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LETTER AND COMMENTS FROM RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL
MANAGEMENT ON RED-LINE STRIKEOUT VERSION OF FINAL STUDY AREA SCREENING
EVALUATION SITE 11 TANK FARM 3 NETC NS NEWPORT RI
11/7/2012
RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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7 November 2012

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

Re: Red-line Strikeout Version of the Final Study Area Screening Evaluation (SASE)
Site 11, Tank Farm 3, NETC

Dear Mr. Pagtalunan,

The Office of Waste Management at the Rhode Island Department of Environmental Management has conducted a review of the red-line strikeout version of the *Final Study Area Screening Evaluation*, submitted on October 9, 2012 for Tank Farm 3 (Site 11), Naval Station Newport, located in Portsmouth, RI. As a result of this review, this Office has generated the attached comments.

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
Deb Moore, NSN
Kymberlee Keckler, EPA Region I
Dabra Seiken, Tetra Tech

**RIDEM's Comments (11/7/12) on the
Red-line Strikeout Version (10/9/12) of the
Final Study Area Screening Evaluation (SASE)
Site 11, Tank Farm 3, NSN**

General Comments:

1. VISLs - This SASE does not include a comparison of concentrations in groundwater to residential or commercial vapor intrusion screening levels (VISLs) provided by USEPA (2012). These VISLs should be considered applicable to groundwater data across the site to evaluate the potential for vapor intrusion. This document contains no mention of the potential for vapor intrusion or any discussion as to why it is not a complete exposure pathway. At a minimum, please discuss the vapor intrusion pathway and consider incorporation of VISLs as screening criteria for groundwater.
2. Figures - RIDEM reviewed Tables 2-1, 4-1, 4-2, 4-3, 4-4, and 6-1 and Figures 1-2 and 2-1 of the SASE. In general, test pit/soil sample locations are not labeled on the figures. Please update the figures with location identifications.
3. AOC 014 - Table 4-1 indicates that data from AOC 014, which is not discussed in the SASE, included a detected value of benzo(a)pyrene greater than its RSL and reporting limits (RLs) for benzo(a)pyrene and dibenzo(a,h)anthracene greater than their RSLs. Furthermore, no subsurface samples were collected from AOC 014. This SASE does not discuss why AOC 014 was excluded from consideration, despite these exceedances and lack of subsurface data. Please clarify in the SASE or include AOC 014 in the areas recommended for additional evaluation.
4. Possible sludge area northwest of Tank 69 (AOC 028) – The Navy's response to RIDEM's comment regarding the possible sludge area northwest of Tank 69 (AOC 028) is unclear. The Navy states that "a review of the SIRAR suggests that the location that had a concentration of TPH above the RDEC was resampled and has a concentration of TPH below the RDEC." RIDEM also reviewed the SIRAR and could not confirm the location and depth from which the original TPH exceedance was collected and whether the resampled concentrations are from the same location and depth (i.e., true duplicates so that it is appropriate to disregard the original exceedance). Please provide additional justification for excluding AOC 028 (possible sludge area northwest of Tank 69) from further investigation (i.e., Category 3) and/or add to Table 6-1 if necessary.
5. OWS #3 – RIDEM reviewed the SIRAR and noted that only TPH field screening by Petroflag analysis was conducted outside the secondary containment of OWS #3 and that no samples were submitted to a laboratory for analysis. The SIRAR indicates that the screening sample results ranged from 45 ppm to 90 ppm and that results less than 100 ppm required no further action, as agreed upon by RIDEM and the Navy. However, these screening samples were collected from 1 to 2 feet bgs and the depth of the secondary containment is unclear. Furthermore, Table 4-4 indicates only one groundwater sample is considered representative

of OWS #3 at monitoring well GZ-303. However, this well is located cross-gradient to as opposed to downgradient from OWS #3 and may not be truly representative of OWS #3. RIDEM agrees that because OWS #3 is currently in use, no activities that would impact its structural integrity should be conducted. Therefore, please provide additional justification for excluding OWS #3 from further investigation, or include this AOC for additional investigation in this SASE, noting that additional sampling/test-pitting could be conducted in such a way as to not impact the structural integrity of the functioning OWS.

