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U S NAVY RESPONSES TO U S EPA COMMENTS TO DRAFT FINAL PHASE 2 REMEDIAL
INVESTIGATION AND BASELINE ECOLOGICAL RISK ASSESSMENT SITE 17 GOULD
ISLAND NS NEWPORT RI
8/1/2011
U S NAVY

ATTACHMENT A

NAVY RESPONSES TO US ENVIRONMENTAL PROTECTION AGENCY (EPA) COMMENTS (DATED SEPTEMBER 20, 2011) DRAFT FINAL PHASE 2 REMEDIAL INVESTIGATION, AND BASELINE ECOLOGICAL RISK ASSESSMENT – AUGUST 2011, SITE 17, GOULD ISLAND NAVSTA NEWPORT, NEWPORT RHODE ISLAND

Navy responses to the EPA comments on the Draft Final Phase 2 Remedial Investigation and Baseline Ecological Risk Assessment –August 2011, Site 17, Gould Island, Naval Station Newport, Newport Rhode Island are presented below. The comments are presented first (in italics) followed by Navy's responses. Redline text is provided to show the actual proposed revisions to the document.

GENERAL COMMENTS

***Comment 1:** The conclusion and recommendations of human health non-cancer and cancer risks in the Executive Summary on pages E-4, E-5, E-6 are not consistent with the summary on pages 1-22 and 1-23. The recommendations do not include exposures to cadmium in subsurface soil (unacceptable non-cancer risks) or PAHs and PCBs exposure in shallow groundwater for construction workers. Please revise the Executive Summary to accurately reflect the findings from the risk assessment in the 2006 RI.*

Response: The executive summary will be revised to present previously- measured risk from soil and water in excavations, as follows:

Under "Soil" (page E-4) the first paragraph will be revised as follows:

"Elevated concentrations of soil PAHs and metals (including cadmium) are present within vaults and sumps in the foundation of former Building 32, and just outside the southwest corner of Building 32, near the former locations of the dust collection storage building and acid storage shed. These PAHs and metals are modeled to pose a cancer risk of 1E-5 and a noncancer hazard index of 1. Additionally, soils in the sumps are presumed to have affected water withheld in the sumps (addressed below). These soils are confined within the sumps and can be easily addressed through excavation if necessary. This area is limited in extent, and the source of the metals and PAHs is presumed to be a result of localized releases from or near these materials storage areas."

Under "Groundwater" (page E-5), a new third paragraph will be added:

"PAHs and PCBs detected in water accumulating in test excavations conducted within building sumps during the Phase 1 RI were found to pose risk to construction workers through a predicted air concentration based on the presence of the constituents in the standing water. This is not a true groundwater risk but is noteworthy, and these sumps will need to be addressed in the FS."

In addition, the first bullet in the "Recommendations" section on page E-6 will be revised as follows:

- "PCBs, PAHs, metals and pentachlorophenol in water and soil within sumps that pose potential risk to future industrial and construction workers under a conservative trench air modeling scenario;"

Comment 2: *Table 6-25 from the Draft Phase 2 RI (juvenile production for surviving female endpoint) was omitted from the Draft Final Phase 2 RI. The Table of Contents shows that this table should be Table 6-27. Please insert the correct Table 6-27.*

Response: The Table 6-27 in the PDF version of the submittal was incorrect, although the Table 6-27 in the paper copy of the report is confirmed to be correct. The remainder of the document is being checked to determine if there was a systematic problem, but it appears that this is not the case. The correct table 6-27 (attached to this response summary) will be included and tables will be QA'd prior to publication of the final.

Comment 3: *The Draft Final RI discusses uncertainty noting that there are several inconsistencies and concerns with the results of the toxicity testing. As a result of team discussions, some samples that would normally be considered non-toxic were considered toxic for the purposes of the uncertainty analysis. This analysis changed some of the NOEC and LOEC values. However, it should be noted that the results of the uncertainty analysis were not carried through to the Draft Final RI. None of the figures presenting the results incorporates the uncertainty analysis and none of these figures reflects the contaminant concentrations detected in earlier sampling rounds. This should be considered as this project moves forward.*

Response: The results of the uncertainty analysis were carried through to the Draft Final RI. The discussion is in Section 6.5.2 beginning with the third paragraph and continuing to the next to last paragraph in that section. However, some figures provided in the response to comments were developed to demonstrate the differences in two ERMQs that were being discussed during the comment response cycle; however, inclusion of both of these is not appropriate or necessary for the revised report. The figures show the logic used to select the more conservative ERMQ, and inclusion of both sets would lead to confusion. Finally, the contaminant concentration figures in the report do include contaminant concentrations detected in earlier sampling rounds. If there are data that the reviewer believes are missing, specific information should be conveyed.

