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LETTER REGARDING SOUTH CAROLINA DEPARTMENT OF HEALTH AND  
ENVIRONMENTAL CONTROL REVIEW OF RCRA FACILITY INVESTIGATION (RFI) EPORT  
ADDENDUM (REVISION 1) DATED FEBRUARY 2002 FOR ZONE K AREA OF CONCERN 698  
(AOC 698) CNC CHARLESTON SC

03/20/2002

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

March 20, 2002

Ms. Amy Daniell  
Charleston Naval Complex  
Caretaker Site Office, 1895 Avenue F  
North Charleston, SC 29405

RE: RFI Report Addendum (Revision 1), Dated February 2002  
AOC 698, Zone K  
SC0 170 022 560

Dear Ms. Daniell:

The Corrective Action Engineering and the Hydrogeology Sections of the South Carolina Department of Health and Environmental Control (Department) have completed the review of the above referenced document (received February 11, 2002) according to applicable State and Federal Regulations, and the CNC Hazardous Waste Permit (Permit) effective September 17, 1998. The Department hereby approves the referenced document, however, it is recommended that AOC 698 be transferred to the Department's Underground Storage Tank (UST) program for investigation of the hydrocarbon contamination at this site.

Based on details and analytical data presented in the RFI Report Addendum for AOC 698, the Department recommends that the groundwater at AOC 698 be addressed under RCRA Subtitle I via the transfer to the Department's UST program. A no further action (NFA) for the groundwater at AOC 698 will be appropriate upon receipt of satisfactory completion of the RCRA Subtitle I requirements.

Thank you for your cooperation in this matter. If you have any questions or concerns, please contact Gil Rennhack at (803) 896-4192

Sincerely,

David M. Scaturo, P.E., P.G., Manager  
Corrective Action Engineering Section  
Division of Waste Management  
Bureau of Land and Waste Management

Attachment: Memorandum dated March 18, 2002, Jo Cherie Overcash to Gil Rennhack

cc: CNC reading file  
Jo Cherie Overcash, SCDHEC-BLWM  
Jerry Stamps, SCDHEC-BLWM  
Michael Bishop, SCDHEC-UST  
Dean Williamson and Gary Foster, CH2M-Hill

Dann Spariosu, EPA Region IV  
Rob Harrell, SOUTHDIV  
Tony Hunt, SOUTHDIV  
Rick Richter, Trident EQC

**MEMORANDUM**

**TO:** Gilbert Rennhack, Engineer Associate  
Corrective Action Section  
Division of Waste Management  
Bureau of Land and Waste Management

**FROM:** Jo Cherie Overcash, Hydrogeologist  
RCRA Hydrogeology Section  
Division of Hydrogeology  
Bureau of Land and Waste Management

**DATE:** 18 March 2002

**RE:** Charleston Naval Complex (Navy)  
SC0 170 022 560  
Charleston County

RFI Report Addendum Revision 1  
Dated February 2002; Received February 11, 2002  
AOC 698 Electrical Boiler House Building 2508, Naval Annex  
Zone K

As requested, the document referenced above has been reviewed with respect to the requirements of R.61-79.264 Subpart F of the South Carolina Hazardous Waste Management Regulations (SCHWMRs), the Environmental Protection Agency's (EPA) RCRA Facility Assessment guidance document dated October 1988, and the revised EPA Region IV Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual (SOP/QAM) dated May 1996, the CNAV Final Comprehensive Sampling and Analysis Plan dated 30 August 1994, and CERCLA 120(h) as amended.

Area of concern (AOC) 698 consist of Building 2508 at the Naval Station Annex, which housed four boilers to supply steam to annex facilities. Building 2508 was designated an AOC due to lead-based paint peeling from the interior and exterior surfaces/walls. A 10,000 gallon fuel oil aboveground storage tank (AST) was located on the northeast side of Building 2508. Lead and petroleum hydrocarbons were identified in the *Final Zone K RFI Workplan* as constituents of concern for AOC 698.

Historical application of pesticides at AOC 698 have adversely impacted groundwater at this unit. Two isomers of lindane (pesticide, benzenehexachloride-BHC) have been sporadically detected in groundwater at AOC 698. While the concentration of alpha-BHC (0.15 µg/L)

exceeded the RBC of 0.011 µg/L during the October 1997 sampling event, this isomer was not detected during the December 1999 sampling event. Only gamma-BHC was detected during the December 1999 sampling event. However, the gamma-BHC concentration of 0.079(J) µg/L does not exceed the MCL of 0.20 µg/L for lindane. These low concentrations of pesticides as reported in this RFI Report Addendum, do not appear to pose a threat to human health at this time. Therefore, the Division of Hydrogeology agrees that there are no RCRA Subtitle C constituents of concern for groundwater at AOC 698 at this time. Moreover, it is recommended that AOC 698 be transferred to the Department's Underground Storage Tank (UST) program for investigation of the hydrocarbon contamination at this site.

The Navy provided a copy of the Department's approval letter for closure of AST 2508 (Bristol to Magwood, 10/22/97) in Appendix G of the referenced Report. The May 9, 1997, Aboveground Storage Tank Assessment Report was not provided. However, on March 6, 2002, Mr. Michael Bishop of the Department's Bureau of Water, informed the author that according to the referenced Assessment Report, no groundwater samples were collected during closure of AST 2508.

Benzene has been consistently detected (5 of 6 samples) in concentrations at or above the maximum contaminant level (MCL) of 5 micrograms per liter (µg/L). The highest concentration of benzene (31 µg/L) was reported in the last sampling event conducted on July 20, 2000. Moreover, naphthalene has been consistently detected in concentrations greater than the EPA Region III risk based concentration (RBC) of 6.5 µg/L. Therefore, the Division of Hydrogeology recommends that groundwater at AOC 698 be addressed under RCRA Subtitle I through transfer to the Department's UST program. Based upon available data, a "no further action" (NFA) decision for groundwater at AOC 698 would be appropriate upon receipt of satisfactory completion of RCRA Subtitle I requirements.

If you have any questions, please discuss them with me.

Attachments: Table 5-3 Groundwater Analytical Results for COPCs Exceeding Screening Criteria

Figure 4-1 Additional Soil Boring and Monitoring Well Locations

cc: Michael Bishop, BOW, SCDHEC