

N62661.PF.003252  
NS NEWPORT  
5090.3b

LETTER AND THE U S NAVY RESPONSE TO THE U S EPA REGION I AND RHODE  
ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS REGARDING  
THE DRAFT FOURTH FIVE YEAR REVIEW REPORT NS NEWPORT RI (PUBLIC  
DOCUMENT)  
09/19/2014  
RESOLUTION CONSULTANTS

Resolution Consultants  
*A Joint Venture of AECOM & EnSafe*  
1500 Wells Fargo Building  
440 Monticello Avenue  
Norfolk, Virginia 23510

September 19, 2014

U.S. Environmental Protection Agency, Region 1  
Federal Facilities Superfund Section  
Attn: Mr. Bill Lovely  
5 Post Office Square, Suite 100  
Mail Code: OSRR07-1  
Boston, MA 02109-3912

U.S. Environmental Protection Agency, Region 1  
Federal Facilities Superfund Section  
Attn: Ms. Kymberlee Keckler  
5 Post Office Square, Suite 100  
Mail Code: OSRR07-3  
Boston, MA 02109-3912

Rhode Island, Department of Environmental Management  
Office of Waste Management  
Attn: Ms. Pamela Crump  
235 Promenade Street  
Providence, RI 02908-5767

RE: Draft Fourth Five-Year Review  
Naval Station (NAVSTA) Newport, Rhode Island

Dear Mr. Lovely, Ms. Keckler, and Ms. Crump:

On behalf of the Naval Facilities Engineering Command (NAVFAC), Mid-Atlantic (MIDLANT), Resolution Consultants is pleased to provide the enclosed responses to comments (RTCs) to written comments and verbal suggestions received from the agencies on the draft Fourth Five-Year Review (FYR) for the Naval Station (NAVSTA) Newport, Rhode Island. This RTC package includes excerpts of planned revisions to the FYR based on the agencies' comments. This RTC package also incorporates our discussions at the September RPM meeting, conducted on September 17, 2014.

The Federal Facility Agreement (FFA) deliverable schedule for the FYR is to submit the draft final version to the agencies on or before October 9, 2014. To maintain that target schedule, please review these RTCs and provide any additional clarifications, input, or suggestions for the draft final version on or before October 3, 2014.

Please provide comments and suggestions to Cindy Castleberry, CTO Manager (781-224-6350), Mark Kauffman, Activity Coordinator (978-905-2262), and/or Jim Gravette, Navy RPM (757-341-2014). We look forward to continuing to collaborate with you in completing the FYR process for NAVSTA Newport.



Sincerely,

A handwritten signature in blue ink that reads "Cindy Castleberry". The signature is written in a cursive style.

Cindy Castleberry, PE  
Task Order Manager, CTO WE37  
Resolution Consultants  
701 Edgewater Drive  
Wakefield, MA 01880  
[cindy.castleberry@aecom.com](mailto:cindy.castleberry@aecom.com)  
(781) 224-6350

Document Distribution:

Bill Lovely, USEPA  
Kymberlee Keckler, USEPA  
Pamela Crump, RIDEM  
Lisa McIntosh, Woodard & Curran  
Greg Kemp, Mabbett & Associates  
Darlene Ward, Navy  
Deb Moore, Navy  
Jim Gravette, Navy  
Roberto Pagtalunan, Navy  
Ken Finkelstein, NOAA  
Ken Munney, USFWS  
Mark Kauffman, Resolution  
Cindy Castleberry, Resolution

Navy Responses to Regulatory Agency Comments  
EPA Comments, July 11, 2014  
RIDEM Comments, August 1, 2014

Draft Five-Year Review Report for  
NAVSTA Newport, Newport, RI

September 19, 2014

Note: Comments that pertain to the 2013 LTM Report for OU 1, McAllister Point Landfill (Site 1), are highlighted per EPA's request. The 2013 LTM data is currently under evaluation by the Navy and regulatory agencies, and will be used to refine the protectiveness evaluation required in this Five-Year Review.

EPA General Comments:

*EPA General Comment 1: Please specify that the Navy is the lead agency, identify in the narrative when the review was initiated and completed, and include the site interviews. The protectiveness statements must be in the narrative for each OU, not solely in the summaries.*

Response: Agreed. The Navy is identified as the lead agency on the Five-Year Review (FYR) Summary Form and in Section 1.2 of the text. The text will be modified to also add the following sentence to Section 1.0, 1<sup>st</sup> paragraph: "The Navy is the lead agency with regulatory oversight provided by USEPA and RIDEM." Each of the narratives for the three sites reviewed (OUs 1 and 4, OU 3 and OU 7) include protectiveness statements.

The following text will be added to Section 1.0, 1<sup>st</sup> paragraph: "The review was initiated in October 2013 and was completed in September 2014." EPA should note that any site-specific activities or deliverables that occur after September 30, 2014 are not expected to make it into this FYR evaluation.

Per the request of the site interviewees and questionnaire responders, the input is consolidated and summarized in the Five-Year Review (FYR), but actual questionnaires and names are not included or disclosed.

*EPA General Comment 2: Any OUs with signed RODs before the FYR is finalized in December should be discussed in this document. Add sections (after Section 4) for OUs 2, 5, 6, 11, and 12. Note that there are ARARs cited in a number of the Sites' RODs that either no longer exist or have been changed, but none affect the protectiveness of the remedy. Any future decision documents may be used to update these ARARs.*

Response: As discussed and agreed during our September RPM meeting, the Navy will expand the narrative discussion for sites not subject to the FYR, by adding fiscal years and quarters for major forthcoming phases under the CERCLA process. Specifically, for those sites that do not yet have a signed ROD, the Navy will add the expected fiscal years and quarters for the RI, FS, PP, and ROD (as appropriate). For those sites that now have a signed ROD, but are

not yet subject to the FYR, the Navy will add the expected fiscal years and quarters for the RD and RA.

As also agreed during our September RPM meeting, and consistent with Navy policy and EPA guidance (OSWER No. 9355.7-03B-P, June 2001), the only OUs subject to this FYR are OU 1 and 4, OU 3, and OU 7. These OUs have been subject to detailed FYR evaluations and conclusions regarding the protectiveness of the selected and/or implemented remedy. However, the other OUs, whether the ROD is signed yet or not, were not subject to the FYR and thus, will not include statements relative to their current protectiveness.

Regarding the comment on ARARs, the OUs subject to this FYR (OU 1 and 4, OU 3, and OU 7) included a detailed evaluation of ARARs. The Navy will ensure that the FYR text clarifies the review conducted and whether there were significant differences that affect the protectiveness of the respected selected remedies.

*EPA General Comment 3: Issues were identified in the pictures. Please discuss them in the narrative and explain how and when they will be fixed.*

Response: The site inspection photo log identified missing locks on two monitoring wells (MW-111S and MW108R) at Site 1 (OU 1). It has since been confirmed that the Navy's contractor, Watermark, replaced the locks. The sentence in Section 2.4.1 which read "Two monitoring wells were missing locks (MW-111S and MW-108R), which should be replaced." will be revised as follows: "Two monitoring wells were missing locks (MW-111S and MW-108R). Following the site inspection, it was confirmed that the well locks had been replaced."

*EPA General Comment 4: Consistency should be used throughout the FYR. The document should be clearer when discussing OU1 and OU4. For example, the FYR interchanges Site 1 and OU1. Further the FYR often switches terminology between sites and OUs. Please include a table that lists all OUs with its corresponding site.*

Response: Agreed. A table has been created for inclusion in Section 1.0 to present all of the sites and OUs at NAVSTA Newport (attached), which cross-references the sites and OU numbers. The protectiveness statements are OU-specific, per EPA guidance, but site numbers have also been added for clarity. The narrative headers present the site numbers, site names, and OUs for ease of reference.

*EPA General Comment 5: As commented further in Attachment A, EPA notes that the discovery of asbestos at NUSC could affect future protectiveness of the remedy. EPA believes that an Explanation of Significant Differences (ESD) is warranted to add asbestos requirements to the remedial action.*

Response: The Navy has begun to prepare an ESD for review by EPA and RIDEM. The working version of the ESD recognizes asbestos as a new COC, but also documents that the selected remedy is still protective. The Navy expects to provide the draft ESD for regulatory review in late September 2014, for the agencies to review and evaluate the Navy's opinion that the current remedy is considered to be protective for asbestos.

**EPA General Comment 6:** *Lastly, EPA would like to reiterate its request to receive timely monitoring data and trend analyses. As you know, it has taken longer than expected to finalize the long-term monitoring reports for the McAllister Point Landfill. In order to ensure that we are effective in our FYR recommendations, it is essential that the Navy provide EPA and RIDEM with timely information related to the performance of its implemented remedies. Similarly, EPA notes that there are several locations within the FYR (e.g., Sections 2.4.2.1, 2.4.2.2, and 2.4.2.3) where 2013 data are missing and expects to see a summary of these data before the draft final FYR is issued.*

*The missing data can be addressed by summarizing the draft Monitoring Report Data, stating explicitly it is draft. Otherwise, the protectiveness findings may need to be changed to "short-term protective" because the data are missing.*

Response: The draft final FYR report has been updated to incorporate review of the most recent working version of the draft 2013 annual monitoring report. The draft 2013 monitoring report will be issued to the agencies prior to submittal of the draft final FYR report. As discussed during September RPM meeting, the evaluation of 2103 LTM data is ongoing, and the Navy will work closely with the agencies as more information becomes available, specifically relative to the evaluation of protectiveness in this FYR.

#### EPA Specific Comments:

##### Attachment A

*EPA Specific Comment 1: p. xi - As further discussed below, EPA commented on the 2012 Draft Annual Monitoring Report in a letter dated July 3, 2013. Because some of these comments raise questions about the impact of settlement of the landfill cap on groundwater interpretations and cap integrity, while others raise questions about the interpretation of the landfill gas/ air monitoring results, EPA cannot concur that the remedy is protective in the long-term until these issues are addressed.*

Response: Since the time of EPA's comment letter, the Navy submitted responses to EPA's comments on the 2012 draft annual monitoring report on July 18, 2014 and the EPA provided concurrence with the responses in a July 28, 2014 letter. The 2012 annual monitoring report was subsequently finalized in August 2014. See also responses to the comments below relating to the specific concerns.

*EPA Specific Comment 2: p. xi - Revise the list of OUs with no issues to include all of the OUs with RODs by the December 2014.*

Response: Please refer to the Navy's response to General Comment 2. EPA confirmed at the September RPM meeting that OUs 2, 5, 6, 11, and 12 do not need to be included on the FYR Summary Form.

*EPA Specific Comment 3: p. xi - To the OU7 Recommendation text, insert: "and incorporate measures to address the risks posed by the asbestos into the remedial action."*

Response: As noted in the response to EPA General Comment 5, the Navy is preparing an ESD. The working version of the ESD recognizes asbestos as a new COC, but also documents that the selected remedy is still protective. Thus, the Navy believes that the discovery of asbestos does not affect current or future protectiveness. This issue and recommendation has been removed from the FYR Summary Form. EPA indicated agreement with this response at the September RPM meeting.