No revisions are anticipated as follow-up to this comment.

SPECIFIC COMMENTS

Comment 1, p. E-6: *Regarding risks from shellfish consumption, PCBs are also major risk contributors in addition to arsenic, which was considered background. The FS must include remedial alternatives to address risks from this pathway.*

Response: The last bullet on the page describes this risk, which will be addressed in the FS. No revisions to the BERA are proposed as follow-up to this comment.

Comment 2, p. 1-19, §1.5.5, ¶13: *EPA agrees with the last sentence. Why were additional data not collected during the Phase 2 RI sediment sampling to determine the 'limits of contaminants to the north'?*

Response: The paragraph cited in the comment above is part of Section 1.5.5, titled "Phase 1 Remedial Investigation", and describes the data collected in Phase 1 during 2005. The conclusion statement regarding "limits of contaminants to the north" was made at the completion of Phase 1. As a result, Phase 2 did sample extensively to the north, all the way to the piling structure at the northern extremity of the study area. There is no revision needed based on this comment.

Comment 3, p. 1-22: Please provide the reference and date for the HHRA from the Phase 1 RI for this section.

Response: The reference [“\(Tetra Tech, 2006\)”](#) will be added to the introductory paragraph of the “Human Health Risk Assessment” header.

Comment 4, p. 2-6, §2.2.1.1, ¶3: In the first sentence, change “for cohesion testing” to “for erodibility testing.”

Response: The requested change will be made as follows:

“It is also noted that during core collection conducted by others in March 2011 (not described in this report) gravity cores were used to acquire sediment for ~~cohesion~~ erodibility testing.”

Comment 5, p. 5-1, §5.0, ¶3: In the third sentence, change “fate and of” to “fate and transport of.”

Response: The requested change will be made as follows:

“The probable contaminant fate and transport of each group of contaminants found at the site are discussed in some detail in Sections 5.3 through 5.5.”

Comment 6, p. 5-6, §5.4, ¶3: It is unlikely that bedload occurs in the Stillwater area? Please reword this sentence to remove reference to bedload transport and define what is meant by down-current.

Response: The sentence will be replaced as follows:

“Disturbance of this sediment could result in conveyance of contaminants through sediment transport processes such as mixing and advection.”

Comment 7, p. 5-7, §5.5, ¶3: Please reword the third sentence. It implies that wave action will result in burial which is unlikely.

Response: The sentence will be replaced as follows:

“Metals bound to sediments will be buried over time beneath the benthic surface or will be conveyed with current flow through sediment transport processes such as mixing and advection.”

Comment 8, p. 5-12, §5.6, ¶2: EPA agrees with the statement in the last sentence that ‘if the breakwater and shoreline improvements are not maintained in the long-term, the fill areas at the north end of the island will sustain continued erosion.’

Response: The comment is noted. No revisions to the BERA are proposed as follow-up to this comment.

Comment 9, p. 4-46, §4.3.7: Regarding the last sentence in the first paragraph, EPA notes that sample locations 308E and 308F had PCB concentrations greater than 10 mg/kg and 15 mg/kg respectively so PCB impacts to biota collected at the northwestern shoreline cannot be dismissed as the text suggests.

Response: The first paragraph was changed based on responses to comments on the draft BERA; however, it appears that some text from the Draft BERA was inadvertently deleted and an edit belonging in the summary paragraph for the northwest shoreline was placed in this paragraph. The first paragraph for Stillwater Basin will be revised as follows:

“The biota samples from the Stillwater Basin had some of the highest concentrations of PCB homologs and metals in comparison to other biota samples collected as part of the Gould Island RI. The presence of PCB homologs in tissue samples collected from this area indicates that the shellfish may be taking up PCBs found in the sediment in this area.”

