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LETTER AND U S EPA REGION I REVIEW OF U S NAVY RESPONSE TO U S EPA
COMMENTS TO DRAFT FEASIBILITY STUDY FOR DESICION UNIT 4-1 SITE 12 TANK
FARM 4 NS NEWPORT RI
3/26/2012
U S EPA REGION I

Steve



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I
5 Post Office Square, Suite 100
Boston, MA 02109-3912

March 26, 2012

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

Re: Responses to EPA's Comments on the Draft Feasibility Study for Decision Unit 4-1 at Site 12, Tank Farm 4

Dear Mr. Pagtalunan:

Thank you for the opportunity to review the responses to EPA's December 6, 2011 comments on the Draft Feasibility Study for Decision Unit 4-1 at Site 12, Tank Farm 4 at dated October 2011 (FS). The FS evaluates remedial alternatives to mitigate unacceptable human risk associated with chemicals of concern in soil and groundwater at Decision Unit 4-1 at Site 12, Tank Farm 4. Detailed comments are provided in Attachment A.

The response to General Comment 1 does not address EPA's comment as to why soil treatment alternatives were not carried forward. Please address the CERCLA preference for treatment by presenting viable treatment alternatives for the soil that poses a risk.

The response to General Comment 2 states that MCLs, non-zero MCLGs, and more stringent state groundwater standards have not been exceeded but fails to state that all groundwater monitoring wells sampled exceeded the non-cancer PRGs, with some exceedances ranging from 5 to 20 times the PRG. The FS further states that there is no defined plume but does not support that contention with evidence. There may be at least three plumes, each associated with a release area (Ruin 1, Ruin 2, and Ruin 1 downgradient). The FS proposes only a LUC to prevent residential use of groundwater. EPA guidance requires the development of alternatives that return groundwater to beneficial use. Additional groundwater investigation, including background, is warranted to support the analysis of viable groundwater alternatives and could require evaluation of a treatment alternative.

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of the Tank Farms. Please do not hesitate to contact me at (617) 918-1385 to arrange a meeting to resolve these comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kymberlee Keckler', written over the word 'Sincerely,'.

Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Pam Crump, RIDEM, Providence, RI
Deb Moore, NETC, Newport, RI
David Peterson, USEPA, Boston, MA
Chau Vu, USEPA, Boston, MA
Steven Parker, Tetra Tech-NUS, Wilmington, MA

ATTACHMENT A

<u>Page</u>	<u>Comment</u>
SC1 (p. ES-1, ¶1)	EPA requests that the Operable Unit designation for Site 12 be included in the text.
SC2 (p. ES-2, bullet 6)	It is unclear how soil could exceed commercial/industrial exposure levels and not exceed more stringent residential exposure levels.
SC3 (p. ES-3)	For soil, IC only alternatives may not be protective. As previously noted, a protective groundwater remedy needs to restore the groundwater to federal drinking water standards (with ICs in place until cleanup standards are achieved).
SC5 (p. 1-1, ¶1)	b) Gaps remain in evaluating the extent of soil contamination as noted in EPA's comments on the Data Gaps Investigation Report.
SC9 (p. 1-6, §1.4.1)	a) and b) Provide the text to be used to clarify these matters.
SC10 (p. 1-7, §1.4.2)	Citation to the CERCLA removal action should be included in the text.
SC11 (p. 1-13, last ¶)	Cite what approved background study is being relied upon.
SC13(p. 1-15, ¶2):	Although EPA recognizes that this FS was prepared for DU 4-1, that Navy still needs to address the lead contamination along the fence lines of Tank Farm 4.
SC15(p. 1-16, ¶5) &SC38	Although no future golf course is currently proposed, this paragraph needs to identify what level of "recreational use" will be permitted.
SC19(p. 1-20, ¶6)	The "Baseline Background Study" does not address sediment.
SC24 (p. 2-6, §2.2.2)	Please note that RI standards require soils intended for recreational use to meet residential standards.
SC26 (p. 2-9, ¶1)	Note that Navy also needs to meet federal risk-based groundwater standards (particularly regarding manganese).
SC30 (p. 2-12, §2.2.4.2)	b) The lack of PAHs is not evidence that the groundwater geochemistry has not been impacted by the release of fuel-related contamination. Given the history of the site it is possible that metals have migrated to groundwater because of the release of fuel-related contamination. The Navy should evaluate groundwater geochemistry to support their contention that metals in groundwater are naturally occurring. This issue should have been resolved during the NUSC FS negotiations, so it is surprising to EPA that it has resurfaced.

