the alternatives.”

If any of the sump/test pit water is below the groundwater level include it in



the volume of groundwater addressed by the remedy.

Response: The volume of groundwater will be calculated and presented. Regarding water in test pits, please refer to the responses to comments on Page 2-10 and 2-5 above.

p. 2-18, 5th bullet Identify the volume of contaminated soil that will be addressed within this subarea.

Response: The volume for area 6 is 93 cubic yards. This will be included.

p. 2-18, §2.4 Add a paragraph at the bottom of the page to specify the extent of the Site that will be addressed for the residential exposure scenario either by area or volume of soil addressed by the remedy.

Response: The volume of soil that would be addressed to be protective of the future resident (protected through a LUC to prevent unrestricted use) will be calculated and included.

p. 2-20, ¶2 Add a new last sentence: “As part of the PDI, the Northeast Shoreline will be sampled to determine the presence of any contamination requiring remedial action.”

Response: The change will be made as requested.

p. 4-2, §4.1.1 Please add a sentence acknowledging that five-year reviews are required for Alternative SO1 because contamination has been left in place at concentrations that create excess risk for unrestricted site use.

Response: Consistent with the Final FS for Tank Farm 4, the following text will be inserted: “In accordance with Navy guidance on alternative development, it is assumed that five year reviews of SO1 would be conducted as part of the facility five year review process. Under the no action alternative, only nominal costs would be anticipated for review of SO1.”

p. 4-3, ¶3 Regarding the last sentence of the new redlined text, clarify “addressed accordingly.” Specify whether all subsurface soil exceeding a particular standard will be removed and disposed offsite or will the concrete be sealed and an IC put on the area to prevent removal of the concrete cover or some other option?

Response: The cited paragraph will be amended to state that if this condition is encountered, the soil under the sump will be addressed in the same manner as other soil addressed by the alternative: Soil will be excavated to a depth of two feet from the top of the foundation or to meet PRGs (based on the alternative), excavated soil will be transported off site and disposed of, and the excavation will be backfilled.



p. 4-3, ¶4 *At the beginning of the second sentence, insert: “Although not part of the CERCLA remedial action,” and add at the end of the sentence: “to meet State regulatory standards.”*

Response: The change will be made as requested.

p. 4-4, ¶4 *Change the first new redlined sentence to: “As part of a separate agreement with the State regarding the Navy’s achieving State compliance standards, the Navy will conduct concurrent TPH sampling during the CERCLA cleanup.”*

Response: The change will be made as requested.

p. 4-5, §4.1.2, ¶1 *In the first sentence after “, loaded” add “into closed containers.” If the contaminated material is just loaded straight into the barge, include additional details about the onshore facility where the barges would be off-loaded and measures to prevent release of contaminants during transport, as well as decontamination of the barges.*

Response: The requested revision will be included, though cited as “covered containers”.

p. 4-5, §4.1.2, ¶2 *Please edit the last sentence to read: “... site, design and construction will be conducted to address this data gap.”*

Response: The lack of vapor intrusion data is not considered a data gap since there are no buildings on site and no plan for construction of such. The redline text presented describes the LUC accurately.

p. 4-5, §4.1.2, ¶3 *Add standard language to this paragraph regarding how LUC restrictions will be transferred if the Navy were ever to transfer the property to either a federal or non-federal entity (see groundwater section).*

Response: The second to last paragraph of Page 6-4 will be copied into this section as requested.

p. 4-7, ¶4 *In the first sentence after “, loaded” add “into closed containers.” If the contaminated material is just loaded straight into the barge, include additional details about the onshore facility where the barges would be off-loaded and measures to prevent release of contaminants during transport, as well as decontamination of the barges.*

Response: The requested revision will be included, though cited as “covered containers”

p. 4-9, ¶5 *In the first sentence after “, loaded” add “into closed containers.” If the contaminated material is just loaded straight into the barge, include additional details about the onshore facility where the barges would be off-loaded and measures to prevent release of contaminants during transport, as well as decontamination of the barges.*



Response: The requested revision will be included, though cited as “covered containers”

p. 4-10 , §4.2.1 Please add a sentence acknowledging that five-year reviews are required for Alternative SO1 because contamination has been left in place at concentrations that create excess risk for unrestricted site use.

