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LETTER AND THE U S EPA REGION I COMMENTS REGARDING THE DRAFT FINAL FIVE  
YEAR REVIEW NS NEWPORT RI (PUBLIC DOCUMENT)  
11/05/2014  
U S EPA REGION I BOSTON MA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I

5 Post Office Square, Suite 100  
Boston, MA 02109-3912

November 5, 2014

Mr. James Gravette  
Remedial Project Manager  
Environmental Restoration  
NAVFAC MIDLANT OPNEEV  
Bldg. Z-144  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

Re: Draft Final Five-Year Review

Dear Mr. Gravette:

EPA reviewed the *Draft Final Five-Year Review* dated October 9, 2014. The Five-Year Review presents a detailed discussion of sites for which remedial actions are underway or completed and summary discussions of sites where remedial decisions have not been made or were only recently completed. While a few are noted in Attachment A, numerous typographical and spelling errors should be corrected before issuing the final document. EPA also reviewed the new text for Tanks 53 and 56 (OU2) provided on October 28, 2014. The text provides the history, chronology, and current assessment of the protectiveness of the remedy implemented at Tanks 53 and 56.

Lastly, EPA would like to reiterate that it expects the Navy to follow the procedures outlined in the Federal Facilities Agreement (FFA). As stated at the September 17, 2014 remedial project managers meeting, it is inappropriate to issue a draft final document concomitant with the responses to comments on the draft version. Deviating from the FFA process causes unnecessary delays in completing documents, creates additional documentation requirements, and unnecessarily puts our two agencies in a potential enforcement situation at the draft final stage.

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of Naval Station Newport. Please contact me at (617) 918-1385 with any questions.

Sincerely,

Kymberlee Keckler, Remedial Project Manager  
Federal Facilities Superfund Section

Attachment

cc: Pam Crump, RIDEM, Providence, RI  
Darlene Ward, NETC, Newport, RI  
Mark Kauffman, Resolution Consultants, Chelmsford, MA

## ATTACHMENT A

<u>Page</u>	<u>Comment</u>
p. x	EPA guidance (OSWER 9355.7-03B-P, Appendix E, page E-17) states that the review period should correspond to the actual start and end dates of the Five-Year Review. Please change the author name and the review period to December 23, 2009 to December 22, 2014.
p. xi	<p>In the last sentence of the statement for OU1, please change “area” to “are.”</p> <p>As agreed on October 15, 2014, Tanks 53 and 56 (Site 13) should be discussed in this Five-Year Review because a final decision document has not been issued. The 2009 Five-Year Review indicated that a decision document was required to remove Site 13 from the next Five-Year Review. It is also not clear whether a remedial action completion report has been prepared. Please add recommendations in the Five-Year Review to develop a final decision document and a remedial action completion report.</p>
p. xi	Please correct the last sentence in the OU1 statement to “land use controls are in place and <b>are</b> enforced....”
p. xii	Please define “AFFF” and “PFOA/PFOS” for the first time in the document. Add these acronyms and PFCs to the list of acronyms and abbreviations.
p. xii	The protectiveness statement, as currently written, is not fully supported by the data in Appendix J of the Draft McAllister Point 2013 Annual Monitoring Report. Specific comments to support EPA’s position are provided below. Please replace the protectiveness statement for OU4 with the following: “The remedy for McAllister Point is protective of human health and the environment, and exposure pathways that could result in unacceptable risks are controlled. 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 the elevated risk off-shore areas is continuing. The sediment and porewater monitoring results, before the most recent monitoring round, showed ICOCs below RGs for sediment and porewater, and most were below baseline PRGs. Additionally, earlier toxicity testing overall did not demonstrate elevated risks to the environment. However, the most recent sediment and porewater monitoring results were not consistent with historical results. Numerous exceedances of the RGs were detected in the most recent monitoring event and toxicity was prevalent. Since similar results were observed in the reference station data, the cause of the RG exceedances and the toxicity is uncertain and may be because of impacts generally prevalent in the environs of the Site and not necessarily related to the Site. There is no evidence that the recent porewater and sediment monitoring results were caused by changes to the integrity of the landfill cap or other components of the source control remedy (OU 1). Monitoring of the near-shore and elevated risk off-shore areas and off-shore areas with low risk will be continued to confirm the protectiveness of the remedy.”