6. Fuel Lines – In the Navy’s responses to RIDEM’s comments (p. 6), the Navy states that “there are monitoring wells adjacent to and downgradient of fuel lines at Tank Farm 3 that have been monitored, and results are below RIDEM GA Objectives”. The fuel lines require additional discussion in the SASE. For example, of the 19 monitoring wells and 7 ring drains downgradient from the fuel lines, two monitoring wells (GT-306 and GZ-331) have not been sampled. None of the monitoring wells or ring drains have been sampled since 2009 and, as discussed in the following comment, reporting limits for samples collected in groundwater samples were collected in April or May, which does not adequately capture seasonal variability. Therefore, please include the fuel lines as an AOC for further investigation in this SASE.
7. Groundwater – RIDEM reviewed Table 4-4 of this SASE and notes that although groundwater concentrations do not exceed GA criteria, the concentrations in groundwater were not compared to residential or commercial vapor intrusion screening levels (VISLs), as provided by USEPA (2012). As previously discussed in general comment #1, please consider vapor intrusion as a potential future pathway in this SASE and consider these VISLs applicable RSLs for future land use. Furthermore, it should be noted that for multiple compounds analyzed in all groundwater samples, reporting limits exceed the EPA Tapwater RSLs and sometimes RIDEM GA Objectives. In other words, the laboratory analyses were not sensitive enough and compounds that are presented as not-detected at an elevated reporting limit could be detected at a concentration above the RSL if reporting limits were low enough. Please collect an additional two rounds (to capture seasonal variability) of groundwater samples with reporting limits that are equal to or lower than the lowest of the EPA Tapwater RSLs, VISLs, and RIDEM GA Objectives.
8. Surface water – Please add more detail to the SASE on contamination in surface water not being due to the Tank Farm 3 site. For example, discuss the compounds detected in surface water samples compared to the compounds detected in site soil and groundwater samples in the vicinity of Lawton Brook and discuss how they are not related. Please include a discussion of the chloroform results.

Specific Comments:

1. p. E-3, Executive Summary; 2nd paragraph.

Please correct ICRECs to ICDECs.

2. p. 1-3, Section 1.2.2, Site Description; 3rd paragraph.

Please correct Tanks 32 and 36 to Tanks 32 through 36.

3. p. 1-4, Section 1.2.3, Facility History; 1st paragraph.

“Between 1996 and 2000 DESC conducted tank closure activities, including the inspection and cleaning of USTs and accessible, associated, auxiliary equipment such as pumps, interior pipelines, and vaults. The USTs were certified as suitable for closure in accordance with the RIDEM UST closure criteria. In addition, the fuel distribution pipelines associated with the USTs and the transfer pipe loop were permanently decommissioned.”

Although the tank interiors were cleaned and the fuel lines were purged, the tanks themselves and the fuel lines at Tank Farm 3 have not been closed. Please note that RIDEM has not issued closure certificates for these tanks to date. Therefore, the tanks and fuel lines cannot be ruled out as areas requiring additional investigation as Category 2 areas. Please state in this SASE that the tanks and fuel lines have not been properly closed out according to RIDEM’s regulations and may require additional investigation to be addressed in the Category 2 Sampling and Analysis Plan.

4. p. 1-7, Section 1.2.5, Records of Historic Fuel...; 1st paragraph.

Total Petroleum Hydrocarbon (TPH) levels in the original excavation exceeded RIDEMs Residential TPH standards so in October of 1999 additional soil was removed from the excavation wall closest to Tank 35.

Why is “Residential TPH standards” deleted? Please revise as necessary.

5. p. 6-2, Section 6.1.2, Contaminants Found; 3rd paragraph.

“Additionally, the Navy has re-evaluated available information/records to determine is AOCs 002, 003, 006 and 007 have exceedances of RIDEM Criteria.”

Please indicate in this SASE why these AOCs required re-evaluation and include additional details regarding AOCs 002, 003, 006 and 007 in the text of this document in either Section 2 or Section 4. Please include the potential source of release at these AOCs, what compounds were detected and why further investigation is not necessary.

6. p. 6-3, Section 6.1.3, Risk Evaluations; last paragraph, 1st sentence.

Please correct ICRECs to ICDECs.

7. p. 6-10, Section 6.3.2, Category 2 Areas; 1st paragraph, last sentence.

Please correct Tank 23 vent to Tank 32 vent.

8. Table 4-1

- Individual Aroclors and TPH are missing from the GA Leachability Criteria. Please include these criteria in this table.
- The note at the bottom of Table 4-1 should include using the pyrene RSL as a surrogate for benzo(g,h,i)perylene. Please update.

9. Table 4-2

- Table 4-2 is missing the RIDEM GA Leachability Criteria for xylenes mixture, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and TPH. Please include this criterion in this table.
- Table 4-2 is missing the EPA RSL Industrial Soil Criteria for xylenes mixture and 3-methylphenol/4-methylphenol.
- The note at the bottom of Table 4-2 should include using the pyrene RSL as a surrogate for benzo(g,h,i)perylene.

10. Table 4-3

- Table 4-3 provides an incorrect RIDEM GA ICDEC for 2-butanone. Please update.
- Table 4-3 is missing the RIDEM GA Leachability Criteria for TPH.
- The note at the bottom should include using the pyrene RSL as a surrogate for benzo(g,h,i)perylene and acenaphthene RSL as a surrogate for acenaphthylene.

11. Table 6-1, Summary of Results by Area and Category

Please note that for AOC 023, Table 6-1 indicates that “TPH in soil remaining above RIDEM Residential DEC”. This statement is misleading. TPH concentrations do not exceed the RIDEM RDEC; however, PAH concentrations do. Please revise as necessary. Also, it appears that AOCs 014 and 028 are missing from Table 6-1 as well as several areas that have groundwater detections above EPA RSL Tapwater Criteria (i.e., Tank 35, Tank 36, and petroleum distribution lines).