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U S NAVY RESPONSE TO REGULATOR COMMENTS TO FACILITY INVESTIGATION
REPORT ADDENDUM/CORRECTIVE MEASURES STUDY WORKPLAN AREA OF CONCERN
573 (AOC 573) ZONE E WITH TRANSMITTAL CNC CHARLESTON SC
11/5/2002
CH2M HILL

ROC 573 Zone E

RTC RFI Report Addendum / CMS Workplan (RO)

CH2MHILL TRANSMITTAL

To: David Scaturo
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: November 5, 2002

Re: CH2M-Jones' Responses to Comments by EPA regarding the *RFI Report Addendum/CMS Work Plan, AOC 573, Zone E* (Revision 0)

Quantity	Description
2	CH2M-Jones' Responses to Comments by SCDHEC regarding the <i>RFI Report Addendum/CMS Work Plan, AOC 573, Zone E</i> (Revision 0) – Originally Submitted on August 30, 2002

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

Remarks:

Copy To:

Tim Frederick/Gannett Fleming, Inc., w/att

Gary Foster/CH2M-Jones, w/att

RFI Report Addendum/CMS Work Plan, AOC 573, Zone E, Revision 0

EPA Specific Comments

1. Page 25

It is inappropriate to compare these BEQ concentrations to elevated "railroad BRCs" where railroad tracks no longer exist. Speculations and/or demonstrations of any prior existence of railroad tracks is irrelevant and in admissible.

CH2M-Jones Response:

We disagree that providing information about potential causes of elevated BEQ concentrations in soil is irrelevant. It is important to evaluate the location at which elevated chemical concentrations occur relative to where industrial activities that may have caused contamination were conducted, and ask whether the observed elevated concentrations may have been caused by those industrial activities. If it does not appear likely that the industrial activities caused the elevated concentrations, it is worth considering what other activities could have caused those elevated concentrations.

The sample (E573SB002) where BEQs exceeded general background levels at the site is in the southeast corner of the site which is paved with asphalt, whereas site-related operations involving anodizing activities occurred in the small shed adjacent to Building 177 (see Figure 1-1 of the Revision 0 document). Thus, it is reasonable to ask whether the elevated BEQs observed at E573SB002 are reasonably expected to be related to site-operations or not. Because no data indicate that BEQs were used as part of the metal anodizing activities at AOC 573, we believe it is reasonable and appropriate to assess whether other site conditions that are known to have used BEQ-containing materials and may have contributed to elevated BEQs in soil. Certainly the presence of BEQ-containing asphalt pavement over the soil at this location and the decades-long presence of railroad (which were constructed of creosote-treated ties, which contain significant BEQ levels) at this site are not irrelevant as potential sources of BEQs in soil.

2. Page 26

It appears that BEQs should also be considered as an industrial worker COC.

CH2M-Jones Response:

We agree. BEQs are identified as a COC for both the unrestricted and industrial land use scenarios in section 7.0, page 7-1, line 14. The text in Section 5.0 and other necessary locations in the report will be revised to indicate that BEQs are a COC for both the unrestricted and industrial land use scenarios.

3. Page 26, Sequence number: 2

The 95% UCL of the mean site BEQ concentrations should not be compared to a BRC based on a range maximum. It would be allowable to compare the site UCL(95) to the UCL(95) of sample concentrations used in the background study.

CH2M-Jones Response:

The reference concentrations for BEQs are 2 times the mean values (not maximum value as implied in the comment). The UCL₉₅ estimate is the upper-bound estimate of the mean. The 2 times the mean value used for background as recommended by EPA Region 4 is based on the principle that such a value represents an approximation of the upper-bound estimate of the mean, more similar to the upper tolerance limit (UTL₉₅). The estimated mean for the site is 1,915 µg/kg, and 2 times the mean site concentration is 3,830 µg/kg, compared to a background 2 times mean value of 1,304 µg/kg. The text will be edited to remove comparison between UCL₉₅ concentrations and replace it with 2 times mean site concentration against background value.

4. Page 27

BEQs should be considered as a COC for future worker, as well.

CH2M-Jones Response:

Please see response to Comment No. 2 above.