- p. 28, §2.4.2.1, ¶1 Please explain how the Navy determined that the revetment was in good condition if the inspector did not access the revetment to conduct the inspection as suggested by the photographs. Describe how the condition of the revetment was assessed.
- p. 28, §2.4.2.1, ¶1 Replace the penultimate sentence with: "Well cluster MW-103S and MW-103R, and replacement well MW-103RR, are located within the landfill and therefore are within the waste management area and not subject to the groundwater compliance criteria."
- p. 31, §2.4.2.3, ¶4 For clarity, split this paragraph after the first two sentences and use the third sentence in a new paragraph to introduce the 2009 sampling event conclusions.
- p. 32, §2.4.2.3     Bullet 3 (MSG-1): Revise the third sentence. At MSG-1 four of the five porewater samples had copper concentrations that exceeded the corresponding RG (Table 4-6). The average porewater copper concentration for MSG-1 was 0.183 mg/L. This value is 0.100 mg/L over the average concentration at the reference group (MSG-5). Even if the average reference concentration is subtracted from the average value at MSG-1, the residual (above anthropogenic background) is twice the RG. These data contradict the statement that porewater concentrations are "slightly above" the Reference Group.
- p. 32, §2.4.2.3     Bullet 5 (MSG-1): Revise the second sentence that incorrectly states that all three toxicity tests were non-toxic. The toxicity data for *Ampelisca abidta* (porewater) are inconclusive. This is different from saying that they showed no toxicity. Four of the five porewater samples exhibited toxicity that was significantly different from the laboratory control and from the reference sample with 81% mean survival according to Table 4-8 from Appendix J of the Draft Annual Monitoring Report 2013. This indicates that the porewater samples demonstrated toxicity to the test organism if the statistical comparison was a laboratory control or a non-toxic reference sample. The conclusion in the FYR should clearly reflect the actual results and uncertainty in the data from the toxicity testing. The conclusion that porewater is not causing negative effects to the ecological communities is not supported by the data presented in Table 4-8 of Appendix J. The data indicate that there are potential risks from exposure to porewater at MSG-1.
- p. 32, §2.4.2.3     Last bullet (MSG-2): See comments above regarding the interpretation of the porewater results. Revise the third sentence. At MSG-2, all five of the porewater samples had copper concentrations that exceeded the corresponding RG (Table 4-6). The average porewater copper concentration for MSG-2 was 0.225 mg/L. This value is 0.172 mg/L over the average concentration at the reference group (MSG-5). Even if the average reference concentration is subtracted from the average value at MSG-2, the residual (above anthropogenic background) is 2.7 times the RG. These data contradict the statement that porewater concentrations are "slightly above" the Reference Group.
- p. 33, §2.4.2.3     Bullet 2 (MSG-2): See comments above for MSG-1 regarding the interpretation of the toxicity results. Revise the last sentence. The results are uncertain in comparison to poor performance in reference samples, which does not equate to a lack of elevated risk. The conclusion should be that there is toxicity but the source is uncertain (*i.e.*, it may or may not be Site-related).
- p. 33, §2.4.2.3     Bullet 4 (MSG-3): It is unclear what the statistical basis is for determining that the trend graph for nickel at MSG-3 represents a decreasing trend, whereas, the trend graphs for MSG-1 and MSG-2 do not support the conclusion of an increasing trend.

Please clarify the basis of the interpretation of these results.