- SC 35(p. 2-14, ¶2) Strike the last sentence. If manganese exceeds EPA's risk-based groundwater standard that could be a reason for taking action under CERCLA.
- SC38 (p. 2-15, ¶3) &SC15 It is unclear from the response what "restricted" recreational use is. Is the area fenced and/or posted? Is the area patrolled to keep base personnel off? Are base personnel subject to sanctions for being on the property without "authorization."
- SC42 (p. 3-5, §3.3) The FS needs to be corrected. As stated previously, Section 3.3 mistakenly evaluates process options that were already eliminated in Table 3-1. This text either needs to be relocated to an initial screening discussion or corrected to eliminate discussion of options that were initially eliminated in Table 3-1. Please correct Section 3.3 and ensure the text and tables are consistent.
- SC47 (p. 3-9, ¶2) The response did not change the existing text. The original comment refers to the text regarding the Conclusion discussion (last paragraph in Section 3.3.2). Please correct this text in response to the comment.
- Groundwater monitoring for the soil remedies need to include both PAHs and metals to ensure that leachable PAHs exceeding RIDEM criteria do not impact groundwater.
- SC49 (p. 3-12, last ¶) The response should clarify that soil that exceeds residential PRGs as well as RIDEM DEC's will remain. Please correct the FS text accordingly.
- SC50 (p. 3-17, §3.4) a) The FS that needs to be corrected, not just clarified. As stated previously, Section 3.4 mistakenly evaluates process options that were already eliminated in Table 3-2. This text either needs to be relocated to an initial screening discussion or corrected to eliminate discussion of options that were initially eliminated in Table 3-2. Please correct Section 3.4 and ensure the text and tables are consistent.
- b) The FS proposes a LUC to prevent residential use of groundwater. EPA requires alternatives that return groundwater to beneficial use.
- SC52 (p. 3-18, bullet 1) The FS proposes a LUC to prevent residential use of groundwater. EPA guidance requires alternatives that return groundwater to beneficial use.
- SC53 (p. 3-24, §3.5) a) IC only alternatives may not be protective for soil if recreational use requires residential cleanup levels.
- SC55 (p. 4-2, §4.1.2) The response should also clarify that soil that exceeds residential PRGs as well as RIDEM DEC's will remain. Please correct the FS text accordingly. IC only alternatives may not be protective for soil if recreational use requires residential cleanup levels. *See also* SC57, SC60, & SC61.
- SC56 (p. 4-2, §4.1.3) Since the Navy concurs with EPA's comment, please delete the text in the first paragraph that states that LUCs are not technically necessary following

hot spot removal.

- SC62(p. 4-9, §4.3) EPA cannot review this section until the all of the changes EPA requested in its comments and responses have been incorporated. Please submit a revised version of this section.
- SC63(p. 5-1, §5.0) As noted in its previous comments, the Navy needs to develop one or more alternatives that will achieve groundwater cleanup standards. Please submit EPA with its revised version of this section.
- SC65 (p. 5-2, §5.1.2) b) The lack of PAHs is not evidence that the groundwater geochemistry has not been impacted by the release of fuel-related contamination. Given the history of the site, it is possible that metals have migrated to groundwater because of a release of fuel-related contamination. Please evaluate groundwater geochemistry and background to support the contention that metals in groundwater are naturally occurring.
- e) Based on the response that up to 14 wells will be monitored, the costs for alternative GW-2 should include the installation of seven new wells because it appears only seven wells are existing (*see* Figure 1-3).
- SC68 (p. 5-5, §5.2.2) See previous EPA comments regarding the groundwater alternatives. All federal drinking water, risk-based standards, and more stringent state standards need to be achieved, not just the identified COCs.
- SC71 (p. 5-7, §5.3) As noted in its previous comments, the Navy needs to develop one or more alternatives that will achieve groundwater cleanup standards. Please submit a revised version of this section.
- SC73(Table 2-2) d) Keep the citation to the RI Freshwater Wetlands Act and add the citation for the Rules and Regulations.
- SC74(Table 2-3) b) A. Retain for monitoring standards for surface waters adjacent to remediation areas (different than the storm water standards).
- B. Retain if MNA is relied on to meet groundwater cleanup standards.
- C. Retain EPA's original text. LUCs only for groundwater without meeting groundwater cleanup standards does not comply with the guidance.
- c) A. Retain if the Navy wants to retain as a contingency the option of treating and discharging any water that might be generated during the remediation (*e.g.*, rainwater entering into excavations).
- B. For less than one acre, the standards would be Relevant and Appropriate.
- SC77(Table 3-4) See all previous EPA comments regarding groundwater and modify table

accordingly.

SC78-SC91

The Navy's revisions to the Tables will need to be reviewed by EPA after the outstanding issues raised above are addressed.

Attachment A-2
Table 2-3

Regarding the NPDES regulations, retain for federal storm water standards and also if the Navy wants to retain as a contingency the option of treating and discharging any water that might be generated during the remediation (*e.g.*, rainwater entering into excavations).

Retain the RI Surface Water Quality Regulations as monitoring standards for surface waters adjacent to remediation areas.

Retain RI Clean Air Act standards for dust suppression.