

N62661.PF.003251
NS NEWPORT
5090.3b

LETTER AND ATTACHED RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT COMMENTS REGARDING THE DRAFT FIVE YEAR REVIEW REPORT NS
NEWPORT RI (PUBLIC DOCUMENT)
08/01/2014
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

1 August 2014

Mr. James Gravette
NAVFAC MIDLANT (Code OPTE3)
Environmental Restoration
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Draft Five-Year Review Report
Naval Station Newport, RI

Dear Mr. Gravette,

The Office of Waste Management at the Rhode Island Department of Environmental Management (RIDEM) has conducted a review of the *Draft Five-Year Review (FYR) Report* dated June 2014 for Naval Station Newport, RI. As a result of this review, this Office has generated the attached comments on the *Draft FYR*.

If you have any questions in regards to this letter, please contact me at (401) 222-2797, extension 7020 or by e-mail at pamela.crump@dem.ri.gov.

Sincerely,

Pamela E. Crump, Sanitary Engineer
Office of Waste Management

cc: Matthew DeStefano, RIDEM
Richard Gottlieb, RIDEM
Lisa McIntosh, W&C
Darlene Ward, NSN
Deb Moore, NSN
Roberto Pagtalunan, NAVFAC
Kymberlee Keckler, EPA Region I
William Lovely, EPA Region I
Mark Kaufmann, Resolution
Cindy Castleberry, Resolution

**RIDEM's Comments (8/1/14) on the
Draft 5-Year Review Report (6/13/14)
Naval Station Newport, RI**

Specific Comments:

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.

2. p. xi, Five-Year Review Summary Form , OU7 Issue.

Please indicate that asbestos exposure reduction was addressed in the remedial action work plan.

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.

4. p. xii, Five-Year Review Summary Form, OU3, Protectiveness Statement.

Please indicate the remedial measures employed to control unacceptable risks.

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....".

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.

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.

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.

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.

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.

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.

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..”)

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.

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.

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.

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.

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.

18. p. 37, Section 2.5.4, Summary of the Technical Assessment.

Please refer to Comment #2.

19. p. 38, Section 2.8, Protectiveness Statement.

Please also include a discussion regarding the off-shore areas with low risk.

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”.

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*”.

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.

23. p. 59, Section 4.2; 1st paragraph, last sentence.

The soil remedy has been completed; please update this paragraph to reflect this.

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.

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.

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.

27. p. 69, Section 4.9, Next Review.

Please reference Site 9 instead of Site 8.

28. p. 70, Section 5.0, Other Sites and Study Areas.

Please update this section with current site information as warranted.

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.

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.

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.

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.