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TRANSMITTAL FOR RESOURCE CONSERVATION AND RECOVERY ACT FACILITY
INVESTIGATION REPORT ADDENDUM AREA OF CONCERN 709 (AOC 709) ZONE F CNC
CHARLESTON SC
12/7/2001
U S EPA REGION IV



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4

61 Forsyth Street SW
Atlanta, Georgia 30303-3104

December 7, 2001

4WD-FFB

Mr. M.A. Hunt
BRAC Environmental Coordinator
Code 18710
Department of the Navy
Southern Division, NAVFAC
2155 Eagle Drive
North Charleston, South Carolina 29419-9010

SUBJ: Charleston Naval Complex (CNAV)
RFI Report Addendum, Area of Concern 709(F), Zone F

Dear Mr. Hunt:

The Environmental Protection Agency, Region 4 (EPA) has reviewed the above referenced document. Please find the comments enclosed.

Please contact me at (404) 562-8552 or spariosu.dann@epa.gov with any questions or responses regarding the enclosed comments.

Sincerely,

Dann J. Spariosu, Ph.D.
Remedial Project Manager

Enclosure

cc: D. Scaturro, SCDHEC
D. Williamson, CH2M-Jones
G. Foster (email), CH2M-Jones
J. Stamps (email), SCDHEC

**Comments on the RFI Report Addendum, Area of Concern 709(F), Zone F
Charleston Naval Complex
North Charleston, South Carolina**

General Comments

1. The final recommendation for the site is NFA under the RCRA Corrective Action (CA) program, with any additional actions to be completed under the UST program. It appears that NFA is acceptable under the RCRA CA program; however, additional actions for both groundwater and subsurface soil at AOC 709(F) should occur under the UST program.

Section 5.2.4 asserts elevated arsenic concentrations are most likely a result of arsenic-reducing bacteria fueled by hydrocarbons present in subsurface soils. The report asserts that arsenic concentrations are well above EPA Region III RBCs for groundwater and MCLs as a result of the fuel hydrocarbons. The detections of arsenic in groundwater are consistently more than two orders of magnitude above the RBC and an order of magnitude greater than the MCL. It should be noted that these concentrations result in unacceptable risk levels at AOC 709(F) that will necessitate additional actions for both groundwater and soil.

Specific Comments

1. Table 4-2, page 4-7. The fifth footnote for the table states "SSL for total xylenes is the sum of the individual SSLs for m-xylene, o-xylene, and p-xylene." The SSL for total xylenes should be the most stringent of the individual xylenes not the sum. According to the data tables provided in Appendix B, the laboratory results were for total xylenes only, and it is impossible to determine which individual xylene dominates the mixture. To be conservative, the comparison should assume only the most stringent xylene SSL and not the summation of a mixture.
2. Section 5.1.2, page 5-2. The first paragraph of the page compares the leachate of subsurface soil samples to EPA Region III RBCs for tap water to determine the subsurface soil "threat" to groundwater. This is an inappropriate use of the RBCs. The RBCs are for a risk-based comparison of the actual media, not leachate of the media, to determine the existence of potential risks to site receptors. Please delete this comparison from the text..
3. Section 6.0, page 6-1. The first paragraph describes the reason for additional investigation at AOC 709(F). The last sentence, which discusses antimony and thallium, should be removed, or the text should be revised to state that

antimony and thallium were not detected in groundwater in the last four sampling events. The way the text is worded is confusing and leads one to believe antimony and thallium were not detected in any media during the last four sampling events.