*EPA Specific Comment 4: p. xi - The OU1 Protectiveness Statement should also include: "Fencing remains in place to restrict access and land use controls are in place and are enforced to prevent unauthorized use of the site."*

Response: The requested additional language has been added as written in the comment.

*EPA Specific Comment 5: p. xi - Add a section for OU2. Discuss completion of the interim groundwater remedy (as discussed in the last FYR). The interim remedy is not complete until the Navy issues a final ROD for the site. Regarding the 2013 ROD, the FYR also needs to state: "The remedy at OU2 will be protective of human health and the environment upon completion. Land use controls are in place and are enforced to prevent unauthorized use of the site."*

Response: Groundwater treatment at Tanks 53 & 56 within Tank Farm 5 was conducted for two years. LTM was conducted accordingly, and subsequently discontinued in 2006. The treatment plant and wells were decommissioned in 2008, and the Third FYR (2009) concluded that no further FYRs would be required, but a final No Further Action (NFA) decision would need to be documented. As discussed at the September RPM meeting, the Navy plans to document NFA as the final remedy for Tanks 53 & 56 in a future decision document.

**EPA Specific Comment 6:** *p. xii - For the OU4 Protectiveness Statement, please clarify what is meant by "...and elevated risk off-shore marine sediment remedial action (OU4) are complete..." Have RGs been achieved in the off-shore sediments and monitoring is no longer required? If so, does OU4 need to be evaluated as part of the FYR?*

*Does the last sentence refer to shoreline monitoring where contaminated sediments were covered either with rip rap as part of the remediation?*

Response: Only the dredging and backfilling components of the remedial action for OU4 have been completed. As summarized in Section 2.0 of the draft FYR, the OU4 ROD addressed three areas of sediment including "near-shore and elevated risk off-shore areas" and "off-shore areas with low risk". For the near-shore and elevated risk off-shore areas, the ROD required dredging of contaminated sediments, backfilling with clean material, and monitoring for an assumed five years since the remedy was intended to completely remove all sediment exceeding the selected PRGs. For the off-shore areas with low risk, the ROD required long-term monitoring (at least 30 years) of sediment and biota. The current frequency of monitoring for both the dredged and non-remediated areas is once every five years as established in the 2010 Work Plan Addendum. Based on review of the 2013 sediment monitoring data, the Navy feels that continued monitoring of the off-shore sediments is appropriate. As discussed during September RPM meeting, the evaluation of 2103 LTM data is ongoing, and the Navy will work closely with the agencies as more information becomes available, specifically relative to the evaluation of protectiveness in this FYR.

The last sentence, questioned by this comment, refers to monitoring of the “nearshore and elevated risk offshore areas” and “offshore areas with low risk.” For greater clarity, the OU4 Protectiveness Statement will be revised as follows:

“The remedy for OU4 at McAllister Point is protective of human health and the environment, and exposure pathways that could result in unacceptable risks are being controlled. The dredging and backfilling activities for the near shore and elevated risk off-shore marine sediment remedial action (OU4) are complete. Long-term monitoring of the off-shore areas with low risk is ongoing. Monitoring of the near shore and elevated risk off-shore areas is also continuing. The sediment and porewater monitoring results, prior to the most recent monitoring round, show Indicator Constituents of Concern below remediation goals (RGs) for sediment and porewater, and most are below baseline Preliminary Remediation Goals (PRGs). Additionally, toxicity testing overall does not demonstrate elevated risks to the environment. Although the most recent sediment and porewater monitoring results were not consistent with historical results, there is no indication that the recent results are caused by changes to the integrity of the landfill cap or other components of the source control remedy (OU 1). Continued monitoring of the near-shore and elevated risk off-shore areas and off-shore areas with low risk will be used to confirm the protectiveness of the remedy.”

*EPA Specific Comment 7: p. xii - For OU7, how was the Remedial Action Work Plan revised to ensure that asbestos protectiveness standards are met? Is all soil handled as potentially containing asbestos or is the exposed/excavated soil tested to determine whether it contains asbestos?*

Response: Per the Final Remedial Action Work Plan (RAWP) Addendum, Excavation, Transportation, and Disposal of Soil with Asbestos-Containing Material, Operable Unit 7 (Site 8) (AGVIQ, May 2014) and based on discussion with AGVIQ, the protocol includes visual screening of soil removed from excavations. Soil with visually observed regulated asbestos-containing material (RACM) is stockpiled for disposal off-site as asbestos-contaminated soil, while soil not visually observed to contain RACM is stockpiled separately and sampled for the presence of asbestos. For greater clarity, the last sentence of the protectiveness statement for OU7 was revised as follows:

“The discovery of asbestos-containing materials in site soils does not impact current protectiveness, since the excavations where asbestos-containing materials were uncovered were immediately backfilled and the Remedial Action Work Plan was amended to include provisions to protect construction workers from potential exposures while the remedial construction is completed and ensure proper handling and disposal of excavated soil and debris.”

Also, to provide greater detail, the following sentence has been added to the 3<sup>rd</sup> paragraph of Section 3.3.2:

“Per the RAWP Addendum, soil with visually observed regulated asbestos-containing material (RACM) is stockpiled for disposal off-site as asbestos-contaminated soil, while soil not visually observed to contain RACM is stockpiled separately and sampled for the presence of asbestos.”

*EPA Specific Comment 8: p. xii - Please modify the protectiveness statement for OU3 based on the current project status and expand on the rationale for the determination. This remedial action will be completed before the FYR is completed.*

Response: The protectiveness statement for OU3 has been revised as follows:  
"The remedy at Site 9 (OU 3) is currently protective of human health and exposure pathways that could result in unacceptable risks are being controlled. The asphalt/soil cover system and replacement stone revetment are in place and preventing exposure to contaminated soils. Land use controls are in place and enforced to prevent unauthorized use of the site. However, in order for the remedy to be protective in the long-term, an evaluation should be conducted to determine whether AFFF was used at the site and whether there was a potential release of PFOA/PFOS and then sampling should be conducted, if required, to ensure protectiveness."

*EPA Specific Comment 9: p. xii - Add: "Land use controls are in place and are enforced to prevent unauthorized use of the site." to the OU3 Protectiveness Statement.*

Response: The requested text has been added to the FYR Summary Form and Section 4.8.

*EPA Specific Comment 10: p. xii - Add a section for OU11 and state: "The remedy at OU11 will be protective of human health and the environment upon completion. Land use controls are in place and are enforced to prevent unauthorized use of the site."*

Response: As stated in the response to EPA General Comment 2 and agreed to by EPA at the September RPM meeting, OU 11 does not need to be evaluated in this FYR because commencement of remedial action (RA) construction or "actual RA start" is not anticipated at this OU until after the end of the review period for this FYR at the end of September 2014.

*EPA Specific Comment 11: p. xii Add sections for Gould Island (OU6) and the two Derecktor OUs (OU5 and OU12) since these RODs will be signed before the FYR is finalized in December. Use the same language as suggested for OU11, above.*

Response: As stated in the response to EPA General Comment 2 and agreed to by EPA at the September RPM meeting, OU5, OU6, and OU12 do not need to be evaluated in this FYR because commencement of remedial action (RA) construction or "actual RA start" is not anticipated at these OUs until after the review period ending at the end of September 2014 and the due date for the FYR on December 17, 2014.

*EPA Specific Comment 12: p. 1, §1.0 - Add discussions for OU2, 11, 5, 12, and 6. Establishing LUCs at these OUs is sufficient for the start of remedial action. Remove the last sentence.*

Response: As stated in the response to EPA General Comment 2 and agreed to by EPA at the September RPM meeting, OU5, OU6, OU11, and OU12 do not need to be evaluated in this FYR because commencement of remedial action (RA) construction or "actual RA start" is not anticipated at these OUs until after the review period ending at the end of September 2014. Based on EPA guidance and Navy policy (see response to EPA General Comment 2), establishing LUCs at these OUs is not sufficient for the start of remedial action and does not trigger the requirement for FYR.

*EPA Specific Comment 13: p. 2, §1.1 - The last paragraph states that the Navy is considering an ESD to the Decision Unit 5-1 Record of Decision (ROD) to close out Tanks 53 and 56 in Tank Farm 5. An ESD cannot be used for this purpose. A Final ROD is required for Tanks 53 and 56 to document a No Further Action decision. This decision is not linked to DU 5-1.*

Response: As agreed to by EPA at the September RPM meeting, the last sentence of this paragraph will be modified to state:

"The Navy is seeking to document No Further Action and the final remedy for Tanks 53 and 56 in a future decision document."

*EPA Specific Comment 14: p. 3, ¶12 - As previously noted, any OUs with signed RODs before the FYR is finalized in December should be discussed here and removed from the bulleted list (OUs 2, 5, 6, 11, and 12).*

Response: Please refer to the Navy's response to EPA General Comment 2. These additional OUs are not yet subject to a FYR.

*EPA Specific Comment 15: p. 3, §1.1 - In the bulleted list, please refer to Tank Farm 4 DU 4-1 and Tank Farm 5 DU 5-1 because the RODs for these sites are restricted to those decision units only.*

*Please refer to Tank Farm 4 DU 4-1 and Tank Farm 5 DU 5-1 because the RODs for these sites are restricted to those decision units only.*

Response: The text has been revised to refer to these specific decision units. Note that for additional clarity and based on RIDEM comment, the bulleted list has been converted to a table summarizing all of the sites/OUs and their status. The new table is attached as Table 1-1 for EPA and RIDEM review.

*EPA Specific Comment 16: p. 3, bullet 9 - It is unclear what the term "closed" refers to in the OU8 discussion. If the Navy conducted a removal action to remove the risks, a No Further Action ROD is required.*

Response: A ROD was not required for Site 21 (OU 8), because the removal actions occurred prior to completing a Study Area Screening Evaluation (SASE) that concluded no further action and therefore, the site never proceeded to the RI phase. The site was administratively closed out in 2009. To avoid confusion, any mention of Site 21 (OU 8) has been removed from the FYR document.

*EPA Specific Comment 17: p. 3 bullets - Have additional study sites been added, that should be identified here, to evaluate potential asbestos releases that aren't within existing study areas?*

Response: No additional sites or study areas have been added to the FFA since the prior FYR. Table 1-1 (attached for EPA and RIDEM review) will help clarify which OUs at NAVSTA Newport have ongoing activities.

*EPA Specific Comment 18: p. 5, ¶12 - Change the last sentence to: "RIDEM has established a state groundwater classification system to protect its groundwater resources, and under this system, McAllister Point Landfill, Gould Island, Tank Farm 3, Tank Farm 4, Tank Farm 5, Carr Point Storage Area, Carr Point Shooting Range, and a portion of NUSC Disposal Area are within RIDEM's GA groundwater classification area, which designates the groundwater as being presumed suitable for public or private drinking water use without treatment. However, per EPA groundwater remediation guidance, in states without an EPA-approved Comprehensive State Groundwater Protection Program (CSGWPP) such as Rhode Island, CERCLA groundwater remediation must meet federal drinking water standards (i.e., MCLs and non-zero Maximum Contaminant Level Goals ([MCLGs]) and risk-based standards, or more stringent state groundwater standards, unless the water is non-potable.*

Response: Change has been incorporated as requested and as written in this comment.