Response: Consistent with the Final FS for Tank Farm 4, the following text will be inserted: “In accordance with Navy guidance on alternative development, it is assumed that five year reviews of SO1 would be conducted as part of the facility five year review process. Under the no action alternative, only nominal costs would be anticipated for review of SO1.”

p. 4-11, ¶1 After “construction workers” add “or future residents/recreational users.”

Response: The requested revision will be made.

p. 4-21, Table There would be Five-Year Review costs for SO1 (see how this was addressed for the no action groundwater alternative).

Response: Costs for five year review will be cited as “negligible” under alternative SO1.

p. 5-1, §5.0 Please edit SD1 to read: “No remedial action would be conducted other than statutory Five-year reviews.

Response: Consistent with the Final FS for Tank Farm 4, the following text will be inserted: “In accordance with Navy guidance on alternative development, it is assumed that five year reviews of SO1 would be conducted as part of the facility five year review process. Under the no action alternative, only nominal costs would be anticipated for review of SO1.”

For SD2, habitat restoration should be added as a component of the alternative both because it may be required if the Northeast Shoreline needs to be covered and because habitat restoration/mitigation will be required for covering the Stillwater Basin sediments (included in SD3). SD2 also requires long-term monitoring and potential maintenance of the cover.



Response: Habitat restoration for dredging is envisioned as partial backfill (approximately 6 inch thickness) of dredged areas with suitable substrate for re-colonization of the benthic community. For cover alternatives, design considerations can be accommodated to select cover material appropriate for optimal re-colonization of the area by marine benthic species. Similarly, monitoring efforts will be included for SD2 to measure the re-colonization, but other restoration efforts are not anticipated. Inspection, monitoring, and maintenance of the cover will be cited.

For SD3, please correct the second bullet to read: “Dredging in affected portions of the Stillwater area to achieve PRGs;”

Response: The requested revision will be made.

p. 5-2, §5.1.2 For SD2 habitat restoration/mitigation will be required for areas that are covered. Specify whether adding two feet of cover in any areas convert subtidal habitat to intertidal habitat or intertidal habitat to upland.

Response: See the response to the comment on P. 5-1 above. Installation of cover will not change the fundamental habitat features through elevation change.

p. 5-4, §5.1.2, ¶3 Please insert the missing length dimension in the first paragraph.

Response: The depth of the water at the potential target areas in the NE shoreline is between 2 and 12 feet. This will be added.

p. 5-4, §5.1.2, ¶5 Add standard language to this paragraph regarding how LUC restrictions will be transferred if the Navy were ever to transfer the property to either a federal or non-federal entity (see groundwater section).

Response: The second to last paragraph of Page 6-4 will be copied into this section as requested.

p. 5-7, §5.1.3, ¶3 Please revise the edited text to: “... above PRGs, sediment at those locations would be removed to achieve the PRGs.”

Response: The requested revision will be made.

p. 5-7, §5.1.3, ¶5 There is more detail presented for the sediment remedy on “Transportation and Disposal” than for the soil alternatives. Will a ramp need to be upgraded/installed for the soil alternatives also? For the soil alternatives, this would trigger location-specific ARARs for doing work in wetlands (Section 404 of the CWA and State wetlands regulations). Also for both the soil and sediment remedies, if a ramp at Davisville/Quonset will need to be upgraded that will trigger federal/state permitting requirements that should be discussed under the Implementability criterion.

Response: Similar detail will be provided in the transportation and disposal portion of the



soil section as is provided in the sediment section. The citation of the CWA will be included for any modifications or upgrades to existing shorelines, bulkheads or piers that will be needed for transportation of waste from the island to the mainland, and the Implementability section will note potential federal and state permitting requirements for these modifications. It is anticipated that the same ramps and landings would be used for both soil and sediment. For the purpose of the FS, cost associated with the use of the existing ramp landings that were used before during demolition of Building 32 is adequate and there is cost provided in the estimate for sediment dredging to allow for repair of landings as needed. This cost will be included in the soil removal cost estimates also.

p. 5-8, §5.2.1 State that Five-year reviews are required for Alternative SD1 because contamination has been left in place at concentrations that create excess risk for unrestricted site use.