In addition, the second paragraph for Northwest Shoreline will be revised as follows:

“However, the single crab sample collected from this area was found to contain PCB homolog concentrations similar to that measured in crabs from the Stillwater area. Since the PCB concentrations in the sediment at this area are relatively low, the elevated concentration in this one crab sample can be attributed to the mobility of the animals and should not be attributed to a local condition at this portion of the site. The low levels of PCB homologs and metals in the clam sample from the Northwest shoreline indicate these contaminants are not being taken up by clams in this area.”

Comment 10, p. 6-14, §6.3.4.2: Please reword the sentence at the top of the page to clarify its meaning.

Response: The sentence will be revised as follows:

“The following summarizes the chemicals that were detected infrequently (in one to three samples out of the data set) and were eliminated from further evaluation:”

Comment 11, p. 7-13: Please discuss whether biota contamination is an issue at the Site. It is unclear where the reference locations for clam/mussel and crab collection are and how background is defined for shellfish, which can migrate. Please also refer to tables 4-23 through 4-31 and Figure 2-2 for biota sampling locations.

Response: The reference locations are presented on Figure 2-4. As presented on Tables 2-6, 4-30 and 4-31, there were three reference samples, and clams and crabs were collected at all three. Figure 2-4 is revised and attached to this response summary to show where these reference samples were located.

Comment 12, p. 7-16: Update “mid 2011” to reflect when the sediment transport model will be available for review.

Response: The sediment transport model is published in the FS (September 2011). The citation will be revised accordingly.

Comment 13, Tables 4-23 to 4-31 & Figure 2-2: It is not clear from these tables where the background clam/mussel and crab samples are located. Please provide. From the tables and the text, it is also unclear how many background sample locations are included. Since contaminants found in shellfish are proposed for exclusion because of high background concentrations, further detail and discussion need to be provided.

Response: The reference locations are presented on Figure 2-4 (revised and attached). Locations and number of reference samples are also presented on Table 2-6. As presented on Tables 2-6, 4-30 and 4-31, there were three reference samples for clams and three for crabs. The specific reference sample locations are listed in the last three rows on Table 2-6, and the second row on Tables 4-30 (clams) and 4-31 (crabs) (JPC-01, JPC-02, and JCC-04). Tables 4-23 through 4-29 will be footnoted to provide reference within the document to the tables presenting the reference data and to the revised Figure 2-4 showing locations.

Comment 14, Table 6-27: Please replace this table with the correct Table 6-27 (juvenile production for surviving female endpoint).

Response: The Table 6-27 in the PDF version of the submittal was incorrect, although the Table 6-27 in the paper copy of the report is confirmed to be correct. The remainder of the document is being checked to determine if there was a systematic problem, but it appears that this is not the case. The correct table 6-27 (attached to this response summary) will be included and tables will be QA'd prior to publication of the final.

Comment 15, Table 6-31: Please correct the second note. The NOECs and LOECs are determined in Tables 6-19 to 6-30.

Response: The note on table 6-31 will be corrected as follows:

“NOECs and LOECs are determined in Tables 6-~~20~~19 to 6-31.”

Comment 16, Figure E-1: This figure is simplistic and does not necessarily reflect toxicity impacts for the site. EPA recommends that this figure be deleted. Other figures present the findings more appropriately, albeit not in summary form. If this figure is retained, it must be edited to include the PCB excavation locations presented in Figure 1-3 and must note that there were PCBs, PAHs, and metals in sediment and low to no risk north of the former dock.

Response: The figure will be deleted.

Comment 17, Figure 1-3: This figure is an interesting addition to the draft final RI. It shows multiple locations where PCB excavations were conducted around the site. It is noteworthy that several of these locations are located immediately adjacent to the northeastern shoreline and several others are located along roadways that drain down to the former dock area. Elevated PCB concentrations have been detected in the sediment adjacent to the shoreline excavations and in the vicinity of the former dock. EPA remains concerned about this general area.

Response: Comment noted. No revisions to the BERA are proposed as follow-up to this comment.

Comment 18, Figure 6-3A: There are several locations where two overlapping symbols are present but only one sample identifier is associated with those locations. The two symbols apparently indicate that two samples have been collected. Please add the missing sample numbers (e.g., 304F, 317, 402, and 413).