*EPA Specific Comment 19: p. 6, §1.2.2, ¶1 - In the last sentence, please refer to Tank Farm 4 DU 4-1 and Tank Farm 5 DU 5-1 because the RODs for these sites are restricted to those decision units only.*

*After "Tank Farm 5," insert "Gould Island, Derecktor Shipyard Off-Shore, Derecktor Shipyard On-Shore."*

Response: The text has been modified as follows: "These investigations have led to decision documents in the forms of RODs for the McAllister Point Landfill, OFFTA, DU 4-1 at Tank Farm 4, DU 5-1 at Tank Farm 5, Gould Island, NUSC Disposal Area, Derecktor Shipyard Off-Shore, and Derecktor Shipyard On-Shore."

*EPA Specific Comment 20: p. 6, ¶12 - Add individual sections for OUs 2, 5, 6, 11, and 12.*

Response: See response to EPA General Comment 2. No change has been made based on this comment.

*EPA Specific Comment 21: p. 6, §1.2.2, ¶1 - In the last sentence, please refer to Tank Farm 4 DU 4-1 and Tank Farm 5 DU 5-1 because the RODs for these sites are restricted to those decision units only.*

Response: Change incorporated as requested. See response to EPA Specific Comment 19.

*EPA Specific Comment 22: p. 8, §1.3, ¶1 - Please note that the final FYR will be made available on-line and cite the access address.*

Response: Change incorporated as requested. The following has been added "Additionally, the final FYR report will be made available on-line on USEPA's website at <http://www.epa.gov/region1/superfund/> and in the Administrative Record for NAVSTA Newport at [http://www.navfac.navy.mil/products\\_and\\_services/ev/products\\_and\\_services/env\\_restoration/administrative\\_records.html?p\\_instln\\_id=NEWPORT\\_NS.](http://www.navfac.navy.mil/products_and_services/ev/products_and_services/env_restoration/administrative_records.html?p_instln_id=NEWPORT_NS.)"

*EPA Specific Comment 23: p. 8, §1.3, ¶12 - Please update the last sentence regarding the number of questionnaires received. Also update the subsequent paragraphs, as appropriate, that discuss the content of the responses.*

Response: As of the date of this letter, no additional questionnaires have been received. If additional questionnaires are received prior to the end of September 2014, the additional responses will be incorporated into the subsequent version of the report.

*EPA Specific Comment 24: p. 13, Table 2-1 - Please update the table with recent events/documents since November 2013.*

Response: The table has been updated as requested.

*EPA Specific Comment 25: p. 16, §2.2, ¶11 - Please correct the second full sentence and confirm that no text is missing.*

Response: The typo has been corrected. No text was missing.

*EPA Specific Comment 26: p. 24, ¶15 - See questions above about the status of the sediment monitoring. Ensure the text is consistent between this section and page xii.*

Response: No changes have been identified to this paragraph.

*EPA Specific Comment 27: p. 27, §2.4.1 - The site inspection discussion does not mention the condition of the revetment. Please supplement this section with observations related to the revetment. Also, please add appropriate photographs showing the condition of the revetment in Appendix C.*

*EPA's July 3, 2013 letter raised concern about areas within landfill cap that have settled more than 6 inches and asked the Navy to investigate the impact of this settlement on cap integrity or groundwater monitoring well elevations. This section should acknowledge this concern and any associated follow-up.*

Response: Three additional photographs of portions of the revetment have been added to the photo log in Appendix C. The following sentence will be added to Section 2.4.1:  
"The stone revetment appeared in good condition across the western edge of the landfill cap."

Additionally, the following sentences have been added to Section 2.4.1:

"No observations were made during the site inspection that would call into question the integrity of the landfill cap. As part of the FYR, landfill settlement data was reviewed. The revised Draft 2013 Annual Monitoring Report (Watermark, 2014b) contains the results of the most recent annual elevation survey, as well as historical survey results and evaluation of the data. As described in this report, settlement has occurred in portions of the landfill since the initial survey completed in 1996. One monitoring well (MW-111S), three settlement platforms, and several revetment toe monitoring points have had settlement of six inches or greater observed over the period from 1996 to 2013. In response to the settlement over 6 inches, a subsurface gas screening was conducted in 2013 to determine if the geomembrane was compromised. Based on the results, it was concluded that the geomembrane is intact. As

additional follow-up, the Navy plans to collect ground shots during the 2014, 2015, and 2016 survey events in the areas where settlement has been shown to better document the potential settling and the magnitude and extent of the settling.”

*EPA Specific Comment 28: p. 28, §2.4.2.1 - The FYR covers 2009 through 2014, yet the report only presents data through 2012 and some of that data is questionable based on comments presented in EPA’s July 3, 2013 letter. The lack of data for the entire review period makes it difficult for EPA to conclude anything beyond a remedy that is protective in the short-term. Please ensure the discussions for all sections for McAllister Point are updated to include the results of that monitoring event.*

*Clarify that the exceedance of groundwater standards noted in the second paragraph is within the landfill and not beyond the groundwater compliance boundary. If it is outside of the compliance boundary, the remedy cannot be considered protective.*

*In its July 3, 2013, EPA recommended that the Navy develop a plan to address MW-111S, MW-103R, and MW-103S, which have been either historically dry or recharge too slowly for collecting a groundwater sample. Navy has yet to respond to this comment, which suggests that this is an outstanding issue that will need to be captured as an action item for follow-up in Section 2.7 of this FYR.*

Response: Review of the most current working version of the Draft 2013 Annual Monitoring Report, Operation and Maintenance Activities 2013 (Watermark) has been incorporated into the FYR.

The following sentence has been added to the second paragraph:

“Well cluster MW-103S and -103R is located within the landfill and within the groundwater compliance boundary.”

As noted in the Navy’s responses to EPA’s July 3, 2013 letter, the Navy replaced MW-103R in April 2013 with MW-103RR and sampled MW-103RR in May 2013. Monitoring well MW-103S was able to be sampled in 2013 and 2014. The need for a possible replacement well for MW-111S will be further discussed in the 2014 report. This has been added as an issue for follow-up in Sections 2.6 and 2.7.

*EPA Specific Comment 29: p. 30, §2.4.2.2 - In its July 3, 2013 letter, EPA raised concerns about: (1) the lack of ambient air monitoring in 2011 and 2012 and (2) the representativeness of the landfill gas data given the very short time interval recorded between the samples. Since there has been no resolution to these concerns (either in a Final 2012 Annual Monitoring Report or in an expanded Section 2.4.2.2), EPA cannot conclude that the remedy is protective in the long-term. Navy should either address this issue prior to finalizing this FYR, or list it as an action item for follow-up in Section 2.7 of the report.*

Response: After this comment was issued, the Navy provided responses to EPA’s July 3, 2013 letter which addressed these concerns and EPA concurred with the responses in a July 28, 2014 letter to the Navy. The Final 2012 Annual Monitoring Report was issued in August 2014.

*EPA Specific Comment 30: p. 30, §2.4.2.2, ¶1 - Please delete the reference to Section 2.4.2.2 (this section) in the fourth sentence and correct the sentence.*

Response: The requested change has been made.

**EPA Specific Comment 31**: p. 31, §2.4.2.3, ¶4 - *Contrary to the conclusion in the first bullet, the 2009 FYR indicated that increasing trends were observed at multiple sampling stations. If those trends or conclusions are no longer correct, please provide the supporting documentation for the conclusion presented herein. However, because only the 2013 monitoring event has been conducted since 2009, one event cannot reverse the trends noted in 2009. Please correct as appropriate.*

*In the second bullet, please discuss the supporting rationale for the conclusion presented.*

Response: The 2009 FYR evaluated sediment/porewater/biota data collected from 2004 through 2008. The draft 2014 FYR also evaluated 2009 data (Round 6). Since the draft report, the 2013 data has been made available and the data review has been further updated to reflect those results and also expand on the bullets documenting conclusions presented in the 2009 Marine Sediment Monitoring Report. As discussed during September RPM meeting, the evaluation of 2103 LTM data is ongoing, and the Navy will work closely with the agencies as more information becomes available, specifically relative to the evaluation of protectiveness in this FYR.

**EPA Specific Comment 32**: p. 32, §2.4.2.3, ¶1 - *Note that the first bullet refers to mean concentrations. It should also discuss any individual exceedances and their significance.*

Response: The bullet has been expanded to include discussion of individual exceedances.

*EPA Specific Comment 33: p. 32, §2.4.4 - This section should also discuss the Land Use Control Remedial Design for the site and its implications.*

Response: This section is intended for discussion of progress related to issues, recommendations, and follow-up actions from the previous FYR. The need for a Land Use Control Remedial Design was not identified as an issue/recommendation in the previous FYR and therefore, not discussed in the section.

*EPA Specific Comment 34: p. 33, ¶1 - Note when the Work Plan Addendum identified in this paragraph was approved by EPA and RIDEM.*

Response: The words "..., following EPA and RIDEM concurrence in July 2010..." have been added to the end of the sentence that reads "TtNUS submitted the document entitled "Work Plan Addendum for Long Term Monitoring Program at McAllister Point Landfill NS Newport, RI" in August 2010 (TtNUS, 2010d)."

*EPA Specific Comment 35: p. 32, §2.4.4 - This section should also discuss the issuance of the Land Use Control Remedial Design for the site and its implications.*

Response: See response to EPA Specific Comment 33.

*EPA Specific Comment 36: p. 33, §2.5.1, ¶1 - The elevated concentrations of arsenic detected in the monitoring wells at the downgradient perimeter of the landfill do not support reducing groundwater monitoring to once every five years because an arsenic load continues to migrate to the bay and that needs to be monitored more diligently than once every five years.*

Response: The recommendation for reduced frequency of groundwater monitoring has been removed.

*EPA Specific Comment 37: p. 33, §2.5.1, ¶3 - The last paragraph on the page relative to groundwater sampling contradicts the recommendation in the first paragraph in this section. Please correct the text to refer to sediment and porewater sampling and vent gas screening and gas sampling.*

Response: The recommendation in the first paragraph has been removed as indicated in the previous comment response. The first sentence of this paragraph has been revised to refer to sediment, porewater, and gas sampling in addition to groundwater sampling and vent gas screening.

*EPA Specific Comment 38: p. 34, §2.5.1 - Regarding the recommendation in the second bullet, the elevated concentrations of arsenic detected in the monitoring wells at the downgradient perimeter of the landfill do not support reducing groundwater monitoring to once every five years because an arsenic load continues to migrate to the bay and that needs to be monitored more diligently than once every five years.*

Response: The recommendation for reduced frequency of groundwater monitoring has been removed.