Response: Consistent with the Final FS for Tank Farm 4, the following text will be inserted: “In accordance with Navy guidance on alternative development, it is assumed that five year reviews of SO1 would be conducted as part of the facility five year review process. Under the no action alternative, only nominal costs would be anticipated for review of SO1.”

p. 5-10, Table Add Five-Year Review costs to the Table (see how this was addressed for the no action groundwater alternative).

Response: Costs for five year review will be cited as “negligible” under alternative SD1.

p. 5-10, §5.2.2 For SD2, habitat restoration/mitigation may be required for areas that are covered, particularly for any areas converted from subtidal to intertidal or in any eelgrass areas.

Response: See the response to the comment on P. 5-1 above. Installation of cover will not change the fundamental habitat features through elevation change.

p. 5-10, §5.2.2, ¶3 Specify that SD3 is the “Least Environmentally Damaging Practicable Alternative” under the federal Clean Water Act.

Response: The requested revision is not appropriate for the cited section. This belongs in Section 5.2.3 and Section 5.3.

p. 5-12, ¶1 Remove “for the 30-yr life of the project.”

Response: The citation is not present on Page 5-12.

p. 5-12, Table Include the Five-Year Review costs back in the Table?

Response: Costs for five year review will be cited as “negligible” under alternative SD1. The costs for Five year reviews for other alternatives are covered with the soil



remedy.

p. 5-12, §5.2.3 *The impacts from transportation and material handling on the island (sediment dewatering; building/upgrading a ramp; any material handling facilities needed on the island; potential permitting of an off-loading ramp at Davisville) also need to be evaluated as part of this alternative.*

Response: It is most likely that transportation systems will be utilized that are compatible with currently available dock and ramp systems.

p. 5-13, ¶3 *Monitoring of any habitat mitigation/restoration implemented as part of this alternative may be required.*

Response: Habitat restoration should be limited to partial backfill of dredge areas with suitable substrate, unless eelgrass areas are disturbed, which is not anticipated based on discussions held with EPA and RIDEM on 10/29/13. See the response to the comment on P. 5-1 above. Dredging target areas will not change the fundamental habitat features through elevation change.

p. 5-13, ¶4 *Specify that SD3 is the “Least Environmentally Damaging Practicable Alternative” under the federal Clean Water Act.*

Response: The requested change will be made.

p. 5-14, ¶2 *If any amendments are added to the sediment to dewater/stabilize it that constitutes limited treatment.*

Response: The comment is noted.

p. 5-16, §5.3, ¶3 *Please correct the first sentence to read: “Implementation of Alternative SD3 could be more damaging to the ecosystem if additional dredging were conducted in areas where eelgrass is known to exist,....”*

Response: The requested change will be made.

Please clarify the last sentence. The target is sediment not necessarily just surface sediment. The goal is to define the extent if any of impacted sediment and to assess if and/or how much the eelgrass beds may be impacted.

Response: The requested change will be made.

p. 5-17, ¶3 *Identify SD3 as the “Least Environmentally Damaging Practicable Alternative.”*

Response: The requested change will be made.

p. 5-17, ¶5 *If any amendments are added to the dredged sediment to dewater/stabilize it that constitutes limited treatment.*



Response: The comment is noted.

*p. 5-18, §5.3, ¶2 Please revise the last two sentences, by combining them as follows:
“Alternative SD2 would be easier to implement than Alternative SD3 owing to the simpler components of the sediment cover layer, the avoidance of transportation and disposal issues related to dredged sediment.”*

Response: The requested change will be made.

SD3 will also have more Implementability issues with transportation and material handling on the island and at Davisville (off-site permitting issues) if an off-loading ramp is needed.

Response: It is most likely that transportation systems will be utilized that are compatible with currently available dock and ramp systems.

p. 5-18, Table Five-Year Review costs need to be included for SD1 (see how this was addressed for the no action groundwater alternative).