Response: Only the sample identifiers for the samples with chemical concentrations that exceed the NOEC or LOEC are presented. In cases where concentrations in two samples from the same location exceed the NOEC or LOEC, both identifiers are shown. No revisions to the BERA are proposed as follow-up to this comment.

Comment 19, Figure 6-3B: Please explain the difference between x and xx presented in the data boxes.

Response: There were two measures of growth (mean dry weight and mean dry biomass) and reproduction (mean overall juvenile reproduction and mean juvenile reproduction per surviving female) in the toxicity tests. The “X” means the sample was considered toxic for one measure of growth or reproduction and the “XX” means the sample was considered toxic for both measures. Additional notes will be added to the legend on Figures 6-3B and 6-3C as follows:

“X - Sample was considered toxic for one measure of the effect cited”
“XX - Sample was considered toxic for two measures of the effect cited”

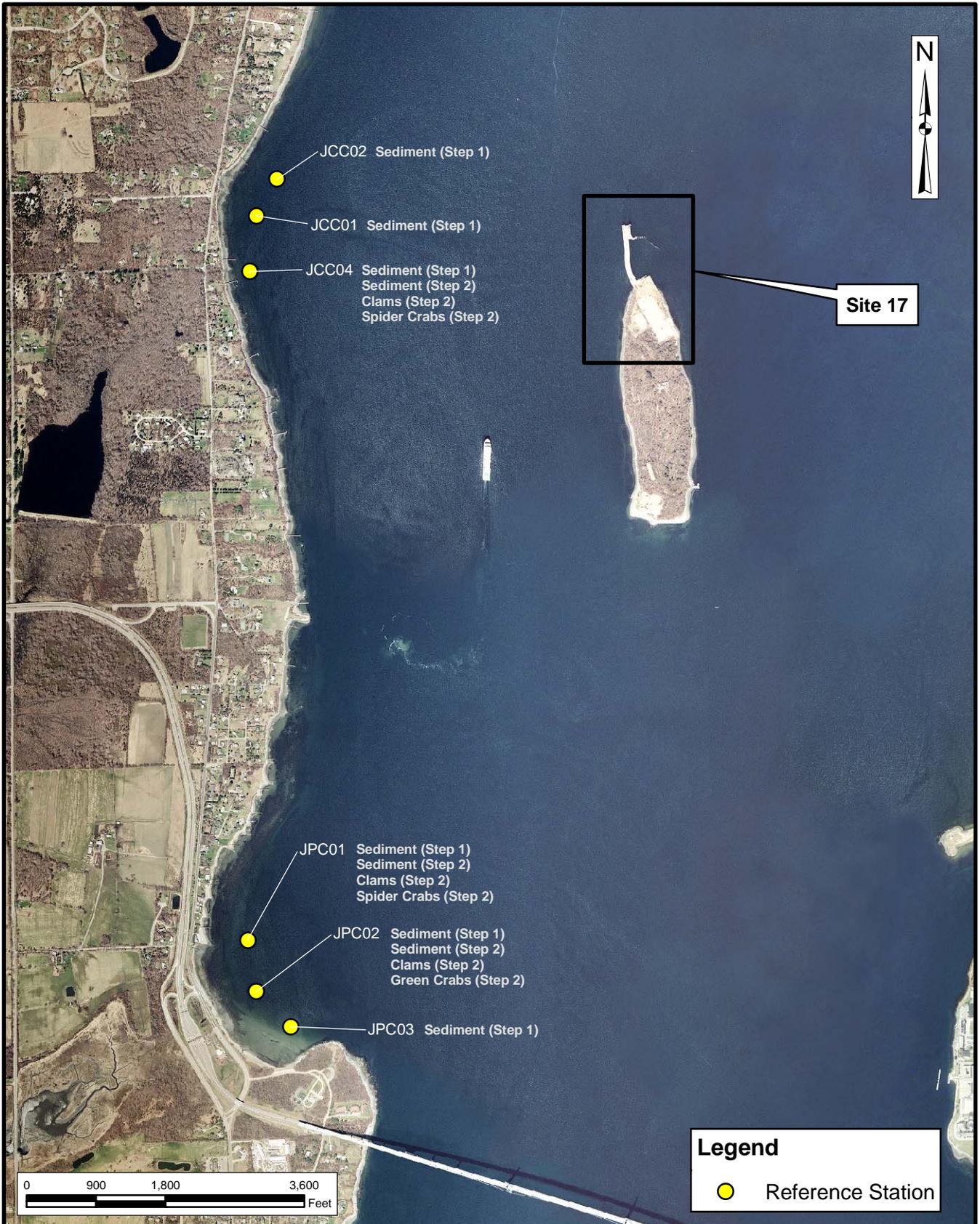
Comment 20, Figure 7-1: This figure does not reflect the toxicity impacts for the site and therefore EPA recommends that it be deleted. Other figures in this RI present the findings more appropriately, albeit not in summary form. If this figure is retained, it must include the PCB excavation locations presented in Figure 1-3 and it must note that there were PCBs, PAHs, and metals in sediment and low to no risk north of the former dock.