*EPA Specific Comment 39: p. 34, §2.5.1 - Regarding the discussion in the fourth bullet relative to institutional controls, please check whether the referenced documents (5090.15A and 5090.15B) are still current or if they need to be updated. Include these documents as appendices.*

Response: The referenced documents are currently being revised and are expected to be revised by the Naval Station in late 2014, after completing this FYR evaluation. At this time, the current versions of the referenced documents are the most current, and will be included as Appendix F in the draft final FYR.

*EPA Specific Comment 40: p. 36, §2.5.2 - In the first bullet, please provide additional detail regarding the changes in toxicity values to better demonstrate that the changes result in less conservative values and support the conclusion expressed here that the protectiveness of the remedy would not be adversely impacted by the changes.*

*In the third bullet, please provide additional detail regarding the changes in the risk assessment methods to better demonstrate that the changes result in less risk and support the conclusion expressed here that the protectiveness of the remedy would not be adversely impacted by the changes.*

Response: As noted in the last sentence of the bullet, the basis for the remediation goals (RGs) was ecological exposures due to the lack of potential for human exposure. If the remedy were based on human exposures, the RGs would have been lower than those selected in the ROD. Therefore, as the text notes, changes to the toxicity values for COCs of concern in shellfish tissue would not change the overall protectiveness of the remedy. However, changes to the slope factors for PAHs (which were set at the most conservative of the PAHs [benzo(a)pyrene]) and PCBs, as well as the copper reference dose, would have resulted in lower calculated risks/hazards. After the second sentence in the bullet, the text will be edited to say, "For example, changes to the slope factors for PAHs (which were set at the most conservative of the PAHs [benzo(a)pyrene]) and PCBs, as well as the copper reference dose, would have resulted in lower calculated risks/hazards, and higher human health-based RGs."

With respect to the third bullet, the same reasoning is involved with respect to how the RGs were selected in the ROD. As the changes are not all easily discussed in a qualitative manner (e.g., the changes in mutagenic evaluation relative to the changes in the default exposure parameters), the text will be edited by adding a sentence at the end: "Some of these method changes would increase the risks (e.g., mutagenic carcinogen evaluation), while others would decrease the risks/hazards (e.g., revisions to default exposure parameters). However, as noted above, RGs were developed based on ecological exposures due to the lack of potential for human exposure. If there is a future change in the potential for human exposure, further evaluation of human health risks/hazards would be appropriate using the most current risk assessment methods."

*EPA Specific Comment 41: p. 37, §2.5.4, ¶1 - Please correct the first full sentence as follows: "... acceptable conditions and as a result the monitoring frequency has recently been reduced."*

Response: The requested change has been made.

*EPA Specific Comment 42: p. 37, §2.5.4, ¶2 - Please refer to the previously issued Base Instruction and the recent 2012 LUC RD. The Base Instruction restricts access and the LUC RD restricts on site activities.*

Response: The requested change has been made.

*EPA Specific Comment 43: p. 37, §2.5.4, ¶3 - Regarding the third sentence, the CERCLA risk from shellfish exposure is independent of any State shellfishing ban based on non-CERCLA contaminants. Since the State shellfishing ban is not a component of the CERCLA remedy, remove the third and fourth sentences. If there was an increase in CERCLA contaminant levels in the sediment to the point where it exceeded CERCLA risk-based standards for shellfish consumption, EPA would consider that to be a potential remedy failure.*

Response: The requested change has been made.

*EPA Specific Comment 44: p. 37, §2.5.4, ¶4 - Please edit the first sentence as follows: "... have been no significant changes in toxicity values or contaminant characteristics that would question the protectiveness of the remedy, as previously discussed."*

Response: The requested change has been made.

*EPA Specific Comment 45: pp. 38, 53, & 69 - In the Next Review Section, only state when the next review will be completed. Remove the second sentence.*

Response: The requested changes have been made.

**EPA Specific Comment 46:** p. 38, §2.7 - *The elevated concentrations of arsenic detected in the monitoring wells at the downgradient perimeter of the landfill do not support reducing groundwater monitoring to once every five years because an arsenic load continues to migrate to the bay and that needs to be monitored more diligently than once every five years.*

*Please update this section as appropriate based on the 2013 monitoring data. Furthermore, unless the issues described in the comments above (i.e., comments which were first presented in EPA's July 3, 2013 letter to Navy) are addressed before this FYR is complete, EPA will require follow-up actions in this section of the report prior to issuing its concurrence that the remedy is protective in the long-term.*

*Is there still a CERCLA basis for the off-shore monitoring? Have all sediment RGs have been met?*

*Please update this section with the 2013 monitoring data.*

Response: The recommendation for reduced groundwater monitoring frequency has been removed.

Since this comment was issued, the Navy provided responses to EPA's July 3, 2013 letter and EPA concurred with the responses in a July 28, 2014 letter to the Navy. The Final 2012 Annual Monitoring Report was issued in August 2014. Based on one of the comments in EPA's July 3, 2013 letter, as well as EPA Specific Comment 28 (above), the previous text in Section 2.7 has been replaced with the following recommendation:

Recommendations/Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Follow-up Actions: Affects Protectiveness (Y/N)	
				Current	Future
Evaluate the need for a possible replacement well for MW-111S in the 2014 annual monitoring report.	Navy	USEPA	FY2015	N	N

Based on review of the 2013 monitoring data, the Navy plans to continue off-shore monitoring. As discussed during September RPM meeting, the evaluation of 2103 LTM data is ongoing, and the Navy will work closely with the agencies as more information becomes available, specifically relative to the evaluation of protectiveness in this FYR.

*EPA Specific Comment 47: p. 38, §2.8 - EPA will only concur that the remedy is "short-term" protective until the issues presented in the comments above are addressed.*

Response: See responses to the comments above. The Navy still concludes that the remedies at McAllister Point Landfill are protective of human health and the environment, and exposure pathways that could result in unacceptable risks are being controlled.

*EPA Specific Comment 48: p. 39, §3.1, ¶12 - Please clarify the second sentence that refers to "including the landfill." If this is meant to refer to the NUSC Disposal Area, please change the reference accordingly.*

Response: The words "including the landfill" have been removed.

*EPA Specific Comment 49: p. 40, §3.1, ¶11 - Please replace the last sentence with: "Remedial design for the groundwater and pond and stream sediment components of the remedy are underway."*

Response: The requested change has been made.

*EPA Specific Comment 50: p. 40 Table 3-1 - Please supplement this table with the additional investigations and documents listed in Table 2-1 of the Record of Decision but missing from Table 3-1.*

Response: Additional information from Table 2-1 of the Record of Decision has been added to this table.

*EPA Specific Comment 51: p. 41, §3.2, ¶14 - Please clarify the third sentence by: "...flowing west from the golf course on the east."*

Response: The requested change has been made.

*EPA Specific Comment 52: p. 43, §3.2, ¶11 - Please supplement the partial paragraph at the top of the page with the following: "RIDEM does not have an EPA-approved CSGWPP and therefore, EPA does not recognize RIDEM's classification system. EPA expects that all groundwater will be remediated to its beneficial use. However, groundwater cleanup standards do not have to be achieved under a waste management unit."*

*Also, discuss the use of local groundwater for irrigating the golf course.*

Response: The additional text has been added. The Navy has confirmed that the golf course is not currently operating wells in the vicinity of the site for irrigation of the golf course. The Navy has initiated more communications with the adjacent golf course relative to precautions to prevent irrigation wells near Site 8. Further meetings are scheduled in late 2014 and periodically thereafter per the LUC RD. No change is proposed to the text on this topic.

*EPA Specific Comment 53: p. 43, §3.3.1 - In the second bullet, remove "for human consumption."*

Response: The RAOs provided in the FYR are obtained directly from the Site 8 ROD. The Navy suggests keeping this language in the FYR for consistency with the ROD.

*EPA Specific Comment 54: p. 48, §3.3.2, ¶3 - Please correct the ninth sentence by changing "contained" to "continued."*

*Was the RAWP Addendum based on EPA's Superfund asbestos guidance? In particular, does only rely on visual observation of potential asbestos containing materials or will soil testing be done to confirm the presence of asbestos (this issue was previously addressed at OFFTA). Solely relying on visual observations of asbestos containing materials is not protective.*

Response: The typo has been corrected. The following text has been added to provide additional information to address the second portion of the comment:

"Per the RAWP Addendum, soil with visually observed regulated asbestos-containing material (RACM) is stockpiled for disposal off-site as asbestos-contaminated soil, while soil not visually observed to contain RACM is stockpiled separately and sampled for the presence of asbestos."

*EPA Specific Comment 55: p. 48, §3.3.2, ¶4 - Please indicate how the soil cover will be protected before final seeding, which will not occur for a significant time after construction of the soil cover.*

Response: The following text has been added to address this question:

"Per AGVIO construction staff, temporary seeding and/or straw will be used to temporarily stabilize the soil after backfilling and grading of all of the excavations until the site is ready for final restoration and seeding."

*EPA Specific Comment 56: p. 50, §3.5.1 - Discuss the status of LUCs since the LUC RD Plan was completed in 2013.*

Response: The following sentence will be added to Section 3.5.1:

"The LUC Remedial Design, including a subsequent addendum, has been completed; however, the engineering controls are under construction and groundwater monitoring and annual LUC compliance inspections have not yet been initiated."

*EPA Specific Comment 57: p. 51, §3.5.2, ¶4 - The relative changes for each groundwater COC presented are not consistent. Please correct.*

Response: The relative changes between the risk-based cleanup levels provided in the ROD (from 2012) for groundwater and what would currently be selected based on the changes in exposure parameters is based on rounding differences. The EPA RSL tables from 2012 present the cleanup levels provided in the ROD and the RSL tables from May 2014 present the potential cleanup levels shown in the text. The toxicity values for the four analytes discussed have not changed in that time. As the exposure parameter changes would be the same for all of the analytes, this shows that the primary reason for the relative changes being inconsistent is rounding. As an example, the unrounded vanadium result is 86.4 ug/L (per the online USEPA calculator - [http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl\\_search](http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search)) rather than 86 ug/L. As described in the bullet regarding changes in toxicity and other contaminant characteristics, the gastrointestinal absorption (GIABS) for vanadium has changed from 100% in 2012 to 2.6% in 2014. This would also have a minor impact on relative changes when comparing vanadium to the other analytes.

The text has been edited to state, "When compared to the 2012 ROD cleanup levels, the relative change for each of the four analytes listed may be slightly different due to rounding differences in the calculated results, as well as the change in the gastrointestinal absorption factor for vanadium, described above."

*EPA Specific Comment 58: p. 53, §3.7 Table - At the end of the Recommendations text, insert: "and incorporate measures to address the risks posed by the asbestos into the remedial action."*

Response: The requested language has been added.

*EPA Specific Comment 59: p. 53, §3.8 - See comment for page 48, §3.3.2, ¶13 concerning whether the NUSC remedy is fully protective of potential asbestos risks.*

Response: See response to EPA Specific Comment #54. The remedial action is not relying solely of visual observations of asbestos.