Response: Costs for five year review will be cited as “negligible” under alternative SD1.

p. 6-1, §6.0 The title of Alternative GW3 used differs from the title used on page 3-41. Please make the title consistent throughout the document. Section 3 evaluated and retained Enhanced Bioremediation.

Response: The requested change will be made.

p. 6-4, §6.1.2 Please clarify the intent regarding monitoring for organic COCs by editing the first full sentence on the page to: “... and as such, after the first five years of annual monitoring a reduction to one monitoring”

Response: The requested change will be made.

p. 6-7, §6.1.3, ¶4 Please correct the time frames as they are not consistent. Injections are two years apart, so PRGs should not be achieved within two years of the pilot study.

Response: The requested change will be made.

p. 6-14, §6.2.3 Please discuss MNA (in particular how long treatment and MNA will take to achieve groundwater cleanup standards).

Response: The requested change will be made using the recently revised flushing model predictions.

p. 6-16, §6.2.3, ¶1 Please review the partial sentence at the top of the page. One month does not appear to be sufficient time for the second injection to have an effect on



all site groundwater based on the spacing of the treatment zones. Please correct.

Response: The durations for the desired reductions will be reviewed and will be revised if appropriate.

Table 2-2, p. 2 *For the Clean Water, Section 404 Consideration insert after “dredging” the text: “, construction/upgrading of shoreline transportation/material handling facilities,”.*

Response: The requested change will be made, though note that if there is no construction of such facilities required, requirements would not apply.

Table 2-3 *For GW3, add federal and state groundwater injection standards (cited in Table 6-10).*

Response: The requested change will be made.

Table 2-3, p. 2 *The CWA NRWQC standards would be used for any water quality monitoring required, not just for dredging (also for capping and any work installing/upgrading the ramp needed on the island).*

Response: The requested change will be made.

Table 2-3, p.5 *State Water Quality standards would be used for any water quality monitoring required, not just for dredging (also for capping and any work installing/upgrading the ramp needed on the island).*

Response: The requested change will be made.

Table 3-3 *Please ensure the table is consistent with the discussion and conclusion in Section 3, where Bioprecipitation is discussed as a component of enhanced bioremediation.*

Response: The requested change will be made.

Table 4-5
other soil *If the alternative will requires a ramp on the island for the off-site disposal of contaminated soils, then federal and state wetlands standards (see sediment tables) (and all location tables) should be cited for any shoreline work in the intertidal zone. Any work on bulkheads would also trigger the requirements.*

Response: The comment is noted. If there is no construction of such facilities required, requirements would not apply. See the response to comment on Table 2-2.

Tables 4-10 to 4-12 *Please revise the titles: SO4 is not Full Excavation as noted in previous comments.*



Response: Tables cited will be revised to be titled “Excavation of Soil Exceeding Industrial PRGs”.

Tables 5-5, 5-8 The Navy has selected SD2 as the least environmentally damaging practicable alternative although it is not clear that is correct. SD3 is the LEDPA because it permanently removes contaminated sediment and the short-term impacts of dredging areas in SD3 versus covering them in SD 2 are not that different.

Response: The change will be made as requested.

Table 5-8 The location-specific ARARs also pertain to the construction/upgrade of any shoreline off-loading ramp needed for the alternative and any work on bulkheads.

Response: The change will be made as requested.

Table 5-10 Regarding Environmental Protection, the FS states that SD3 is destructive initially, but the same comment should also be applied to SD2 that also destroys the existing ecosystem with a cover. Either apply this comment to both alternatives or delete it for SD3. Similarly, SD3 is said to damage eelgrass if sediment removal is required. Eelgrass may also be damaged by SD2 if a cover is required. Please edit the text throughout the FS where applicable.

Response: It is agreed that SD2 and SD3 are equally destructive to the existing habitat initially. This change will be made as requested.

Table 6-8 Please supplement the line items to indicate the time frame for achievement of the PRGs for GW3.

Response: The revised flushing model time frames will be included.