Response: The figure will be deleted.

Attachments:

Figure 2-4 revised

Table 6-27



TETRA TECH

REFERENCE SAMPLE LOCATIONS
 SITE 17: GOULD ISLAND
 PHASE 2 REMEDIAL INVESTIGATION REPORT
 NAVSTA NEWPORT, RHODE ISLAND

SCALE
AS NOTED

FILE
G:\GIS\GI_BACK_SAMP.MXD

| REV | DATE |
|-----|----------|
| 0 | 10/17/11 |

FIGURE NUMBER
2-4

**TABLE 6-27
SUMMARY OF NOECs AND LOECs FOR LEPTOCHEIRUS PLUMULOSUS BASED ON JUVENILE PRODUCTION PER SURVIVING FEMALE ENDPOINT
PHASE 2 REMEDIAL INVESTIGATION
SITE 17, GOULD ISLAND
NAVSTA NEWPORT, NEWPORT RI**

| Sample Area | Sample Number | Concentration (mg/kg) | | | | | | Concentration (ug/kg) | | | | Average ERM-Q |
|--|-------------------|-----------------------|--------|--------|----------|--------|----------|-----------------------|----------|------------|--------------------|---------------|
| | | Antimony | Copper | Lead | Mercury | Nickel | Silver | HMW PAHs | LMW PAHs | Total PAHs | Total PCB Homologs | |
| Toxic Samples⁽¹⁾ | | | | | | | | | | | | |
| GI_SD_STILLWATER_2010 | GI-SD501-0006 | 0.79 UJ | 28.7 J | 35.2 J | 0.107 | 7.7 J | 0.145 J | 48600 | 6550 J | 55100 J | 2720 J | 2.29 |
| GI_SD_STILLWATER_2010 | GI-SD509-0006-D | 0.68 UJ | 11.8 J | 10.6 J | 0.0285 | 5.85 J | 0.106 J | 3000 J | 593 J | 3600 J | 460 J | 0.34 |
| GI_SD_NE_2010 | GI-SD518-0006 | 0.57 UJ | 17.9 J | 14.5 J | 0.023 | 9.6 J | 0.19 U | 5100 | 840 J | 5940 J | 164 J | 0.22 |
| Non-Toxic Samples⁽¹⁾ | | | | | | | | | | | | |
| GI_SD_STILLWATER_2010 | GI-SD502-0006 | 0.81 J | 21.2 J | 11.3 J | 0.02 J | 10 J | 0.27 U | 27000 J | 7750 J | 34700 J | 862 J | 1.06 |
| GI_SD_STILLWATER_2010 | GI-SD503-0006 | 0.7 UJ | 9.6 J | 13.9 J | 0.059 | 6.7 J | 0.23 UJ | 8900 | 944 J | 9840 J | 5.71 U | 0.17 |
| GI_SD_STILLWATER_2010 | GI-SD504-0006 | 0.72 UJ | 17.8 J | 21 J | 0.083 | 7 J | 0.223 J | 5960 | 1240 J | 7200 J | 394 J | 0.38 |
| GI_SD_STILLWATER_2010 | GI-SD505-0006 | 0.208 J | 25 J | 20.4 | 0.079 | 6.7 | 0.271 U | 5510 | 801 J | 6310 J | 950 | 0.66 |
| GI_SD_STILLWATER_2010 | GI-SD506-0006 | 0.692 UJ | 11.1 J | 11.4 | 0.035 | 6.5 | 0.231 UJ | 3570 | 494 J | 4060 J | 547 | 0.39 |
| GI_SD_STILLWATER_2010 | GI-SD507-0006 | 0.69 UJ | 12.5 J | 12.4 J | 0.045 | 6.5 J | 0.143 J | 7430 J | 1090 J | 8520 J | 2590 | 1.59 |
| GI_SD_STILLWATER_2010 | GI-SD508-0006-AVG | 0.65 UJ | 14.8 J | 10.6 J | 0.0195 J | 8.9 J | 0.0435 J | 2150 J | 326 J | 2480 J | 895 J | 0.58 |
| GI_SD_STILLWATER_2010 | GI-SD509-0006 | 0.68 UJ | 11.8 J | 10.6 J | 0.0285 | 5.85 J | 0.106 J | 3000 J | 593 J | 3600 J | 460 J | 0.34 |
| GI_SD_STILLWATER_2010 | GI-SD527-0006 | 0.71 UJ | 14.9 J | 15 J | 0.054 | 7.7 J | 0.23 UJ | 1570 | 233 J | 1800 J | 25.3 | 0.08 |
| GI_SD_STILLWATER_2010 | GI-SD532-0006 | 0.71 UJ | 10.4 J | 7.1 J | 0.023 J | 8.4 J | 0.24 U | 32000 | 6650 J | 38700 J | 1240 | 1.27 |
