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LETTER AND RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
RESPONSE TO COMMENTS ON DRAFT FINAL FEASIBILITY STUDY DECISION UNIT 1-4
TANK FARM 4 SITE 12 NS NEWPORT RI
1/18/2013
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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18 January 2013

Roberto Pagtalunan
NAVFAC MIDLANT (Code OPTE3)
Environmental Restoration
Building Z-144, Room 109
9742 Maryland Avenue
Norfolk, VA 23511-3095

Re: Response to Comments
Draft Final Feasibility Study
Decision Unit 4-1 at Tank Farm 4 – Site 12

Dear Mr. Pagtalunan,

The Office of Waste Management at the Rhode Island Department of Environmental Management has conducted a review of the Navy's response to RIDEM's comments on the *Draft Final Feasibility Study* dated August 2012 for Decision Unit 4-1 at Tank Farm 4 - Site 12, Naval Station Newport, located in Newport, RI. As a result of this review, this Office has generated the attached responses.

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, DEM OWM
Richard Gottlieb, DEM OWM
Gary Jablonski, DEM OWM
Kymberlee Keckler, EPA Region I
Deb Moore, NSN
Steve Parker, Tetra Tech

**RIDEM's Evaluation (1/18/13) of the
Navy's Responses (12/4/12) to RIDEM's Comments (10/1/12)
Draft Final Feasibility Study
for Decision Unit 4-1 AT Site 12 - Tank Farm 4
Naval Station Newport, RI**

Specific Comment 1: Page ES-3, Executive Summary; groundwater remedial alternatives.

The Navy has not demonstrated to date that monitored natural attenuation (MNA) is a viable remedial alternative at this site. To show that natural attenuation of metals is occurring at this site, the Navy must have multiple rounds of groundwater data with seasonal variances showing decreasing trends. The summary of geochemistry information provided in Appendix A-5 is not sufficient to prove that MNA will be effective for this site. Please note that in the RPM meeting notes from 3/28/12, Tetra Tech stated that "MNA is not likely to occur because the constituents (cobalt, iron, and manganese) are naturally present and concentrations appear to be what could be considered background". Therefore, please include an additional groundwater alternative in this FS (i.e., in situ treatment).

Navy's Response:

The actual timeframe for groundwater quality at DU 4-1 to achieve concentrations below the PRGs is currently unknown. A trend analysis from data collected during sampling efforts completed during the MNA activities under alternative GW2 (as part of the 5-year review process) will provide the data necessary to estimate the length of time MNA would be required to achieve groundwater quality objectives at DU 4-1.

In-situ treatment via a chemical detoxification injection process for inorganics will be added as an additional groundwater alternative in the Final FS. The in-situ groundwater treatment alternative will be retained in the case MNA fails to achieve remedial objectives for groundwater (concentrations below the PRGs for Site COCs) in a timely fashion.

The draft final FS allows for an additional 7 groundwater monitoring wells to be installed as part of the MNA program. These wells would also support a pre-design investigation (PDI) if necessary for either remedy. Additional wells can be included with the PDI if it is determined to be necessary for the specific outcome of that investigation. The discussions in the revised FS will focus on the goals of each PDI under each of the alternatives: A PDI conducted to support the groundwater treatment alternative will have different goals and different scope than a PDI conducted to support the MNA alternative. These discussions will be generalized descriptions of what the purpose of each PDI will be.

RIDEM's Evaluation of Response:

Please note that the Office of Waste Management has never concurred with a Record of Decision (ROD) which includes an MNA remedy for groundwater without sufficient existing MNA data showing a decreasing trend at a site. Please explain why the Navy plans to conduct the MNA program as a pre-design investigation after the ROD rather than a data gap investigation prior to the ROD. RIDEM would prefer to have the data upfront rather than after a remedy is chosen for the Site. Please consider conducting the MNA program prior to the issuance of the ROD.

Specific Comment 7: Page 5-2, Section 5.1.2, Monitored Natural Attenuation; 2nd paragraph.

“Attenuation of metals in groundwater at this Site is expected as described in Appendix A5 and Section 3.4.2 of this report.”

Please see specific comment #1.

Navy’s Response:

In-situ treatment via a chemical detoxification injection process for inorganics will be added as an additional groundwater treatment alternative throughout the appropriate section of the Final FS. The in situ groundwater treatment alternative will be retained in the case MNA fails to achieve remedial objectives for groundwater (concentrations below the PRGs for Site COCs) in a timely fashion.

RIDEM’s Evaluation of Response:

Please refer to specific comment #1.

Specific Comment 8: Page 5-2, Section 5.1.2, Monitored Natural Attenuation; 4th paragraph.

“In order to provide documentation of the attenuation, an annual monitoring schedule is appropriate for the first five years, and if a trend of COC reduction appears evident, reduction to one monitoring event every five years would be adequate in order to support the 5-year review documentation.”

Please see comment #1. Please revise this statement to state that quarterly monitoring is appropriate for the first several years to show seasonal trends. After a trend has been established, the Navy can propose a change in the sampling frequency to EPA and RIDEM for review and approval.

Navy’s Response:

The first sentence in the 4th paragraph of Section 5.1.2 will be revised in the Final FS to “In order to demonstrate the effectiveness of natural attenuation, a quarterly groundwater quality monitoring program is appropriate for the first two years to define seasonal trends, if any. Further monitoring would likely be annual. Once a trend in groundwater quality has been established, the Navy will request a change in monitoring frequency to the EPA and RIDEM for review and approval.” However, the actual monitoring program would be determined based on the data as it is developed.

RIDEM’s Evaluation of Response:

Please do not include the sentence “Further monitoring would likely be annual” in the above statement. Also, please see specific comment #1.