Appendix D The calculation sheets have been omitted from this appendix. Please include them. Please clarify where pre-excavation sampling will be conducted. It appears that pre-excavation sampling would be warranted at Areas 2 and 6 that are defined only by a single sample.

Response: The use of pre-excavation sampling or (conversely) confirmation sampling is presented in Section 4.1.4 for each of the excavation areas under alternative SO4.



**NAVY RESPONSES TO COMMENTS FROM RIDEM
REDLINE DRAFT FINAL FEASIBILITY STUDY
SITE 17 – GOULD ISLAND (AUGUST 27, 2013)
NAVAL STATION NEWPORT, RHODE ISLAND
COMMENTS DATED 11/6/13**

General Comments:

1. *Former Building 44 Underground Storage Tanks*

As indicated in RIDEM's comments on the Draft Final FS, the State was concerned that the debris remaining in the five former underground storage tanks (USTs) at Building 44 was not clean fill and would therefore be considered solid waste that would need to be addressed by the CERCLA remedy. However, RIDEM was able to find documentation indicating that these five tanks should in fact be considered closed out under RIDEM's regulations. Although only two of the five tanks are documented as being officially closed out, it appears that all five tanks should have included. This error will be corrected in the UST files. Also, it appears that sampling of the fill material was conducted and the results met RIDEM's residential criteria. Therefore, RIDEM believes the former USTs at Building 44 are no longer an issue and no further action is required.

Response: The comment is noted, and the report will be revised to reflect that all five tanks were closed out in accordance with RIDEM UST regulations.

2. *MNA for Manganese*

The Navy sent revised flushing calculations on October 29, 2013 which provided new estimates for the time for manganese in groundwater to reach PRGs with monitored natural attenuation (MNA). As indicated in RIDEM's email on November 1, 2013, the State concurs with this approach assuming that the sampling program will include obtaining additional hydraulic conductivity data from Gould Island during its implementation which can be used to further refine these estimates by the first 5-year review.

Response: The comment is noted, and the need for additional conductivity information will be noted in the costing and description of the first rounds of MNA.

Specific Comments:

1. *p. ES-6, Alternative SO2, 4th bullet (revised).*

Please remove "annual" from this statement. RIDEM would require more frequent sampling for MNA purposes.

Response: The suggested revision will be made.

2. *p. ES-6, Alternative SO3, 2nd bullet (revised).*

"Leachability Criteria" was changed to "Leachability concentrations." This modification does not make sense in this context. How does one define "Leachability concentrations"? This bullet should state that vadose zone soils exceeding Leachability Criteria (as outlined in RIDEM's Remediation Regulations) would be addressed. Please undo this language modification.

Response: The change was specifically requested by USEPA 2/15/13. The Navy asked EPA the



revision be changed on behalf of RIDEM, and the EPA agreed on 11/6/13.

3. *p. ES-7, Alternatives SD2 and SD3, last bullet.*

As RIDEM has suggested previously, it may be prudent to leave the option open for continued monitoring along the Northeast Shoreline if the PDI indicates that further remedial action is necessary. Based on the results of the PDI, the team would decide whether monitoring or dredging would be the best alternative to address this area if needed.

Response: Follow up on the outcome of the PDI sampling step at the NE Shoreline is to be resolved after the data is collected. If the sediment is removed, there would not be a need to conduct continued monitoring. Likewise, if concentrations are definitively below cleanup levels, there would not be a need for monitoring.

4. *p. 1-2, Section 1.0, last paragraph.*

Since TPH is comingled with CERCLA contaminants at this Site where there is a CERCLA risk, and TPH will be addressed as part of the remedial action work plan stage, this FS should clearly indicate where exceedances of the RIDEM Direct Exposure Criteria (industrial and residential) for TPH are located. Exceedances of the residential DEC for TPH should be included to determine the boundaries for the land use controls for this Site. Please ensure that this FS discusses all TPH exceedances where TPH is comingled with CERCLA contaminants. In addition, please state that any areas where TPH is not comingled with CERCLA contaminants will be addressed as Category 2 Areas similar to other sites at Naval Station Newport.