*EPA Specific Comment 60: p. 58, Table 4-1 - Please add the following events to this table:*

- Remedial action for soil cap construction completed – May 2014
- Draft Final Long-Term Management Plan – May 2014
- ESD to revise groundwater standards – June 2014

Response: The table has been updated as requested. Since the Final LTM Plan was issued in September 2014, the table now reflects the final version.

*EPA Specific Comment 61: p. 59, §4.2, ¶11 - The soil cap construction has been completed as noted earlier in the report. Therefore, please update the text in this paragraph accordingly.*

Response: The requested update has been made.

*EPA Specific Comment 62: p. 60, §4.3 - Discuss the second ESD that changed the groundwater standards.*

Response: The following sentence has been added to the first paragraph of Section 4.3: "A second ESD was issued in June 2014, which clarified that the groundwater cleanup levels in the ROD are actually groundwater performance standards and modified the performance standard for arsenic."

*EPA Specific Comment 63: p. 63, Table 4-2 - Please revise this table to list the current performance standard for arsenic (10 µg/L) and its basis (MCL) and have the footnote provide the ROD standard and basis accordingly.*

*For the Basis text for Manganese change "Heathl" to "Health."*

Response: The requested changes have been made.

*EPA Specific Comment 64: p. 64, ¶12 - Update this paragraph once the LUC requirements are completed, which will occur before December 2014.*

Response: The second sentence in this paragraph has been updated as follows:  
"It is anticipated that the LUC requirements will be implemented in the fall of 2014, following completion of the Long-Term Management Plan for the site in mid-September 2014."

*EPA Specific Comment 65: p. 64, §4.3.2 - Discuss implementation of the groundwater component of the remedy.*

Response: The following text has been added:  
"Three groundwater wells will be monitored long-term, including existing well SWOS-MW2 and two newly-installed wells. The two new monitoring wells are anticipated to be located west and east of the waste management area (WMA), respectively and upgradient of the WMA boundary.

The ROD for Site 9 requires groundwater monitoring in the area upgradient of the WMA for the COCs listed in the ROD (i.e., arsenic, chromium, lead, manganese, benzene, and 2-methylnaphthalene). The project action levels (PALs) for LTM groundwater monitoring will be selected as the performance standards (cleanup levels listed in the ROD), or the MCLs, and are described in the Sampling and Analysis Plan (SAP) for the LTM program. Procedures related to groundwater monitoring, including well development, stabilization, sampling, quality assurance/quality control (QA/QC) procedures, etc., are presented and described in the SAP, which was just finalized in mid-September 2014"

*EPA Specific Comment 66: p. 64, §4.3.3 - A word is missing in the second sentence after "monitoring wells."*

Response: The omitted word has been added.

*EPA Specific Comment 67: p. 64, §4.4.1 - Is any of the fencing around the Site present before the remediation still in place and being maintained to restrict access? If so, describe the condition is it in and whether it is effective.*

Response: A post-construction site walk to support the Remedial Action Completion Report (RACR) was conducted by EPA, RIDEM, Tetra Tech, and the Navy on May 22, 2014. It was noted that the temporary fence had been removed from the boundary of the site since the elements of the soil cover had been completed, addressing potential for exposure to site soils.

*EPA Specific Comment 68: p. 67, §4.5.2, ¶1 - Please supplement the first full sentence with: "... below those standards/objectives, unless the presence of multiple contaminants creates an unacceptable cumulative risk." If MCLs are not protective because of the presence of multiple contaminants, then according to the National Contingency Plan, risk-based standards shall be used to establish cleanup concentrations. Furthermore, with the chromium value approximately 100 times lower than the ROD value, it is not apparent that the remedial goal in the ROD is protective, unless the Navy can document that hexavalent chromium is not the predominant species present.*

Response: The text will be edited as suggested in the first sentence. With regard to chromium, the Navy believes that the cleanup goals cited in the ROD remain protective and do not merit revision at this time. For additional information, the following text has been added to the paragraph:

"However, the history of the site did not indicate presence or disposal of chromium in hexavalent form, and the presence of chromium and other metals was assumed to be present as a result of fire training (long term combustion of oils and other fuel sources). The RI (Tetra Tech, 2001) notes that metals concentrations (including chromium) in filtered samples were low as compared to unfiltered samples, indicating that these metals in groundwater are likely associated with particulate and colloidal matter. Hexavalent chromium is typically associated with industrial processes such as plating operations, pigmentation in inks and dyes, wood preservatives and leather tanning operations, none of which are associated with the site."

*EPA Specific Comment 69: p. 69, §4.5.7 - Adjust the groundwater performance standards based on the changes cited for toxicity values and exposure factors and issue an ESD to document the changes. The groundwater monitoring program should be adjusted to analyze baseline samples for the presence of hexavalent chromium to determine the presence of this species in site groundwater and to determine if the groundwater is potable at the well locations selected for monitoring. Depending on the monitoring results, adjustments to the monitoring locations may be made and the perimeter of the waste management area may be adjusted.*

Response: No new information has been identified to indicate that the cleanup goals identified in the ROD are not protective, nor has information been developed that an industrial source of chromium impacted the site. Therefore, no recommendation for chromium speciation is needed at this time.

*EPA Specific Comment 70: p. 69, §4.5.9 - Please change Site 8 to Site 9.*

Response: Per EPA Specific Comment 45, the relevant sentence has been deleted.

*EPA Specific Comment 71: p. 69, §4.7 - As indicated in your e-mail dated June 11, 2014, for sites with a LUC remedy, PFCs should be considered in the FYR where historical releases may have occurred but were not previously analyzed. Since EPA has a preliminary health advisory for PFCs, EPA expects the Navy to sample for PFOA/PFOS before the next FYR. Please include a recommendation for PFOA/PFOS sampling in this section.*

Response: The following paragraphs will be added to Section 4.5.2 under the bullet titled "New Contaminants and /or Contaminant Sources":

"Additionally, perfluorinated chemicals (PFCs) (including perfluorooctane sulfonate [PFOS] and perfluorooctanoic acid [PFOA]) have been identified as emerging contaminants and were not considered at the time of the 2010 ROD. It is possible that aqueous film-forming foam (AFFF) with PFOA and PFOS was in use during the period of historical fire-fighting training operations at the site.

Groundwater samples collected at Site 9 during the RI were not analyzed for PFCs. However, there are no downgradient human receptors for groundwater, and a LUC is in place at the site to prevent use of groundwater for consumption, and therefore the remedy in place under the existing ROD would be protective from PFCs if they are present in groundwater at

concentrations above the EPA preliminary health advisory. Finally, it is noted that based on the conceptual site model, foams and other extinguishing materials used on site would mostly have been washed over land or into the surrounding drains and then dispersed within Coasters Harbor, resulting in a lower PFC concentration in local groundwater than one would expect to see in a landlocked fire training facility where the material was simply dispersed on the ground. The Navy is aware of the EPA concerns with PFOA and PFOS and will be seeking these materials at key areas as needed and the monitoring program will be adjusted accordingly for this site once that decision is made."

Additionally, the following issue and recommendation has been added to Sections 4.6 and 4.7:

Issues	Affects Protectiveness (Y/N)	
	Current (Y/N)	Future (Y/N)
PFCs (including PFOS and PFOA) are emerging contaminants that were not considered at the time of the RI and ROD and AFFF containing PFOS and PFOA may have been used during historical fire-fighting training operations at the site.	N	Y

Recommendations/Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Follow-up Actions: Affects Protectiveness (Y/N)	
				Current	Future
Evaluate whether AFFF as used at the site and whether there was a potential release of PFOA/PFOS as part of a preliminary assessment. Conduct sampling if required.	Navy	USEPA	December 2018	N	Y

*EPA Specific Comment 72: p. 71, Table 5-1 - Please add the risk assessment revision in January 2013 and the supplemental groundwater sampling in 2014.*

Response: The risk assessment revision was an interim deliverable to ensure regulatory concurrence prior to issuing the final SASE report. The final SASE report (August 2014) includes the revised risk assessment details and completes the required assessments for soil, sediment, and surface water. The final SASE report has been added to the table. Groundwater was deferred to a supplemental groundwater assessment. The supplemental groundwater assessment work plan is included in the table, but the results and associated report will not be available to evaluate during this FYR evaluation period.

*EPA Specific Comment 73: pp. 72 to 77 - The FYR discusses in Section 5 the path forward for TFs 1-5 and those discussions do not address the metals exceedances in groundwater at these sites. This recommendation should be added to the FYR.*

*There has been virtually no follow-up for the metals exceedances found at TFs 4 and 5 by TRC and they exceeded the MCLs for multiple metals. For TFs 1-3, DESC's investigation was limited*

*to petroleum so only organic parameters were part of the scope. There have been no investigations of metals concentrations in groundwater at TFs 1-3. Because product existed in the subsurface at those TFs, it is likely that metals have been mobilized at TFs 1-3. The CERCLA investigations at TFs 1-3 were focused on specific locations that RIDEM identified as potentially impacted by CERCLA contaminants, so those specific locations were moved from DESC's purview to CERCLA for further investigation. Those locations did not include general site groundwater, but that medium needs a CERCLA investigation because metals were never evaluated.*

Response: The tank farm sites are not subject to this five-year review and are still undergoing investigation. Based on discussion with EPA at the September RPM meeting, no change is needed. However, the Navy agreed to add additional schedule information through ROD completion for TFs 1-3 and for the RD and RA phases of work at TFs 4 and 5.

*EPA Specific Comment 74: p. 73, §5.2, ¶1 - The Data Gaps Report does not address groundwater throughout Tank Farm 1. It focuses on the ethyl blending plant. Earlier groundwater investigations at Tank Farm 1 focused on organic contaminants. However, the release of petroleum to the subsurface has likely caused reducing conditions and the mobilization of significant metals concentrations, as has been observed at Tank Farms 4 and 5. Therefore, closeout of Tank Farm 1 will require follow-up groundwater sampling throughout the site to determine if groundwater requires remedial action under CERCLA because of elevated metals concentrations.*

*Also include another bullet for: Remedial Action Completion Report, as appropriate.*

Response: The requested bullet has been added. Relative to groundwater, see response to EPA Specific Comment 73..

*EPA Specific Comment 75: p. 74, §5.3, ¶3 - Please edit the first sentence by: "... 2013 for selected areas of the site ...."*

Response: The requested edit has been made.

*EPA Specific Comment 76: p. 75, §5.3 - Include another bullet for: Remedial Action Completion Report, as appropriate.*

Response: The requested bullet has been added.

*EPA Specific Comment 77: p. 77, §5.4 - Include another bullet for: Remedial Action Completion Report, as appropriate.*

Response: The requested bullet has been added.

*EPA Specific Comment 78: p. 77, §5.5 - As previously discussed, part of Tank Farm 4 is subject to a ROD and should be given its own section (new Section 5).*

Response: See response to EPA General Comment 2.

