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RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT COMMENTS ON
DRAFT FINAL FEASIBILITY STUDY FOR DU 4-1 SITE 12 TANK FARM 4 NS NEWPORT RI
1/10/2012
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

**RIDEM's Comments (10/1/12)
on the Draft Final Feasibility Study
for DU 4-1 at Site 12, Tank Farm 4
Naval Station Newport, RI**

General Comment:

1. Fenceline

A discussion of the fenceline is not included in this FS. RIDEM's understanding is that the Navy will address the fenceline as a separate Decision Unit (DU). As stated in the RPM meeting notes from 5/16/12, the Navy was to follow up with a letter regarding the fenceline issue. Please discuss this in the FS and send EPA and RIDEM a written proposal on how the Navy will address the fenceline.

Specific Comments:

1. p. 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, TetraTech 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).

2. p. 1-2, Section 1.1, Objectives and Approach; 1st paragraph, last sentence.

"The DU 4-1 COCs include polycyclic aromatic hydrocarbons (PAHs) and manganese in soil, and arsenic, cobalt, iron and manganese in groundwater."

Please add arsenic as a COC for soil in this sentence since PRGs were developed for arsenic in surface and subsurface soil.

3. p. 2-16, Section 2.4.1, Soil Exceeding Industrial PRGs; 1st paragraph.

"Soils at SB934 exceed industrial PRGs for PAHs and manganese."

According to the data presented in Table 2-5 and Figures 2-8 and 2-10, soils at SB934 do not exceed the industrial PRG for manganese. Please delete *"and manganese"* from the statement above.

4. p. 2-16, Section 2.4.1, Soil Exceeding Industrial PRGs; 2nd paragraph.

Based on the summary table sent by email on 7/6/12 titled “*Tank Farm 4 – Summary of Issues, Evaluation of Response, Draft FS*”, the Navy agreed to address all locations with exceedances greater than 15 mg/kg of arsenic in the surface soil at DU 4-1. There is one other location (SB-926) with arsenic levels slightly above 15 mg/kg. Please include this location in the estimation of areas and volumes in this section of the FS. Also, since the Navy agreed to address all surface soil with arsenic above 15 mg/kg, it may make sense to adjust the PRG to 15 mg/kg for consistency. Please update the FS as necessary.

5. p. 2-17, Section 2.4.1, Soil Exceeding Industrial PRGs; 4th paragraph.

“There are two other potential target areas that were identified by EPA during the development of the FS. These areas include a reported soil/debris berm near SB930 and former test pits to the northwest of SB924...the Site-specific conditions and history of the area indicate that it may be appropriate to sample these areas to be sure they do not also contain COCs at concentrations above PRGs.”

Please elaborate in this section on the agreement between the Navy, EPA and RIDEM for future sampling of these areas. Will this be conducted during a pre-design investigation? Please revise the last sentence to state that the Navy agreed to sample these areas rather than “*it may be appropriate*”. Please ensure that the sampling/investigation of these areas is included in all remedial alternatives for soil in this FS (except the no action alternative).

6. p. 4-3, Section 4.1.3, Alternative SO3, Removal of Target Area Soil.

Please see comment #4.

7. p. 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 comment #1.

8. p. 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.

9. Table 2-3, Action-Specific ARARs and TBCs

In Navy's email on 7/6/12 which included the "final resolution of issues and comments", the attached State ARAR table states that the Navy agreed to include the "direct discharge" portion of the *Regulations for RI Pollutant Discharge Elimination System (RIPDES)* as an ARAR for this Site. Please include this ARAR in Table 2-3 in this FS.

10. Table 2-5, Exceedances of Soil PRGs

It appears that several pages of this table are missing. Specifically, comparison of industrial PRGs to detected concentrations of benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, indeno(1,2,3-cd)pyrene, and pyrene. Please include these pages in the Final FS.

