LETTER OF TRANSMITTAL AND SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL COMMENTS ON TECHNICAL MEMORANDUM FOR POST INTERIM CONSTRUCTION RISK ASSESSMENT AT SITE 3 MCRD PARRIS ISLAND SC
2/3/2010
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

D H E C
PROMOTE PROTECT PROSPER
C. Earl Hunter, Commissioner
Promoting and protecting the health of the public and the environment.

February 3, 2010

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

RE: Comments to the Site 3 Technical Memo for Post Interim Construction Risk Assessment
Marine Corp Recruit Depot (MCRD)
Parris Island
SC6 170 022 762

Dear Mr. Cook:

The Division of Waste Management of the South Carolina Department of Health and Environmental Control (Department) completed the review of the Site 3 Technical Memo for Post Interim Construction Risk Assessment received December 22, 2009. Based on this review the Department provides the following hydrogeology and risk assessment comments. Please note that while two options for the path forward at Site 3 are provided in the risk assessment comments, the Department's preference is Option A.

The Department's comments are based on the information presented by MCRD to date; any information found to be contradictory may result in additional comments or require further action. The response to the review should consist of response to comments and revision pages. If you have any questions regarding this issue, please contact me at (803) 896-4218.

Sincerely,

Meredith Amick, Environmental Engineer Associate
Corrective Action Engineering Section
Division of Waste Management

cc:

Tim Harrington, MCRD Parris Island
Annie Gerry, Hydrogeology
Priscilla Wendt, SCDNR
Russell Berry, EQC Region 8, Beaufort
Lila Llamas, EPA Region 4
Tom Dillon, NOAA (via email)
Mark Sladic, TtNUS
Heber Pittman, MCRD Parris Island

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MEMORANDUM

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

FROM: Susan K. Byrd, Risk Assessor
Kent Krieg, Risk Assessor
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

DATE: February 3, 2010
RE: Marine Corp Recruit Depot
Parris Island, South Carolina

Document:
Technical Memorandum
Post-Interim Construction Risk Assessment
Site/SWMU 3-Causeway Landfill
Dated December 2009

The above referenced document by Tetratech NUS, Inc. and responses to comments have been reviewed. The Department has the following risk related comments:

GENERAL COMMENTS:

1.) Based on the review of the 2009 fish tissue analysis and consumption risk calculation revisions, the Department suggests one of the following two scenarios.

a. The Department is concerned that dioxin-like contaminants in the risk calculations have not been identified as site related. Since dioxins-like PCBs were never identified as COPCs in any site 3 media, they should not be included in the risk calculations tables. The Department recommends that the congener analysis be removed from the Tech Memo and replaced with data for Arochlor 1254, as presented in the MCRD Team meeting on February 2, 2010. Arochlor 1254 was the only PCB identified as a COPC in the RI/FS risk calculations and previous fish tissue samples. If MCRD feels that the dioxin-like congener analysis and risk calculations not be removed entirely from the document, it is suggested that they be placed in an appendix in order to prevent confusion with the site related risk calculations. The appendix should also include a detailed uncertainty discussion of regional/national/global anthropogenic risk due to the consumption of dioxin-like PCBs in fish tissue.

b. If dioxin-like PCB data remains in the site related risk calculations, the Department believes that further sampling in all media is recommended. Due to the lack of previous or historical dioxin-like PCB data at the site, delineation of dioxins and dioxin-like PCBs would be needed. In addition, a thorough background study is warranted to provide local anthropogenic dioxin-like PCB data. This comparison would show if the contamination is site related or from non-point sources.

2.) The document does not present the risk associated at the reference site for the recreational and subsistence fisherman. Risk tables should be updated and the text should be revised to include a detailed discussion of any elevated "background" risk. This information will assist the Team in its future risk management decisions.

SPECIFIC COMMENTS:

1. Section 3.3.1, 3rd Battalion Pond, Page 18: The fish caught by rod and reel in Quadrant 1 was from the shore, not off a fishing pier as stated in the text (Figure 4 does not show a fishing pier in Quadrant 1). The third sentence in paragraph two should read, "One red drum (PAI-03-RD-01-02) was caught from the shore in Quadrant 1 using a rod and reel."

2. Tables, Table 6, Physical Characteristics of Fish Collected October 26 to 31, 2009: Various footnotes in the Length column are inconsistent with the species referenced.

3. Tables, Table 6, Physical Characteristics of Fish Collected October 26 to 31, 2009 and Appendix A, Table 1, Fish Collected October 26-31, 2009, at MCRD Parris Island and Retained for Laboratory Analysis of Selected Chemicals: Sample PAI-03-RD-03-04's weight in grams was also above the reference (see footnote 3) maximum weight of the available scales.

4. Appendix G, Table G-2, Biota-Sediment Accumulation Factor: Excel formatting error caused the table titles to be cut off .

5. Appendix H-3, Calculation Worksheet, Page 2: A typographical error for CSFo units caused the (-1) to be a subtraction rather than formatted as superscript.

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

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MEMORANDUM

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

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

DATE: January 28, 2010

RE: Marine Corps Recruit Depot
SC6 170 022 762

Review of Technical Memorandum Post-Interim Construction Risk Assessment for Site 3-Causeway Landfill Marine Corps Recruit Depot (MCRD), Parris Island, South Carolina dated December 22, 2009

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. This Technical Memorandum presents the results of the post-interim construction risk assessments performed on sediment and fish tissue at Site 3.

Based on review of this document, the Department has generated the following comment.

Specific Comment

1. The Department does not agree with the Navy's response to the Environmental Protection Agency's (EPA) Comment #11. The text reads,

> **Total dissolved solids (TDS) present in groundwater averaged 10,050 mg/L in the four groundwater samples collected in 1998. According to the State of South Carolina, groundwater that exceeds a concentration of 10,000 mg/l TDS can be classified as Class GC (groundwater not considered potential sources of drinking water.**

The reference to Class GC groundwater is correct. However, in accordance with R.61-68 (South Carolina Water Classifications and Standards) all groundwater in the State is classified as Class GB (potential underground sources of drinking water). It takes an act of the South Carolina Legislature to reclassify an aquifer to a standard other than Class GB.

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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.

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