| GI_SD_NE_2010 | GI-SD510-0006 | 0.63 UJ | 17.7 J | 10.7 J | 0.012 J | 10.8 J | 0.017 U | 1020 J | 244 J | 1260 J | 2.14 UJ | 0.07 |
| GI_SD_NE_2010 | GI-SD511-0006 | 0.71 UJ | 10.6 J | 20.7 J | 0.029 | 7.6 J | 0.24 UJ | 271 J | 55.8 J | 327 J | 276 J | 0.20 |
| GI_SD_NE_2010 | GI-SD512-0006 | 1.77 UJ | 30.6 J | 8.4 J | 0.006 J | 33.4 | 0.2 UJ | 3910 J | 1880 J | 5790 J | 3.2 J | 0.21 |
| GI_SD_NE_2010 | GI-SD513-0006 | 2.05 UJ | 6.8 J | 7.3 J | 0.039 U | 6.2 | 0.524 | 283 J | 38.4 J | 321 J | 4.3 J | 0.04 |
| GI_SD_NE_2010 | GI-SD514-0006 | 0.89 UJ | 13.9 J | 23 J | 0.087 | 6.3 J | 0.3 U | 8700 J | 2470 J | 11200 J | 16 J | 0.22 |
| GI_SD_NE_2010 | GI-SD515-0006 | 0.253 J | 18.7 J | 18.3 J | 0.239 | 8.2 J | 0.27 U | 4970 J | 1390 J | 6360 J | 290 J | 0.31 |
| GI_SD_NE_2010 | GI-SD517-0006-AVG | 1.46 UJ | 13.8 J | 41.6 J | 0.031 J | 8.5 | 0.245 UJ | 342 J | 37.2 J | 380 J | 150 J | 0.15 |
| GI_SD_NE_2010 | GI-SD519-0006 | 0.665 UJ | 10.9 J | 17.9 | 0.02 J | 6 | 0.222 UJ | 633 | 112 J | 745 J | 286 | 0.21 |
| GI_SD_NE_2010 | GI-SD528-0006 | 0.67 UJ | 16.4 J | 96.8 J | 0.018 J | 7.3 | 0.254 UJ | 551 J | 124 J | 675 J | 56.1 J | 0.12 |
| GI_SD_NE_2010 | GI-SD530-0006 | 0.69 UJ | 186 J | 20.9 J | 0.031 | 32.8 | 0.23 UJ | 711 J | 123 J | 834 J | 8.1 J | 0.19 |
| GI_SD_NE_2010 | GI-SD531-0006 | 0.75 UJ | 102 J | 199 J | 0.229 | 8.2 | 0.25 UJ | 824 J | 166 J | 990 J | 19.1 J | 0.19 |
| GI_SD_NE_2010 | GI-SD566-0006 | 0.71 UJ | 16 J | 17.7 J | 0.03 | 8.8 J | 0.24 UJ | 3290 J | 949 J | 4240 J | 129 J | 0.18 |
| GI_SD_NW_2010 | GI-SD520-0006 | 0.67 UJ | 6.5 J | 9.3 J | 0.015 J | 6.7 | 0.435 J | 1520 J | 425 J | 1950 J | 6.7 J | 0.06 |
| GI_SD_NW_2010 | GI-SD521-0006 | 0.58 UJ | 22.9 J | 13.2 J | 0.019 J | 9.4 | 0.19 UJ | 14100 J | 3800 J | 17900 J | 1.42 U | 0.32 |
| GI_SD_NW_2010 | GI-SD522-0006 | 2.6 UJ | 40.6 J | 22.2 J | 0.039 | 21.6 | 0.492 J | 1490 J | 116 J | 1600 J | 6.4 J | 0.13 |
| GI_SD_NW_2010 | GI-SD523-0006 | 0.6 UJ | 37.7 J | 35.9 J | 0.005 J | 17.2 | 0.277 UJ | 1450 J | 360 J | 1810 J | 3.92 J | 0.12 |
| GI_SD_S_2010 | GI-SD529-0006 | 0.718 UJ | 8.1 J | 12.7 | 0.027 J | 8.4 | 0.252 UJ | 1780 | 567 J | 2350 J | 16 | 0.08 |
| GI_SD_REF_2010 | GI-SD524-0006 | 0.68 UJ | 6.2 J | 9.2 J | 0.028 | 7 J | 0.097 J | 229 J | 31 J | 260 J | 0.543 U | 0.04 |
| GI_SD_REF_2010 | GI-SD525-0006 | 0.83 UJ | 15 J | 20.6 J | 0.083 | 10.2 J | 0.19 J | 673 J | 96.6 J | 770 J | 0.669 U | 0.07 |
| GI_SD_REF_2010 | GI-SD526-0006 | 0.68 UJ | 9.9 J | 10.6 J | 0.039 | 11.7 J | 0.144 J | 173 J | 10.4 J | 184 J | 0.538 U | 0.05 |
| NOEC⁽²⁾ | | 0.81 | 186 | 199 | 0.239 | 33.4 | 0.524 | 32000 | 7750 | 38700 | 2590 | 1.59 |
| [Max.] in toxic sample | | NA | 28.7 | 35.2 | 0.107 | 9.6 | 0.145 | 48600 | 6550 | 55100 | 2720 | 2.29 |
| LOEC⁽³⁾ | | NA | NA | NA | NA | NA | NA | 48600 | NA | 55100 | 2720 | 2.29 |
| Geometric mean of NOEC and LOEC | | NA | NA | NA | NA | NA | NA | 39436 | NA | 46178 | 2654 | 1.91 |