- p. 34, §2.4.2.3     Bullet 1 (MSG-4): In the first bullet, replace the text with "All mean concentrations of metals in porewater..." There were individual samples (at which porewater toxicity was observed) that did exceed the RGs for copper. Regarding the sediment samples, one randomly collected sample with results above the RG indicates the potential for risk over an uncertain amount of the area in MSG-4. Insufficient data are available to calculate the proportion of the area that does not meet the RG, but exceedances in one sample represent a potentially large area of the habitat owing to the small sample size.
- p. 34, §2.4.2.3     Bullet 2 (MSG-4): See previous comment regarding the interpretation of the trend graphs.
- p. 34, §2.4.2.3     Bullet 3 (MSG-4): See previous comment about the interpretation of the toxicity test results. Remove or re-write the last sentence. Uncertainty does not equate to a lack of elevated risk. Revise the last sentence to refer to MSG-4, not MSG-1.
- p. 34, §2.4.2.3     The last sentence is misleading and needs to be rewritten. The data presented in Appendix J of the Draft Annual Monitoring Report 2013 (Watermark, 2014) do not completely support this statement. Data from MSG-1 and MSG-2 (unadjusted) and MSG 5, show an increase in copper and nickel in 2013. The conclusions of the Annual Monitoring Report (Appendix J, Section 5.1.1) stated that the porewater concentrations of nickel and copper were higher in 2013; however, it is premature to indicate if these data represent a trend. This is not the same conclusion as stated in the referenced sentence, which concludes levels are steady or decreasing. Although the Draft Annual Monitoring Report for 2013 (Watermark, 2014) states that anthropologic background contamination appears to be the major source of environmental contamination, this statement is not well-supported for the porewater data. See the comments for MSG-1 and MSG-2 regarding the interpretation of the porewater results. The statement should be revised and qualified to be supported by the data in the referenced report. There are not sufficient data to support the conclusion that none of the copper or nickel in porewater is coming from site sources.
- p. 36, §2.5.1, ¶1    Please replace the first sentence with: "There are no areas of non-compliance with any of the remedial objectives for McAllister Point Landfill that can be clearly attributed to Site-related contamination."
- p. 37, §2.5.1, ¶2    Please replace the first sentence with: "No significant issues were noted during the site inspection or based on review of the O&M and monitoring reports except that toxicity was observed in the latest porewater and sediment monitoring event. However, the toxicity cannot be definitively attributed to the Site because of similar results in the reference samples."
- p. 37, §2.5.1, ¶3    As EPA noted in its follow-up comments on Specific Comment 39, the institutional controls in effect at the time this Five-Year Review is issued should be included.
- p. 38, §2.5.2, ¶7    As EPA noted in its follow-up comments for Specific Comment 40, please delete the second and third sentences that refer to human health toxicity values.
- p. 38                 The first part of the response to EPA's Specific Comment 40 regarding toxicity changes is not added to the last bullet of Section 2.5.2.

pp. 39-42, §§2.5.4 Please revise the text to reflect the concerns expressed above.  
to 2.8

p. 39, §2.5.2, ¶1 Please revise this bullet by replacing the second sentence with: “However, the inconsistency of the latest porewater and sediment monitoring results with earlier monitoring results indicates a degree of uncertainty that will require continued monitoring to resolve.”

p. 41, §2.8 The protectiveness statement should mention that the protectiveness of the remedy was enhanced by the issuance of the Land Use Control Remedial Design in 2012.

p. 41, §2.8, ¶3: Please replace this paragraph with: “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 the elevated risk off-shore areas is also continuing. The sediment and porewater monitoring results, before the most recent monitoring round, showed ICOCs below RGs for sediment and porewater, and most were below baseline PRGs. Additionally, earlier toxicity testing did not demonstrate elevated risks to the environment. However, the most recent sediment and porewater monitoring results were not consistent with historical results. Numerous exceedances of the RGs were detected in the most recent monitoring event and toxicity was prevalent. Similar results were observed in the reference station data, and therefore the cause of the RG exceedances and the toxicity is uncertain and may be because of impacts generally prevalent in the environs of the Site and not necessarily related to the Site. There is no evidence that the recent porewater and sediment monitoring results were caused by changes to the integrity of the landfill cap or other components of the source control remedy (OU 1). Monitoring of the near-shore and elevated risk off-shore areas and off-shore areas with low risk will be continued to confirm the protectiveness of the remedy.”