*EPA Specific Comment 79: p. 78, §5.5, ¶12 - In the first sentence, please revise the text by: "... fully characterize the site soil and review areas under the IRP." No groundwater sampling targeting impacts from releases of petroleum to the subsurface were conducted during this Site Investigation or any other time since significant metals concentrations were detected in 1992 by TRC during the Phase I Remedial Investigation.*

Response: See response to EPA Specific Comment 73.

*EPA Specific Comment 80: p. 78, §5.5, ¶13 - Please revise the second sentence by: "... that were impacted with petroleum products would ...."*

*Please revise the last sentence by: "... areas impacted with petroleum will be closed ...."*

Response: The requested edits have been made.

*EPA Specific Comment 81: p. 80, §5.5, ¶11 - Please revise the first bullet to refer to "RD/RA for DU 4-1."*

*Delete "as appropriate" from the second bullet. Also include another bullet for: Remedial Action Completion Report.*

*Delete the second section of the text. Establishment of LUCs is a remedial action.*

Response: The edits requested in the first two paragraphs have been made. No edit has been made in response to the third paragraph (see response to EPA General Comment 2).

*EPA Specific Comment 82: p. 80, §5.5 - Please add the following final paragraph: " A Phase II Remedial Investigation of Tank Farm 4 groundwater will also be conducted to determine the current condition of groundwater in the vicinity of the former petroleum storage tanks where significant metals contamination of groundwater was detected during the Phase I Remedial Investigation in 1992."*

Response: See response to EPA Specific Comment 73.

*EPA Specific Comment 83: p. 80, §5.6 - As previously discussed, parts of Tank Farm 5 are subject to either an interim ROD or ROD and should be given its own section (new Section 6).*

Response: See responses to EPA General Comment 2.

*EPA Specific Comment 84: p. 82, §5.6, ¶13 - Regarding the last sentence, please plan to issue a Final ROD for Tanks 53 and 56 rather than an ESD for DU 5-1. They are separate sites within Tank Farm 5 and additional investigation and remediation of Tank Farm 5 groundwater could be required.*

Response: Consistent with discussion with EPA at the September RPM meeting, the text has been revised to simply state that the "Navy is planning to prepare documentation in a future

decision document of No Further Action..." The sentence that referred to an ESD to the DU 5-1 ROD has been deleted.

*EPA Specific Comment 85: p. 82, §5.6, ¶14 - In the first sentence, please revise the text by: "... better characterize the site soil and review areas under the IRP."*

Response: The requested edit has been made.

*EPA Specific Comment 86: p. 82, §5.6, ¶15 - Please revise the second sentence by: "... that were impacted with petroleum products would ...."*

Response: The requested edit has been made.

*EPA Specific Comment 87: p. 83, §5.6, ¶11 - Please revise the last sentence by: "... areas impacted with petroleum will be closed ...."*

Response: The requested edit has been made.

*EPA Specific Comment 88: p. 85, §5.6, ¶1 - Please revise the second bullet to refer to "RD/RA for DU 5-1."*

*Delete "as appropriate" from the third bullet. Also include another bullet for: Remedial Action Completion Report.*

Response: The requested edits have been made.

*EPA Specific Comment 89: p. 85, §5.6 - Please add the following final paragraph: " A Phase II Remedial Investigation of Tank Farm 5 groundwater will also be conducted to determine the current condition of groundwater in the vicinity of the former petroleum storage tanks where significant metals contamination of groundwater was detected during the Phase I Remedial Investigation in 1992."*

Response: See response to EPA Specific Comment 73.

*EPA Specific Comment 90: p. 85, §5.7 - A ROD for Gould Island was completed on June 30, 2014 and should be given its own section (a new Section 7).*

Response: See response to EPA General Comment 2.

*EPA Specific Comment 91: p. 88, Table 5-7 - Please add the Record of Decision to the table (the Draft Final ROD has been issued and the final will be signed before this FYR is completed).*

Response: The requested addition has been made.

*EPA Specific Comment 92: p. 88, §5.7 - Delete the first bullet and "as appropriate" from the second and third bullets. Also include another bullet for: Remedial Action Completion Report.*

*Please correct the second paragraph to discuss the project status since a remedial action was selected.*

Response: The requested edits have been made. The second paragraph has been replaced with the following:

*"Since remedial construction has not yet begun at Gould Island, this site has not been reviewed in this FYR. It is expected that the subsequent FYR for NAVSTA Newport will include a review of the remedy for Gould Island."*

*EPA Specific Comment 93: p. 88, §5.8 - As previously discussed, the two Derecktor OUs should be completed before this FYR is and should be analyzed the same as the other OUs with RODs and given their own sections (new Sections 8 and 9).*

Response: See response to EPA General Comment 2.

*EPA Specific Comment 94: p. 90, §5.8, ¶1 - Please correct the last sentence because the Final FS has already been issued.*

Response: The text was edited to reflect that the Final FS was issued May 2014.

*EPA Specific Comment 95: p. 90, §5.8, ¶2 - Please change the last sentence to refer to each operable unit rather than each site.*

Response: The requested correction has been made.

*EPA Specific Comment 96: p. 91, Table 5-8 - Please add the Record of Decision for each operable unit to the table because both Draft RODs have been issued and final RODs will be signed before this FYR is completed.*

Response: The table has been updated to reflect the Final RODs which were just completed.

*EPA Specific Comment 97: p. 91, §5.8 - Delete the first bullet and "as appropriate" from the second and third bullets. Also include another bullet for: Remedial Action Completion Report.*

*Please correct the second paragraph to discuss the project status for both operable units since a remedial action was selected for both.*

Response: The Remedial Action Completion Report has been added and "as appropriate" has been deleted from the second and third bullets. The second paragraph has been revised as follows:

*"Since remedial construction has not yet begun at Derecktor Shipyard, this site has not been reviewed in this five-year review. It is expected that the subsequent five-year review for NAVSTA Newport will include a review of the remedies for Derecktor Shipyard (both On-Shore and Off-Shore.)"*

*EPA Specific Comment 98: p. 91, last ¶ - Since the Derecktor ROD is likely to be completed before this FYR (i.e., September vs. December), please replace this statement with "...The*

*protectiveness of the remedial actions for Derecktor Shipyard (both On-Shore and Off-Shore) will be reviewed in subsequent FYRs."*

Response: See replacement text included in the previous comment response.

*EPA Specific Comment 99: p. 92, §5.9 - Even though a Site Closeout Report has been developed, the Navy still needs to issue a final ROD for the OU.*

Response: A ROD was not required for Site 21 (OU 8), because the removal actions occurred prior to completing a Study Area Screening Evaluation (SASE) that concluded no further action and therefore, the site never proceeded to the RI phase. The site was administratively closed out in 2009. The inclusion of a Site Closeout Report in the chronology table (Table 5-9) was done in error. To avoid further confusion, Section 5.9 has been removed from the report entirely.

*EPA Specific Comment 100: p. 93, Table 5-9 - Regarding the last line item, please add the Site Closeout Report to the on-line administrative record.*

Response: The reference to a Site Closeout Report for Site 21 (OU 8) was made in error and such a document does not exist. See also the response to the previous comment.

*EPA Specific Comment 101: p. 93, §5.10 - For consistency, please change the title of this section to Site 22 – Carr Point Storage Area (OU 10).*

Response: The requested edit has been made.

*EPA Specific Comment 102: p. 95, §5.10, ¶11 - Please insert the following sentence before the last sentence: "A discussion of MRP Site 1 is provided in Section 5.12 and a chronology table is provided in that section for events and documents specific to MRP Site 1."*

Response: The requested language has been added.

*EPA Specific Comment 103: p. 95, Table 5-10 - Please change the title of this table to refer only to Site 22 and delete the line items specific to MRP Site 1 because they are provided in Section 5.12.*

Response: The requested changes have been made.

*EPA Specific Comment 104: p. 96, §5.10 - Please include another bullet for: Remedial Action Completion Report.*

Response: The requested bullet has been added.

*EPA Specific Comment 105: p. 98, §5.11 - Please include another bullet for: Remedial Action Completion Report.*

Response: The requested bullet has been added.

*EPA Specific Comment 106: p. 100, §5.12, ¶1 - Please insert the following sentence before the last sentence: "A discussion of IR Site 22 is provided in Section 5.10 and a chronology table is provided in that section for events and documents specific to IR Site 22."*

Response: The requested language has been added.

*EPA Specific Comment 107: p. 101, Table 5-12 - Please change the title of this table to refer only to MRP Site 1.*

Response: The requested change has been added.

*EPA Specific Comment 108: p. 102, §5.12 - Please include another bullet for: Remedial Action Completion Report.*

Response: The requested bullet has been added.

*EPA Specific Comment 109: p. 102 - Please discuss any additional asbestos study areas at the end of this section.*

Response: No additional asbestos study areas have been added at this time.

*EPA Specific Comment 110: Appendix B.1 - Figure 1: Please change the Operable Unit designation for Site 4 from NA to TBD because the Step 3A refinement included in the Site Assessment and Screening Evaluation was not accepted by EPA.*

*Please correct the acronym for Site 9/20 to OFFTA.*

*For Site 19 Derecktor Shipyard, please add OU5.*

Response: The requested changes have been made.

*EPA Specific Comment 111: Appendix B.2 - Please edit the figure to distinguish between monitoring wells that are active and inactive relative to the current groundwater monitoring program.*

Response: The figure has been annotated accordingly.

*EPA Specific Comment 112: Appendix B.3 - Please include figures that depict the selected remedial action for soil and sediment as identified in the remedial designs.*

Response: Figure 3-1 from the soil remedial design has been added to this appendix. The sediment remedial design has not been completed.

*EPA Specific Comment 113: Appendix D - The ARARs tables for all of the RODs that are or will be completed before December 2014 should be included in the Appendix. Note that there are ARARs cited in some of the tables that either no longer exist or have been changed, but none affect the protectiveness of the remedy. If any future decision documents are issued for OUs within the Site these ARARs may be updated.*

Response: See response to EPA General Comment 2.

*EPA Specific Comment 114: Appendix E.1 - Please update this appendix to include 2013 monitoring data.*

Response: The appendix has been updated to include the 2013 monitoring data.

*EPA Specific Comment 115: Appendix E.2 - Many of the tables in this appendix do not specify a date. Please ensure each table has a date to properly identify when the data were collected.*

*Update the tables in this appendix to include all historical data.*

Response: Dates have been added to tables as needed and the outstanding 2013 monitoring data has been added.

*EPA Specific Comment 116: Appendix E.3 - Update this appendix to include the data collected since the last FYR.*

Response: The appendix has been updated to include the 2013 monitoring results.

#### RIDEM Specific Comments:

*RIDEM Specific Comment 1: p. x, Five-Year Review Summary Form, Site Status - For the site status section, please include a table summarizing all of the site names, operable units, decision units, and CERCLA status at Naval Station Newport.*

Response: The attached table has been added to Section 1.0.

*RIDEM Specific Comment 2: p. xi, Five-Year Review Summary Form, OU7 Issue. - Please indicate that asbestos exposure reduction was addressed in the remedial action work plan.*

Response: Because there is no current or future protectiveness concern with this issue, the issue has been removed from the FYR Summary Form.

