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LETTER AND COMMENTS FROM U S EPA REGION 1 REGARDING REVIEW OF DRAFT  
FINAL SAMPLING AND ANALYSIS PLAN TANK FARM 2 DATA GAPS ASSESSMENT NS  
NEWPORT RI  
9/15/2011  
U S EPA REGION 1



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION I**

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

September 15, 2011

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

Re: Draft Final Sampling and Analysis Plan - Data Gaps Assessment for Tank Farm 2

Dear Mr. Pagtalunan:

Thank you for the opportunity to review the *Draft Final Sampling and Analysis Plan for Tank Farm 2* dated August 2011 (SAP). The SAP presents the sampling design and rationale and the analytical and data assessment requirements for the project in accordance with the requirements of the *Uniform Federal Policy for Quality Assurance Plans* and *EPA Guidance for Quality Assurance Project Plans*. Detailed comments are provided in Attachment A.

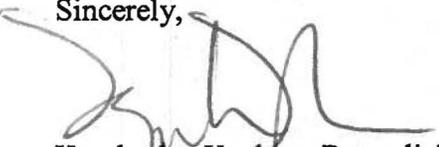
There are several concerns related to the adequacy of the groundwater investigation related to the Category 1 AOCs.

- a) Groundwater is generally within bedrock which calls into question the actual direction of groundwater flow through the fractured bedrock.
- b) No monitoring well construction information has been provided in the SAP to support whether appropriate groundwater monitoring wells exist downgradient of the Category 1 AOCs.
- c) The information provided in revised Figures 2 and 3 suggests groundwater monitoring wells are not appropriately located at or downgradient of the AOCs resulting in a significant data gap. Therefore, further investigation of the groundwater associated with the Category 1 AOCs is necessary before a conclusion of no groundwater impacts can be confirmed.

Why are soil depths at 1-2 ft and 4-8 ft not sampled for Category 1 areas? Only soils at 0-1 ft, 2-4 ft, and 8-10 ft depth are considered for sampling. If these soil samples would be used to evaluate the nature and extent and to support CERCLA human health risk assessment, they need to be collected at depth from 0-10 ft since this is the depth EPA considers for human exposures.

I look forward to working with you and the Rhode Island Department of Environmental Management toward the cleanup of the Derecktor Shipyard Gould Island. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,



Kimberlee Keckler, Remedial Project Manager  
Federal Facilities Superfund Section

Attachment

cc: Pam Crump, RIDEM, Providence, RI  
Darlene Ward, NETC, Newport, RI  
Steven Parker, Tetra Tech-NUS, Wilmington, MA

## ATTACHMENT A

<u>Page</u>	<u>Comment</u>
p. 5	In the Executive Summary, please clarify that upon completion of the data gap investigations, whether the Study Area Screening Evaluation (SASE) or Remedial Investigation (RI) Report will be completed in addition to the Data Gaps Investigation Report or whether the Data Gaps Investigation Report will replace the other documents. If the SASE or RI report is not completed, the Data Gaps Investigation Report would need to include details for data evaluation and risk assessments as normally included in the RI Report.
p. 18, Worksheet #9	EPA does not concur with the decision reached for this scoping session. In a prior Tank Farm conference call EPA stated that the fact that an active utility runs through the site does not exempt it from CERCLA. Please edit the SAP to include investigation of Building 218 for lead and PCBs and Building 219 for PCBs.
p. 32, §11.2.2	The first bullet states that " <i>Category 1 data are not needed for groundwater because previous groundwater sampling downgradient of the Category 1 areas did not indicate contamination.</i> " EPA has reviewed revised Figure 2, which now contains groundwater contours, together with Figure 3, which shows the locations of the AOCs, and has determined that there are no apparent groundwater monitoring wells downgradient of AOCs 001 and 003 and only one groundwater monitoring well potentially downgradient of AOCs 004 and 005. Consequently, it appears that an appropriate investigation of the groundwater related to these four AOCs has not been completed and cannot apparently be completed using the existing groundwater monitoring wells. If Navy has additional information to support its statement in the referenced bullet, please provide it; otherwise, the scope of this investigation needs to be expanded to include appropriate groundwater sampling.
p. 34, §11.3.1	The last sentence in the third paragraph states that " <i>However, the screening of soil data against protection of groundwater SSLs is of interest to allow a qualitative evaluation of the potential for chemical migration from soil to groundwater, in the unlikely event that contaminants migrated through the bedrock.</i> " EPA concurs that soil screening data for protection of groundwater should be collected, especially considering EPA's comment on the first bullet in Section 11.2.2. As such, the RSLs for soil to groundwater migration should be evaluated in Appendix B and included in Worksheet #15a as appropriate.
p. 37, §11.4.1	For the Category 1 Decision Rule, please discuss what the risk screening evaluation is for scenarios when surface and subsurface soil