p. 47, §3.2, ¶2 Please supplement the text to include the response to Specific Comment 52.

p. 52, §3.3.2, ¶3 Please replace the penultimate sentence with: “An ESD has been issued to add asbestos ARARs.”

p. 70, §4.4.1 Please incorporate the Navy’s response to Specific Comment 67.

pp. 75 & 76 The tables in responses to EPA’s Specific Comment 71 listed the issues and recommendations as “Y” under the columns for affecting future protectiveness, but they are listed as “N” in the Draft Final. Please correct.

p. 80, Table 5-2 Please include the Draft Feasibility Study Report dated October 3, 2014.

p. 82, Table 5-3 Please include the Draft Data Gaps Assessment Report dated July 2014.

p. 84, Table 5-4 Please include the Draft Data Gaps Assessment Report dated July 2014.

p. 89, §5.6, ¶4 A remedial action completion report is required to complete the documentation for Tanks 53 and 56.

p. 92, §5.6, ¶1 Add another bullet for the remedial action completion report for Tanks 53 and 56.

- p. 101, §5.9, ¶1 In the fifth full sentence, please change “Section 5.12” to “Section 5.11.”
- p. 103, §5.10, ¶4 Please edit the last sentence to note that the Draft RI report was issued October 16, 2014.
- p. 104, Table 5-10 Please include the Draft RI Report dated October 16, 2014.
- p. 104, §5.10, ¶1 Please delete the first bullet referring to the RI Report.
- p. 106, §5.11, ¶2 In the penultimate sentence, please change “Section 5.10” to “Section 5.9.”

Please edit the last sentence to acknowledge that the Draft RI Report was issued September 10, 2014.

- p. 104, Table 5-10 Please include the Draft RI Report dated September 10, 2014.
- p. 108, §5.11, ¶1 Please delete the first bullet referring to the RI Report.
- Appendix D Include the new ARAR for NUSC that was added with the ESD to address asbestos.
- Appendix E.1 Figure 2-3: The color coding presented is not accurate for several COCs. For example, the arsenic MCL and RIDEM’s criterion for arsenic have changed through the course of monitoring at McAllister and that is not reflected in the color coding. Currently the arsenic criterion for both EPA and RIDEM is 10 micrograms per liter (µg/L), but historically the value was 50 µg/L. Please include a note of explanation.
- Appendix E.2 Table 2-1: Why are the cells for STA 5+25 highlighted for each parameter?

*Comments on the new text for Tanks 53 and 56 (OU2)*

- Table 5-1 Add the date that the pump and treat system was shut off (*i.e.*, December 1996).
- p. 80, ¶4 Remove the last sentence: “However, groundwater cleanup standards do not have to be achieved under a waste in place unit.” There is no waste management area in the OU.
- p. 84, §5.4.1 If correct, please edit the last sentence to read: “That was confirmed and no other ...”
- p. 84, §5.4.2 The last sentence in the first paragraph states “The following review was included in the previous five-year review report (TtNUS, 2009c)”. This suggests that an excerpt from the previous five-year review will be presented; therefore, for clarity please format the text that comprises this excerpt so that it is differentiated from text that is not part of the previous review.
- p. 85, ¶2 Add a new last sentence: “A Final ROD has not been issued.”
- p. 85, § 5.4.3 Correct the spelling of regulations. Also, the arsenic MCL has changed since the 1992 interim ROD. Explain whether using the revised standards change any of the findings in this Five-Year Review.
- p. 86, §5.5.2 Revise this section to acknowledge that the cleanup goal for arsenic at the time of remedy selection was 50 micrograms per liter (µg/L). During the last sampling event

in May 2004, arsenic concentrations were all below the current MCL for arsenic of 10 µg/L except for one well that had high turbidity in the unfiltered sample possibly because of the use of a bailer.

p. 86, ¶2

Revise the last sentence to state: "...the Navy plans to prepare a final decision document to document No Further Action for the interim remedial action at Tanks 53 and 56 (*see also* Section 5.7)."

Appendix A

Add the TRC, B&RE, and TtNUS reports referenced herein to the references list.