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LETTER REGARDING SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL CONDITIONAL APPROVAL OF THE REMEDIAL
INVESTIGATION REPORT FOR SITES 9, 16, 27 AND 55 MCRD PARRIS ISLAND SC
6/25/2012
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

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June 25, 2012

Commanding Officer
NAVFAC Southeast
ATTN: Mr. Charles Cook, P.E.
PO Box 30
Ajax Street North, Bldg 135
Jacksonville, Florida 32212

and

Commanding General
NREAO
ATTN: Ms. Lisa Donohoe
PO Box 5028
Parris Island, SC 29905

RE: Conditional Approval of Site 27/55/9/16 Remedial Investigation Report
Parris Island
SC6 170 022 762

Dear Mr. Cook and Ms. Donohoe:

The Division of Waste Management of the South Carolina Department of Health and Environmental Control (Department) completed the review of *Site 27/55/9/16 Remedial Investigation Report* received May 11, 2012. The Department reviewed the document with respect to applicable sections of the South Carolina Hazardous Waste Management Regulations (SCHWMR). Based on this review the Department has determined the response to comments and the revised document do not sufficiently address the concerns. Please see attached the conditions of the approval.

The Department's review is based on the information presented by MCRD to date; any information found to be contradictory may require further action. If you have any questions regarding this issue, please contact me at (803) 896-4218.

Sincerely,

A handwritten signature in black ink, appearing to read "Meredith Amick", with a horizontal line extending to the right.

Meredith Amick, P.E., Environmental Engineer
Corrective Action Engineering Section
Division of Waste Management

cc:

Lila Llamas, EPA Region 4
Peggy Churchill, TtNUS
Russell Berry, EQC Region 8, Beaufort

Annie Gerry, Hydrogeology
Priscilla Wendt, SCDNR

Engineering Memo
Prepared by Meredith Amick
Marine Corp Recruit Depot (MCRD)
June 18, 2012

1. A revised CSM should be provided prior to the FS scoping based on the construction at Site 27 resulting in placement of 4 ft of clean fill on the surface. Also the discussion of any impact on the risk assessment at Site 27 should be provided. Additionally please reference the Department's June 11, 2011 letter (Amick to Cook and Donohoe), if the construction is completed as detailed, further discussion of impact of the construction activities should be provided.
2. As stated in Amick Comment #16 it is inappropriate to use Eastern United States background data in the uncertainty discussion.
3. The Department reiterates Amick Comment #4, "The relation of SVOC contamination in surface soil to asphalt present at the site being used as a weight of evidence or justification should be supported by applicable anthropogenic data."

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MEMORANDUM

TO: Meredith Amick, P.E., Engineering Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

FROM: Annie M. Gerry, Hydrogeologist
Federal Facilities Groundwater Section
Division of Waste Management
Bureau of Land and Waste Management

DATE: June 18, 2012

RE: Marine Corps Recruit Depot
SC6 170 022 762

Review of Rev.1- Remedial Investigation (RI) Report for Site 27- Motor Transportation (Motor T) Facility Site, Site 55-Fiber Optic Vault (FOV), Site 9- Paint Waste Storage Area, and Site 16-Pesticide Rinsate Disposal Area, Marine Corps Recruit Depot (MCRD), Parris Island, South Carolina dated April 2012

The above referenced document has been reviewed with respect to the conditions of the Federal Facility Agreement (FFA) that the Department entered into with the Navy and EPA Region 4 in January 2005. Light Non-Aqueous Phase Liquid (LNAPL) was discovered floating on groundwater during installation of the Fiber optic Vault (FOV). Site 55 is located just east of Site 27 (Motor T Area) and based on prior investigations, groundwater flows from the FOV toward the Motor-T Area. Site 9 (former Paint Waste Storage Area) and Site 16 (Pesticide Rinsate Disposal Area) are located to the northeast of Site 55.

The purpose of the Draft Remedial Investigation Report is to document assessment of these sites and to summarize field activities.

Based on review of this document, the following conditions have been generated.

CONDITIONS

1. Response to Comments (RTCs) on the Site 27 Rev 1, Site 55/9/16 Rev 1, and Draft RI Report for Site 27, 55, 9, 16 Comment # 6

File # 50492

The Departments Original Comment

Based on further evaluation, the exceedances shown in the tables and figures indicate that the contamination is not adequately defined in the deep groundwater zones. Pesticides, in particular are above the USEPA tapwater values (No Maximum Contaminant Level [MCL] is established) (See Appendix D-7). The Navy should propose additional deep groundwater monitoring wells to adequately define the extent of contamination in the deep aquifer.