Footnotes:

- 1 - Risk characterization in Table 6-17.
- 2 - Greatest concentration in a non-toxic sample.
- 3 - Lowest concentration in a toxic sample that is greater than the maximum concentration in a non-toxic sample.

ERM-Q - Effects range medium quotient

NOEC - No observed effects level

LOEC - Lowest observed effects level

ATTACHMENT B

NAVY RESPONSES TO RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
(RIDEM) COMMENTS (DATED SEPTEMBER 20, 2011)
DRAFT FINAL PHASE 2 REMEDIAL INVESTIGATION, AND BASELINE ECOLOGICAL RISK
ASSESSMENT – AUGUST 2011,
SITE 17, GOULD ISLAND
NAVSTA NEWPORT, NEWPORT RHODE ISLAND

Navy responses to the RIDEM comments on the Draft Final Phase 2 Remedial Investigation and Baseline Ecological Risk Assessment –August 2011, Site 17, Gould Island, Naval Station Newport, Newport Rhode Island are presented below. The comments are presented first (in italics) followed by Navy's responses.

General Comments

This office will concur with the Draft Final Phase II Remedial Investigation if the following changes are made:

Response: Changes will be incorporated into the Final Phase 2 RI as discussed below.

Comment 1: *Please replace the "Draft" pages of the Executive Summary with updated "Draft Final" pages which address RIDEM's comment #'s 1-6;*

Response: The error is noted. The header of the text will actually be deleted in final version of the report: Final reports do not have a header.

