

N61165.AR.005622
CNC CHARLESTON
5090.3a

SUPPORTING INFORMATION FOR INVESTIGATION OF BUILDING 2508 AREA OF
CONCERN 698 (AOC 698) CNC CHARLESTON SC
02/08/2003
J.A. JONES ENV. SERVICES



J.A. JONES

ENVIRONMENTAL
SERVICES

Charleston Naval Complex
1849 Avenue F
N. Charleston, SC 29405

Phone: (843) 740-2780
Fax: (843) 740-2785

Fax

To: MICHAEL BISHOP

From: BRIAN CAMPBELL

Fax #: 803 898 3795

Total Pages: 5

Phone #: _____

Date: 2/8/03

Re: _____

Urgent For Review Please Comment Please Reply

Comments:



2600 Ball Street
Columbia, SC 29201-1708

Mr. Gabriel L. Magwood
Southern Division NFEC
P.O. Box 190010
2155 Eagle Drive
North Charleston, South Carolina 29419-9010

Re: Aboveground Storage Tank Assessment Report dated May 9, 1997
Bldg. 2508 (AST 2508) (Site Identification # 00951)
Charleston Naval Complex/Charleston Naval Base
Charleston, SC
Charleston County

Date: October 22, 1997

Dear Mr. Magwood:

The author has completed technical review of the referenced document. As submitted, the report provides a narrative describing closure activities and analytical results of environmental sampling to determine if releases have occurred as a result of operation of the referenced vessel and/or associated piping system. The employed closure activities and sampling results appear to indicate that no additional endeavors for remedial actions and/or contaminant characterization are warranted at the referenced site at this time. If in the future contamination is identified which is attributable to this site, additional assessments and/or remedial endeavors may be required, as appropriate.

Should you have any questions, please contact me at (803) 734-5328.

Sincerely,

Paul L. Bristol, Hydrogeologist
Groundwater Quality Section
Bureau of Water

cc: Trident District 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