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TRANSMITTAL AND RESPONSE TO COMMENTS FOR RCRA FACILITY INVESTIGATION REPORT ADDENDUM SOLID WASTE MANAGEMENT UNIT 53 (SWMU 53) AREA OF CONCERN 526 (AOC 526) ZONE E CNC CHARLESTON SC

9/19/2002

CH2M HILL

AOC 572C Zone E
RtC RFI R4 (R4)

CH2MHILL TRANSMITTAL

To: Jerry Stamps
South Carolina Department of Health
and Environmental Control
Bureau of Land and Waste
Management
2600 Bull Street
Columbia, SC 29201

From: Dean Williamson/CH2M-Jones

Date: December 24, 2002

Re: CH2M-Jones' Responses to Comments by SCDHEC regarding *RFI Report Addendum, Solid Waste Management Unit 53/Area of Concern 526, Zone E (Revision 0)*

Quantity	Description
4	CH2M-Jones' Responses to Comments by SCDHEC regarding *RFI Report Addendum, Solid Waste Management Unit 53/Area of Concern 526, Zone E (Revision 0) – Originally submitted on September 19, 2002*

If material received is not as listed, please notify us at once

Remarks:

Copy To:

Gillbert Rennhack/SCDHEC, w/att
Mansour Malik/SCDHEC, w/att
Susan Byrd/SCDHEC, w/att
BCT Distribution List

SCDHEC Comments

Engineering Comment Prepared by Gillbert Rennhack

1. Please provide the analytical data of the thirteen (13) soil and five (5) groundwater sample locations for SWMU 53 and AOC 526.

CH2M Jones Response:
A review of the Zone E RFI Report, Revision 0 *(EnSafe, 1997) indicated that the analytical data for the soil and groundwater samples at SWMU 53 and AOC 526 are included in Appendix H of the RFI Report. All data are also included in the CNC EGIS. An additional copy of the analytical results showing detected concentrations of analytes from the RFI for this site will be provided with the Revision 1 of this RFI Report Addendum.*

Risk Assessment Comments Prepared by Susan Byrd

1. Section 5.0, COPC/COC Refinement, Pages 5-1 and 5-2:

BEQs detected in surface soil were originally screened against background and the industrial RBC in the 1997 RFI report. A comparison of the maximum detected BEQ concentration (2.218 mg/kg) against the residential RBC of 0.087 mg/kg, the industrial RBC of 0.78 mg/kg, and the CNC site-wide reference concentration of 1.40 mg/kg suggests that BEQ should be retained as a COPC. After the completion of risk calculation in the 1997 RFI, BEQ was determined to be a COC. According to the CNC Project Team Notebook, exposure point concentrations (UCL_{95}) can be used to eliminate COCs if the UCL_{95} value is below the residential RBC. However, BEQ was eliminated as a COC based on a UCL_{95} comparison to the CNC site-wide reference concentration. In order for the Department to make the proper risk management decisions for SWMUs 53 and 526, the risk to the human receptor under the anticipated land use scenario should be presented.

CH2M-Jones Response:
Similar to other Zone E sites, BEQs at SWMU 53 and AOC 526 will be retained as COCs for both the unrestricted and industrial land use scenarios, due to exceedance of background levels in surface and subsurface soils.

2. The level of BEQs detected in the subsurface soil sample collected at E053SB002 (10.6 mg/kg) was extremely higher than other concentrations of BEQ detected at SWMUs 53 and 526 as well as at the site-wide reference concentrations. Please provide information regarding a potential source of the subsurface contamination. No groundwater monitoring well is located at E053SB002, so a more thorough discussion of the potential migration of the subsurface contamination to groundwater is warranted.

CH2M-Jones Response:

The BEQ concentration in one subsurface soil at E053SB002 is elevated. Two monitoring wells, E053GW001 and E053GW002, are within 10 to 20 feet of this soil boring location. These two wells did not have detectable PAHs.

The Zone E RFI Report, Revision 0 *(EnSafe, 1997) was reviewed by the Hydrogeology Department of SCHDEC, and the site data and potential leachability of BEQs were evaluated as part of this review process. There were no concerns from this review regarding a significant leaching concern.*

The elevated PAHs are likely from asphalt material that is ubiquitous in this part of the Base, due to repeated digging and re-paving that could have resulted in mixing of the soils. The observed PAHs are similar to those detected elsewhere within Zone E. BEQs have been retained as COCs in soil at this site.

3. Please provide a more thorough explanation for disregarding the linkage of soil contamination to the storm sewer. The text merely states that there is no direct connection to the storm sewer, but no discussion of overland runoff to the sewer was provided in this section.

CH2M-Jones Response:

Soils investigated at this site remain under paved areas, thereby preventing contact with overland runoff that reaches storm drains. Therefore, there is currently no linkage to storm sewers from this site.

It should be noted that the Navy/EnSafe team is currently performing an evaluation of whether there is any contamination discharging from the storm sewers at the CNC. They have conducted wet weather sampling of stormwater and have analyzed the collected stormwater for a wide range of analytes. In the event that this evaluation indicates a discharge of significant contamination that may be related to this site, any potential linkage will be reassessed at that time.

These observations will be added to the text under Section 6.4.