Navy Response: Additional monitoring or installation of additional wells at some point in the future will be discussed with the Project Team. However, deep monitoring wells PAI-27-MW08D, PAI-27-MW13D, and PAI27-TW-45D were installed below the clay layer. The majority of exceedances were observed in monitoring well PAI-27-MW08D. No pesticide exceedances were observed in monitoring well PAI-27-TW-45D and the most recent sample collected at PAI-27-MW13D (2010). No pesticide exceedances above MCLs (where available) were observed except for Gamma-BHC, which only exceeded in one sample collected at monitoring well PAI-27-MW08D in 2003. Exceedances in monitoring well PAI-27-MW08D have either decreased or remained consistent when compared to the conservative USEPA Tapwater values. The Navy believes sufficient data has been collected to complete an FS which will propose LTM at Sites 27 and 55.

Department Response:

The Department agrees that additional groundwater data is necessary. After collection of additional groundwater samples, the Department will decide if more wells are necessary to determine the extent of groundwater contamination.

2. Response to Comments (RTCs) on the Site 27 Rev 1, Site 55/9/16 Rev 1, and Draft RI Report for Site 27, 55, 9, 16 Comment # 7

The Departments Original Comment

Figures 4-15 and 4-16: This figure shows that Naphthalene was detected at 1.3 ppb from a temporary monitoring well (PAI-9/16-TW04I), which exceeds the RSL tapwater of 0.14 parts per billion (ppb). In addition, there are pesticides (Alpha, Beta and Delta-BHC) that exceed the RSL tapwater value in this well. Further, temporary monitoring well PAI-9/16-W-03S shown on Figure 4-16, indicates that Delta-BHC was detected at 0.015 ppb, which exceeds the RSL tapwater value of 0.011 ppb.

This area needs to be further evaluated to determine if naphthalene and pesticides are defined. Additional monitoring wells should be proposed.

Navy Response: No naphthalene exceedances were observed in shallow or intermediate groundwater in the area of Sites 6/16 besides temporary monitoring well PAI-9-16-TW04I. The naphthalene result 1.3 ppb is slightly less than an order of magnitude above

the conservative USEPA Tapwater values. Pesticide exceedances observed in PAI-9/16-TW04I and PAI-9/16-TW03S were only slightly above the USEPA Tapwater values as presented in Appendix D-13. No exceedances were observed above the MCLs where available. The Navy believes sufficient data has been collected to complete an FS which will propose LTM at Sites 9 and 16.

Department Response:

The Navy should continue to monitor for naphthalene and pesticides in all existing wells. More data is necessary to determine the extent of contamination and additional monitoring wells may be needed based on results obtained from future groundwater data collected at this site.

Should you have any questions regarding this memo, please contact me via email at GerryAM@dhec.sc.gov or by phone at (803) 896-4018



C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MEMORANDUM

TO: Meredith Amick, P.E., Environmental Engineering Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

FROM: Kent Krieg, Risk Assessor *CK*
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

DATE: June 25, 2012

RE: Marine Corps Recruit Depot
Parris Island, South Carolina

Documents: Remedial Investigation Report for:
Site 27 – Motor Transportation Facility
Site 55 – Fiber Optic Vault
Site 9 – Former Paint Waste Storage Area
Site 16 – Pesticide Rinsate Disposal Area
Dated April 2012

The above referenced document by Tetra Tech NUS, Inc. has been reviewed. The Department does not believe that all of the risk-related responses to comments were incorporated into the revised document, specifically comment #2, 4, and 6.

As requested, comments #2 and 4 were to assist the risk managers in making decisions based on risks that fall within the USEPA risk management range (1×10^{-6} to 1×10^{-4}). Although these two comments were not adequately addressed into the document, the risk managers should still be able to make their decisions pursuant to condition 1 below. Please note however, in future documents, the Department expects site risk to be presented and discussed as it relates to the risk management range described in USEPA RAGS.

Specific comment #6 – beta-BHC is still not included in the risk calculation as a COPC and, therefore, it is unknown if it should be retained as a COC.

The risk assessment presented in this document is structured differently than the previous version, since it separates the risk for Site 27 and 55. The Department does not agree with the statements that there are no COCs for the Site 27 industrial worker (cumulative ICLR 2×10^{-4}) or the Site 55 construction worker (cumulative ICLR 1×10^{-4}) since the cumulative ICLRs for these receptors are greater than 1×10^{-4} .

The Department conditionally approves this document based on the following conditions being addressed prior to the FS scoping:

1. An acceptable risk management level should be decided upon through consensus of the risk managers for the various site receptors that fall within the risk management range.
2. The Site 27 – Industrial Worker and Site 55 – Construction worker have cumulative risks above 1×10^{-4} risk level. This is above the risk management range and, therefore, COCs should be retained and have RGOs developed. The COC/RGO lists for Site 27 and 55 should be updated accordingly.
3. Beta-BHC needs to be included in the risk calculation tables as a COPC to determine if it warrants being carried forward as a COC and subsequently have RGOs developed.
4. The text summarizing Site 27 and 55 COCs do not match Table 6-25. The text needs to be corrected so that no COCs are lost in the development of future documents.

If you need any further information, feel free to contact me at (803) 896-4262.