*RIDEM Specific Comment 3: p. xi, Five-Year Review Summary Form, Protectiveness Statement, OU1. - Please indicate the remedial measures employed to control unacceptable risks. Also, indicate that MCL exceedances of arsenic do occur within the landfill; however, those exceedances have been observed within wells at the downgradient/shoreline edge of the landfill.*

Response: The protectiveness statement has been updated as follows:  
"The remedy for OU1 at McAllister Point Landfill (Site 1) is protective of human health and the environment, and exposure pathways that could result in unacceptable risks are being controlled. The source control remedy (OU 1) is complete and functioning as intended. The landfill cap, stone revetment, and surface control are in place and being well maintained to

prevent exposure to the landfill area and limit infiltration of precipitation within the cap. Groundwater, vent gas, and ambient air monitoring are on-going to confirm emissions are within acceptable parameters. The most recent annual groundwater monitoring results show few detections of VOCs and SVOCs and mainly infrequent exceedances of the MCLs by these chemicals and by metals, with the few exceedances observed only within the footprint of the landfill. More frequent exceedances of MCLs do occur for arsenic in areas of the landfill cap, including near the downgradient/shoreline edge of the landfill, but still within the footprint of the landfill. The groundwater and vent gas monitoring have shown generally consistent results with no indications of any issues with the protectiveness of the remedy. Groundwater migration does not appear to be providing contaminants above RGs to the bay. Continued monitoring at wells within the landfill and on the western edge will be used to confirm protectiveness by comparing contaminant concentrations measured in the sampled media to RGs and ensure that there is no increased risk to human health or the environment."

*RIDEM Specific Comment 4: p. xii, Five-Year Review Summary Form, OU3, Protectiveness Statement. - Please indicate the remedial measures employed to control unacceptable risks.*

Response: The Protectiveness Statement for OU3 has been revised as follows:

"The remedy at Site 9 (OU 3) is currently protective of human health and exposure pathways that could result in unacceptable risks are being controlled. The asphalt/soil cover system and replacement stone revetment are in place and preventing exposure to contaminated soils. Land use controls are in place and enforced to prevent unauthorized use of the site. However, in order for the remedy to be protective in the long-term, an evaluation should be conducted to determine whether AFFF was used at the site and whether there was a potential release of PFOA/PFOS and then sampling should be conducted, if required, to ensure protectiveness."

*RIDEM Specific Comment 5: p. 1, Section 1.1, Purpose; 1st sentence - Please revise the end of this sentence to "...initiated at select operable units at Sites 1, 8 and 9....".*

Response: The requested edit has been made.

*RIDEM Specific Comment 6: p. 4, Section 1.2.1, Land Use and Physical Characteristics. - Elevations are discussed relevant to mean sea level (MSL) in this section whereas in subsequent sections elevations are discussed relevant to mean low water (MLW). Please discuss elevations with regard to MLW.*

Response: The sentence referencing MSL has been removed from Section 1.2.1 and the following sentence was slightly revised to read:

"Due to the coastal location of NAVSTA Newport, areas at low elevations are susceptible to flooding during storm surges."

*RIDEM Specific Comment 7: p. 15, Section 2.2, Background, Physical Characteristics - The first paragraph (continued from previous page) states that "Access to the shoreline adjacent to the landfill is not completely restricted". This implies that the capped landfill area is not completely fenced and that trespassers can access the site if they disregard the signs warning against trespassing. The remedy, as presented in the ROD for the Source Control Operable Unit, requires that access be restricted with fencing and institutional controls to prevent exposure that could result in unacceptable risks. The lack of fencing on the revetment side of the landfill*

*should be discussed in Section 2.5.1, Implementation of Institutional Controls and Other Measures, as well as in Section 2.6, Issues.*

Response: Based on discussion with RIDEM at the September RPM meeting, the sentence quoted above has been removed to avoid confusion.

*RIDEM Specific Comment 8: p. 24, Section 2.3.3, Operations and Maintenance, Source Control (OU 1) and Table 2-2 (p. 26) - It is unclear whether Table 2-2 includes the actual monitoring and maintenance activities and frequencies or the planned monitoring and maintenance activities in accordance with the Long-Term Monitoring Plan (LTMP). Please clarify in the text whether actual inspections were conducted as planned/required by the LTMP and revise Table 2-2 to include a summary of actual monitoring and maintenance activities if they differ from that required by the LTMP.*

Response: Table 2-2 includes the actual monitoring and maintenance activities and frequencies as well as the planned future monitoring and maintenance activities per the 2010 Work Plan Addendum. For clarity, the words "ROD for" have been removed from the title of Table 2-2.

*RIDEM Specific Comment 9: p. 28, Section 2.4.2 and Sub-sections, Document and Analytical Data Review - Please review the 2013 Draft Annual Monitoring Report Operation and Maintenance Activities, which is now available, and update the relevant sub-sections.*

Response: The report has been updated based on review of the 2013 Draft Annual Monitoring Report Operation and Maintenance Activities. As discussed during September RPM meeting, the evaluation of 2103 LTM data is ongoing, and the Navy will work closely with the agencies as more information becomes available, specifically relative to the evaluation of protectiveness in this FYR.

*RIDEM Specific Comment 10: p. 28, Section 2.4.2.1, Groundwater; 1st paragraph, last sentence - Please update the tables and figures with the updated drinking water standards. Additionally, please provide graphs depicting groundwater results for COCs over time at each monitoring well.*

Response: The appendix has been updated to include Figure 2-3 from the draft 2013 annual monitoring report as well as tables of 2013 groundwater data from this report. The figures and tables reflect the updated RIDEM GA aquifer standards. Tables obtained from previously annual monitoring reports do not reflect the updated RIDEM GA aquifer standards. The text has been updated to reflect this. Regarding the request for graphs of groundwater requests over time, the Navy is planning some trend analysis but it won't be done in time for the FYR. The Navy will make sure funding is in place to do so for the 2015 annual monitoring report.

*RIDEM Specific Comment 11: p. 29, Section 2.4.2.1, Groundwater - The last sentence of the first (partial) paragraph describes how it is not typical for dissolved concentrations to be higher than total concentrations but sometimes does occur "due to various reasons". Please provide and discuss the potential reasons why this may be occurring at this site, as well as any implications associated with this phenomenon with respect to the protectiveness of the remedy.*

*Additionally, this section states that based on a comparison of the range of 2009 arsenic porewater data (2013 data unavailable to-date) in samples collected near McAllister Point Landfill to those from reference stations, dissolved arsenic in groundwater does not appear to be migrating to porewater. Please provide the porewater arsenic data in Table 4-6 of Appendix E.3 along with a comparison of the mean dissolved arsenic concentrations of each porewater sample group for comparison to mean groundwater concentrations in the most downgradient landfill interior wells.*

Response: The reason for the detection of lead in the dissolved metals analysis, but not the total metals analysis, is not apparent from review of the monitoring report, but could have been related to field or laboratory contamination. Since this appears to have been an isolated anomaly, there is no concern with protectiveness of the remedy. The referenced sentence has been revised as follows:

"While it is not typical for dissolved concentrations to be higher than total concentrations, this appears to have been an isolated anomaly."

Table 4-6 of 2009 annual monitoring report does not include arsenic because there is no remedial goal for porewater. A separate table has been prepared that includes arsenic results in porewater for the 2009 and 2013 monitoring rounds; however, it does not include groundwater data. However, the Navy understands RIDEM's concern and will plan to include the requested tables in the annual monitoring report for the next porewater sampling event.

*RIDEM Specific Comment 12: p. 30, Section 2.4.2.2, Landfill Gas; 1st paragraph - Please fix the incorrect reference to Section 2.4.2.2. Additionally, in the 2nd paragraph, please break the 3rd sentence into two sentences by adding a period after "perimeter vents" and capitalizing "these". (...generally lower levels at the perimeter vents. These results indicate..)*

Response: The incorrect reference has been removed and the requested edit has been made.

**RIDEM Specific Comment 13:** p. 31, Section 2.4.2.3, Sediment, Porewater and Biota - *Sediment data show considerable variability over the years, with the last round in 2009 having concentrations well above the remedial goal at location MCA-11. Biota data show an increase in concentrations, particularly for PCBs – please discuss these results within the text. Additionally, please provide graphs showing concentrations over time in these media to assist in interpreting monitoring results.*

Response: This section has been updated to include review of the 2013 monitoring data and also provide some additional discussion of RG exceedances at individual monitoring locations. Trend graphs will be included in the draft 2013 annual monitoring report and a reference is included in this section.

**RIDEM Specific Comment 14:** p. 33, Section 2.5.1, Question A: *Is the Remedy Functioning as Intended by the Decision Documents? - Please review the 2013 Draft Annual Monitoring Report Operation and Maintenance Activities, which is now available, and update the relevant sub-sections.*

Response: The section has been updated based on review of the 2013 monitoring data.

*RIDEM Specific Comment 15: p. 33-34, Section 2.5.1, Remedial Action and Monitoring Results and Opportunities for Optimization - The text states that MCL exceedances occur within the footprint of the landfill. However, these exceedances occur at the downgradient/shoreline edge of the landfill. For example, arsenic exceedances are observed at wells MW-108 and MW-111. This condition does not support a reduced frequency of monitoring. Because remedial goals have not yet been achieved in groundwater at downgradient/perimeter wells, RIDEM does not recommend reducing monitoring to a five-year frequency at this time.*

*Additionally, please discuss in this section and other subsequent sections the observed increases in COC concentrations in shellfish and sediment with respect to the protectiveness of the remedy.*

Response: The recommendation for reduced groundwater monitoring frequency has been removed. No change was identified to this section based on shellfish and sediment data.

*RIDEM Specific Comment 16: p. 33, Section 2.5.1, Question A: Is the Remedy Functioning as Intended by the Decision Documents? - There is a recommendation to reduce the groundwater monitoring frequency from annual to every five years corresponding with the Five-Year Review. Whether or not the monitoring frequency is reduced, please ensure that groundwater sampling events correspond with porewater sampling events (at the same frequency, at least for near-shore sample locations) so that potential off-site migration of arsenic may be evaluated.*

Response: The recommendation for reduced groundwater monitoring frequency has been removed based on other comments.

*RIDEM Specific Comment 17: p. 36, Section 2.5.2, Question B, 6th bullet, Changes in Toxicity and Other Contaminant Characteristics - For the sake of transparency, please provide a table summarizing COCs, toxicity values and other characteristics that have changed, and direction of change (more or less stringent), and the revised remediation goals.*

Response: While the text notes that there have been changes to some human health toxicity values for the COCs in shellfish tissue, most of which would result in higher human health-based RGs, the text also notes that the basis for developing the overall RGs for the site was that ecological exposures would be the basis of the RGs due to the lack of potential for human exposure. At the time of the ROD, human health-based RGs were already below those selected for ecological exposures. Therefore, the human health toxicity value changes would not result in changes to the RGs. Providing the table that is requested would likely only confuse readers since the selected RGs are not human-health based. The following sentence has been added to provide some additional information regarding the changed human health toxicity values:

"For example, changes to the slope factors for PAHs (which were set at the most conservative of the PAHs [benzo(a)pyrene]) and PCBs, as well as the copper reference dose, would have resulted in lower calculated risks/hazards, and higher human health-based RGs."