Comment 2: *Please retain lead as a COC for sediment in the FS (comment #35).*

Response: Lead is retained as a COC in sediment because it is part of the ERM-Q calculation. The third bullet in Section 7.1.8.4 and the seventh bullet in Section 7.5 will be changed to add copper and lead into the ERM-Q calculation. This was a consensus agreement made during the comment resolution cycle on the draft document. The revised bullet will read as follows:

- "ERMQ using arsenic, cadmium chromium, copper, nickel, lead, zinc, PAHs and PCBs in sediment"

Comment 3: *Please include residential groundwater consumption on page 7-17, Section 7.5 "Recommendations" under potential human health risks. As this document discusses residential groundwater consumption, it is appropriate to make this revision.*

Response: The use of water as a potable source was not evaluated in the Phase 1 RI. However, because two wells provide groundwater data that exceeds MCLs, there is a presumed risk from use of groundwater as a potable source. For this reason, the use of Land Use Controls (LUCs) is included in the FS as a component of on shore alternatives.

In order to address the above comment on this document, a new bullet will be added to the bottom of Page 7-17:

"Because MCLs are exceeded in two wells at the site, there is presumed potential risk to human receptors utilizing the groundwater as a potable source."

Comment 4: *Please include TPH in soil/sediment as a COC on Page 7-17, Section 7.5 "Recommendations" under potential human health risks. Please note that now that a CERCLA risk was found at the Site, the State Regulations are ARARS (comment #'s 56 and 60).*

Response: This comment was reviewed based on the Dispute Resolution document dated January 12, 2012 and the notes from the dispute resolution meeting held April 20, 2012. The presence of TPH in soil at the site is described in the Phase 1 RI report (Tetra Tech 2006), and based on the data in that report, PAHs which pose risk appear to be comingled with the TPH found. Since risk is not measured for TPH, TPH is not selected as a risk-based COC, although the PAHs are cited as COCs on Page 7-17. Additionally, these PAHs are carried forward in the FS for remedial action.

Because it is assumed that TPH is comingled with these PAHs, TPH can be included for confirmation of remedial actions described in the FS report. However, RIDEM petroleum regulations and the TPH DECs are not ARARS under CERCLA due to the petroleum exclusion rule, and therefore TPH cannot be used to direct a remedy. Instead, the co-mingled PAHs will direct the remedy. For this reason, a PRG for TPH will not be established in the FS, but TPH will be discussed as a comingled substance in the text of the FS.

For the cited section of the BERA, no revision is required.

Comment 5: *Please retain individual PAHs as COCs for sediment to be evaluated in the FS (comment #'s 60 and 61).*

Response: In response to RIDEM Comment #42 on the Draft BERA Report, the Navy indicated that NOECs and LOECs for individual PAHs are presented on Table 6-32. However, PRGs should not be developed for individual PAHs. This is because the distribution of concentrations for the individual PAHs follows the same pattern as that for the total PAH groupings, and because ecological toxic effects of PAHs are additive. This was discussed during the comment resolution period for the draft BERA. Individual PAHs should not be retained as COCs for ecological risk from sediment.

Comment 6: *Please include ERL-Qs as well as ERM-Qs in the third bullet on page 7 -17, Section 7.5 "Recommendations" for the potential for ecological risk.*

Response: As indicated in the Navy's response to RIDEM Comment No. 41, hazard quotients based on the ER-L were presented on Table 6-17 but a mean ERL-Q was not calculated. Also, no decisions (including the development of NOECs or LOECs) will be based on hazard quotients based on the ERL because this metric is not used by the authors who developed the ERL and ERM values. Therefore, the Navy does not believe that it is appropriate to include ERL-Qs in Section 7.5 of the BERA or to develop PRGs based on the ERL-Q.

Comment 7: *Please be advised that a number of source areas that were not investigated or adequately investigated (i.e., sludge pits for the acetylene generator building; tanks for the power plant, etc.). These areas need to be properly investigated prior to the final remedial action for this Site.*

Response: The investigations conducted pertain to the CERCLA release at Building 32 area at Gould Island. If there are other releases, they should be addressed under the appropriate programs.