Response: TPH data is presented on Table A-3.1, and A-3.2 of the FS report. It is likely that the LUCs will be established for the entire property since groundwater and soil exceeding residential criteria are assumed and not defined.

5. *p. 2-4, Section 2.1.4.1, Soil; 1st paragraph.*

Please remove “based on the federal groundwater classification” from the 2nd sentence. This paragraph is discussing the State’s leachability criteria which are soil-based regulatory criteria based on the State’s groundwater classification. Please explain why “and leachability” was deleted from the 5th sentence. Site concentrations should be compared to direct exposure and leachability soil criteria.

Response: The change was specifically requested by USEPA 2/15/13. The Navy asked EPA if the revision could be changed on behalf of RIDEM, and the EPA agreed on 11/6/13.

6. *p. 2-8, Section 2.2.1, Identification of Media of Concern; 1st bullet.*

Please explain why this bullet was modified to indicate that soil is only a media of concern due to exceedances of leachability criteria. Leachability is not the only concern for soil; the risk is unacceptable from other exposure routes (i.e., direct contact). Please undo this modification.

Response: Soil does not pose *measured* risk to residents and unrestricted recreational users, it is *assumed* to pose risk, and in accordance with prior agreements, the risk to residents was not measured. Direct contact risk is also assumed based on DEC exceedances, and this can be stated in this bullet.

7. *p. 2-8, Section 2.2.1, Identification of Media of Concern; last bullet.*



Response: Please explain why “and TPs” was deleted. The contaminated water contained within test pits is discussed throughout this FS.

Response: The water in test pits was deleted at the suggestion of USEPA in their February comments. There has been continued confusion on the role of water in test pits that poses risk. The water from the test pits that posed the risk were test pits that were excavated into the sump.

8. *p. 2-18, Section 2.4, 4th bullet.*

Please explain why part of this bullet was deleted. Will the actual depth of contamination at TP09 be verified prior to excavation?

Response: As described in Section 4.1.4, area 5 (where TP09 was excavated) would be excavated to a depth of 2 feet and confirmation samples would be collected as a part of SO4.

9. *p. 2-10, Sediment; 2nd paragraph.*

“Given the sensitive nature of the area along the northeast shoreline, and because a remedial action within the eelgrass bed would likely cause more harm to ecological aquatic species existing in that habitat, remedial action in this area should be considered only if absolutely necessary.”

Please see specific comment #3.

Response: Follow up on the outcome of the PDI sampling step at the NE Shoreline is to be resolved after the data is collected. If the sediment is removed, there would not be a need to conduct continued monitoring. Likewise, if concentrations are definitively below cleanup levels, there would not be a need for monitoring.

10. *p. 3-41, Marine Sediment Alternatives, Alternative SD2.*

Please update the description of SD2 to be consistent with the Executive Summary.

Response: The alternative titles and summary descriptions will be checked and revised for consistency.

11. *p. 4-1, Alternative SO4.*

The revised title of Alternative SO4, “Excavation of soils exceeding Industrial PRGs”, does not include soils exceeding Leachability Criteria, and is not consistent with the title of Section 4.1.4 on page 4-8. Please revise as necessary.

Response: The alternative titles and summary descriptions will be checked and revised for consistency.

12. *p. 4-17, Section 4.2.4, Alternative SO4 – Title*

Please see previous comment.



Response: The alternative titles and summary descriptions will be checked and revised for consistency.

13. p. 5-1, Section 5.0, Description and Detailed Analysis of Offshore Alternatives for Sediment.

Please see specific comment #3.

Response: Follow up on the outcome of the PDI sampling step at the NE Shoreline is to be resolved after the data is collected. If the sediment is removed, there would not be a need to conduct continued monitoring. Likewise, if concentrations are definitively below cleanup levels, there would not be a need for monitoring.

14. p. 5-4, Section 5.1.2, LUCs and Inspections; 1st paragraph, 1st sentence.

Please update the water depth for the Northeast Shoreline and delete “will be established” following the parentheses.

Response: The water depths (6-14 feet) will be presented as requested.