*RIDEM Specific Comment 18: p. 37, Section 2.5.4, Summary of the Technical Assessment - Please refer to Comment #2.*

Response: As discussed during our September RPM meeting, RIDEM believes this comments is a possible typo or contains a possible typo. RIDEM will provide further detail if this is an intended comment.

*RIDEM Specific Comment 19: p. 38, Section 2.8, Protectiveness Statement - Please also include a discussion regarding the off-shore areas with low risk.*

Response: The third paragraph of the Protectiveness Statement has been revised as follows: "The dredging and backfilling activities for the near shore and elevated risk off-shore marine sediment remedial action (OU 4) are complete. Long-term monitoring of the off-shore areas with low risk is ongoing. Monitoring of the near shore and elevated risk off-shore areas is also continuing. The sediment and porewater monitoring results, prior to the most recent monitoring round, show ICOCs below RGs for sediment and porewater, and most are below baseline PRGs. Additionally, toxicity testing overall does not demonstrate elevated risks to the environment. Although the most recent sediment and porewater monitoring results were not consistent with historical results, there is no indication that the recent results are caused by changes to the integrity of the landfill cap or other components of the source control remedy (OU 1). Continued monitoring of the near-shore and elevated risk off-shore areas and off-shore areas with low risk will be used to confirm the protectiveness of the remedy."

As discussed during September RPM meeting, the evaluation of 2103 LTM data is ongoing, and the Navy will work closely with the agencies as more information becomes available, specifically relative to the evaluation of protectiveness in this FYR.

"

*RIDEM Specific Comment 20: p. 41, Section 3.2, Background - In the 3rd paragraph, last sentence, please fix spelling of "metamorphosed". In the 4th paragraph, last sentence, please add a space between "below" and "the ground surface".*

Response: These typos have been corrected.

*RIDEM Specific Comment 21: p. 48, Section 3.3.2, Remedy Implementation - There appears to be a typographical error in the ninth sentence of the second full paragraph. Please revise the sentence to state "Soil excavation continued" instead of "Soil excavation contained".*

Response: The typo has been corrected.

*RIDEM Specific Comment 22: p. 50, Section 3.5.2, Question B, 6th bullet, Changes in Toxicity and Other Contaminant Characteristics - For the sake of transparency, please provide a table summarizing COCs, toxicity values and other characteristics that have changed, direction of change (more or less stringent), and the revised remediation goals. Additionally, please provide the reference for the new approach for arsenic in soil using a bioavailability factor and for vanadium using a different gastrointestinal absorption value and how these approaches will be used in the future.*

Response: As cleanup levels for most of the groundwater COCs are MCLs, those COCs do not require evaluation of toxicity/exposure parameter changes at this time. Changes to risk-based cleanup levels were discussed qualitatively as recommended in EPA guidance related to changes

in default exposure parameters (USEPA, 2014). As these parameters are likely to change again in the near future, based on recent communication with EPA, the document notes that when it is determined the appropriate time to develop a new decision document with revised cleanup levels, that would be the time to re-evaluate what the cleanup levels should be for the risk-based COCs. The remedy is still protective as no one is using the water as drinking water.

Reference: USEPA, 2014. FREQUENTLY ASKED QUESTIONS (FAQS) ABOUT UPDATE OF STANDARD DEFAULT EXPOSURE FACTORS (OSWER Directive 9285.6-03, dated February 6, 2014)

The following reference regarding arsenic bioavailability has been added to the report: U.S. Environmental Protection Agency (USEPA). 2012b. Compilation and Review of Data on Relative Bioavailability of Arsenic in Soil and Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil Documents. OSWER Directive 9200.1-113. December 31, 2012.

The following sentence has been added to provide a reference for the current vanadium gastrointestinal absorption value: "The current gastrointestinal absorption value can be found in the May 2014 USEPA Regional Screening Levels (RSLs) (<http://www.epa.gov/reg3hwmd/risk/human/rb-concentrationtable/index.htm>)."

*RIDEM Specific Comment 23: p. 59, Section 4.2; 1st paragraph, last sentence - The soil remedy has been completed; please update this paragraph to reflect this.*

Response: The last two sentences of this paragraph have been updated as follows: "Figure 2-4 of Appendix B.4 shows the site features in 2010, along with planned asphalt/soil cover areas that have since been constructed. The parking lot constructed on the north side of Taylor Drive, as part of the remedial action, is currently being used for parking."

*RIDEM Specific Comment 24: p. 63, Section 4.3.1, Remedy Selection, Table 4-2 - Please update the groundwater performance standard for arsenic to the current MCL; note the incorrect spelling of "health" for manganese –basis of selection entry.*

Response: The table has been revised to show the new arsenic performance standard in the table rather than in the footnote. The typo was also corrected.

*RIDEM Specific Comment 25: p. 66, Section 4.5.2, Question B, 3rd bullet, New Contaminants and/or Contaminant Sources - Please indicate that the identification of asbestos as a COC was addressed in the 2012 ESD.*

Response: This was stated previously; however, for additional clarity, the wording has been revised as follows: "The identification of asbestos as a COC was addressed in the 2012 ESD. Otherwise, there have been no new contaminants or contaminant sources observed since the remedy selection of the 2010 ROD.

*RIDEM Specific Comment 26: p. 66, Section 4.5.2, Question B, 6th bullet, Changes in Toxicity and Other Contaminant Characteristics - For the sake of transparency, please provide a table summarizing COCs, toxicity values and other characteristics that have changed, direction*

*of change (more or less stringent), and the revised remediation goals. Also, please provide the reference for the new approach for arsenic in soil using a bioavailability factor and how this approach will be used in the future.*

*The discussion regarding the risk-based cleanup levels for chromium, benzene and 2-methylnaphthalene suggests that the cleanup levels in the ROD are no longer protective. Please discuss this issue further with respect to impacts to protectiveness of the remedy.*

Response: On other FYRs, we have been directed by USEPA not to provide potential revised cleanup goals in the FYR, only those that are actually in a decision document. Qualitative discussion is typically best to remove reader confusion.

The following reference regarding arsenic bioavailability has been added to the report: U.S. Environmental Protection Agency (USEPA). 2012b. Compilation and Review of Data on Relative Bioavailability of Arsenic in Soil and Recommendations for Default Value for Relative Bioavailability of Arsenic in Soil Documents. OSWER Directive 9200.1-113. December 31, 2012.

While the risk-based performance standard for benzene would be lowered (0.45 ug/L), the actual selected performance standard would typically be the MCL, which would be higher (5 ug/L). Referring to EPA Specific Comment 68 regarding chromium at the site, the performance standard for chromium would also typically be the MCL, which would be higher (100 ug/L). The 2-methylnaphthalene risk-based performance standard would be lower (36 ug/L for an HI=1), but the water is not being used for drinking water. The remedy is currently protective as no one is drinking the water.

*RIDEM Specific Comment 27: p. 69, Section 4.9, Next Review - Please reference Site 9 instead of Site 8.*

Response: The sentence containing this typo has been deleted based on EPA comment.

*RIDEM Specific Comment 28: p. 70, Section 5.0, Other Sites and Study Areas - Please update this section with current site information as warranted.*

Response: This section has been updated where needed to reflect additional activities and documents.

*RIDEM Specific Comment 29: p. 88, Section 5.7, Site 17 – Building 32, Gould Island (OU 6), Site Chronology and CERCLA Path Forward - The final ROD for this site was signed on June 30, 2014. Please update this report accordingly.*

Response: The report has been updated to reflect the final ROD.

*RIDEM Specific Comment 30: p. 90, Section 5.8, Site 19 – Derecktor Shipyard – Offshore (OU 5) and Onshore (OU 12), Site Chronology and CERCLA Path Forward - The final ROD for this site will likely be signed by December 2014, before this Report is finalized. Please update this report accordingly.*

Response: These sections have been updated to reflect the final RODs that were just completed.

*RIDEM Specific Comment 31: Appendix B.2, Figures - For evaluation of potential migration of inorganic constituents, it would be helpful to know which wells are screened in the same aquifers or monitored zone. A potentiometric surface map, and generalized cross-section aligned in the direction of groundwater flow, with well screen intervals and a summary of concentrations of COCs exceeding standards would be useful to evaluate remedy performance. Please update the report to include this information.*

Response: A groundwater potentiometric surface map (Figure 2-2 of the 2013 Revised Draft Annual Monitoring Report) has been added to Appendix B.2. The requested cross-section has not been prepared; however, the Navy will make sure funding is in place to do so for the 2015 annual monitoring report.

*RIDEM Specific Comment 32: Appendix E.3, Table 4-6 - Porewater concentrations and mean concentrations of copper and nickel are provided, but not arsenic. Section 2.4.2.1 of the Report states that based on a comparison of the range of 2009 arsenic porewater data (2013 data unavailable to-date) in samples collected near McAllister Point Landfill to those from reference stations, dissolved arsenic in groundwater does not appear to be migrating to porewater. Please provide the porewater arsenic data in Table 4-6 of Appendix E.3 along with a comparison of the mean dissolved arsenic concentrations of each porewater sample group for comparison to mean groundwater concentrations in the most downgradient landfill interior wells.*

Response: The Navy understands the concern. As part of evaluation of the next porewater sampling event, the requested tabular comparison will be completed.

Table Error! No text of specified style in document.-1  
Inventory of Sites and Operable Units  
NAVSTA Newport, RI

FFA Site No.	Site Name	Operable Unit No.	Regulatory Phase
Site 1	McAllister Point Landfill	OU 1 and OU 4	O&M/LTM
Site 4	CCRF	No designation	SASE
Site 7	Tank Farm 1	OU 13	RI/FS
Site 8	NUSC Disposal Area	OU 7	RD/RA
Site 9 (includes former Site 20)	OFFTA	OU 3	O&M
Site 10	Tank Farm 2	OU 14	RI
Site 11	Tank Farm 3	OU 15	RI
Site 12	Tank Farm 4 (includes Decision Unit 4-1)	OU 11	RD for Decision Unit 4-1
Site 13	Tank Farm 5 (includes Decision Unit 5-1 and Tanks 53 and 56)	OU 2	RD for Decision Unit 5-1; NFA Decision Document planned for Interim RA for Tanks 53 and 56
Site 17	Gould Island	OU 6	RD
Site 19	Derecktor Shipyard - Off-shore	OU 5	RD
	Derecktor Shipyard - On-shore	OU 12	RD
Site 22	Carr Point Storage Area	OU 10	RI
MRP Site 1	Carr Point Shooting Range	OU 9	RI
Site 23	Coddington Point Buried Debris Areas	No designation	RI