concentrations are greater than surface and subsurface soil PSLs. Please note that EPA requires use of the CERCLA risk assessment approach to show risks before making cleanup decision and does not allow use of the ratio approach in lieu of a risk assessment for decision making. If this ratio approach is used to replace the RI/FS Superfund phase, it is not possible to show what toxicity values and exposure assumptions are used for decision making and it would make future review of the Site difficult.

Please explain what is meant by "serious enough" for exceedances. EPA has standard policy to use for screening that must be followed.

- p. 37, §11.4.3 Please note that although background comparisons will be conducted for metal contaminants in soil at Category 1 and 2 areas, the discussion and results need to be included in the SASE or RI Report.
- p. 45, Worksheet 15a Navy has made many changes to this table to incorporate ecological soil screening levels and RIDEM residential DEC's; however, there are still many chemicals for which the project action level (PAL) is based on the RIDEM UCL concentration. Except for the omission of RSLs for soil to groundwater migration, the changes made will be sufficient to address the needs for CERCLA; although they may not be sufficient to obtain closure from RIDEM.
- p. 46 Although VOCs will not be analyzed for Category 1 samples, please provide a process and table presenting the selection process for VOCs soil PSLs. The VOCs soil PSLs in this Worksheet are not included in Table B-1 of Appendix B (SAP Worksheet #15a).
- p. 47 Some PAHs soil PSLs in Worksheet #15a are not consistent with those in Table B-1, *i.e.*, for acenaphthylene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, fluoranthene, and fluorene, the soil PSLs in Worksheet #15a are the Residential DEC's while they are the ecological SSLs for these analytes in Table B-1. Please revise these PSLs.
- p. 50 Which values will be used in screening for those analytes without groundwater PSLs or MCLs? Please provide PSLs for those analytes in SAP Worksheet #15b.
- p. 53, Worksheet 17 a) Regarding the last sentence in the second paragraph, please refer to EPA's comment on Section 11.2.2 regarding the need to collect groundwater samples.
- b) In the fourth paragraph regarding the sampling changes proposed for AOCs 004 and 005, deep boring samples should not be eliminated from the work plan based on the assumed depth to bedrock. The work plan should include all the deep borings and they should be eliminated in the field if the borings cannot be drilled to a sufficiently deep interval below

the 2-4 foot interval. It should be a field decision to collect a deep sample if the 8-10 foot interval cannot be reached but some appropriate intermediate interval is accessible.

p. 55

In Table 17-1, please explain why dioxins will not be analyzed for soil samples in Category 1 areas at 8-10 ft depth. Why are soils in Category 1/AOC TF2-004 and AOC TF2-005 not sampled at depths greater than 4 feet?

p. 55, Table 17-1

Please restore the 8-10 foot sample intervals for AOCs 004 and 005 for this SAP. Elimination of them needs to be a field decision based on encountering shallow bedrock.

p. R-2

This reference page is missing from the electronic document.

Appendix B,  
Table B-1

a) Table note #1 states that the November 2010 RSLs were used, but the May 2011 RSLs are the most recent. Navy needs to update the RSLs of interest, if values have changed with the issuance of the May 2011 values.

b) It is not clear how the soil to air SSL was calculated using the reference cited (EPA 2010b). Please provide a sample calculation for reference.

Appendix B,  
Table B-1

Please use EPA residential RSLs from May 2011 for Category A screening levels instead of the November 2010 RSLs. The RSLs are updated twice a year and publicly available. Please also provide soil PSLs for VOCs.