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CNC CHARLESTON
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U S NAVY RESPONSE TO REGULATOR COMMENTS TO CORRECTIVE MEASURES
STUDY REPORT AREAS OF CONCERN 569, 570 AND 578 ZONE E WITH TRANSMITTAL
CNC CHARLESTON SC
1/26/2004
CH2M HILL

AOC's 569, 570, and 573 Zone E
RTC on CMS Report (RD).

CH2MHILL TRANSMITTAL

To: Mr. 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: Jan. 26, 2004

Re: CH2M-Jones' Responses to Comments by SCDHEC regarding the *Corrective Measures Study Report, AOCs 569, 570, and 578, Zone E, Revision 0* – Originally Submitted on Nov. 13, 2003

We Are Sending You:

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2	CH2M-Jones' Responses to Comments by SCDHEC regarding the <i>Corrective Measures Study Report, AOCs 569, 570, and 578, Zone E, Revision 0</i> – Originally Submitted on Nov. 13, 2003

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

Copy To:

Dann Spariosu/USEPA, w/att
Rob Harrell/Navy, w/att
Gary Foster/CH2M HILL, w/att

SCDHEC Specific Comments

1. Section 1

This section should be revised to include a groundwater contour figure for the deeper component of the surficial aquifer.

CH2M-Jones Response:

A groundwater contour figure for the deeper component of the surficial aquifer for this site will be provided in the revised report. The CNC EGIS provides this information as a theme. The groundwater contours in the deeper portion are very similar to those in the shallower portion of the surficial aquifer at this site.

2. Section 3.2.1, Description of Alternative

The statement that "The low concentrations of CVOCs in groundwater indicate that a significant source area with high-level contamination is not present" is an assumption that may be inaccurate. It should be noted that the presence of a source area with high-level contamination, while not likely, is possible. If a source area exists in this area, MNA will most likely prove ineffective. The Tier I team should be made aware that while it is unlikely, the possibility does exist that additional soil investigation/remediation might be necessary in the future. No response necessary.

CH2M-Jones Response:

Comment noted.

3. Section 3.2.2, Key Uncertainties

The Division of Hydrogeology agrees with the listed uncertainties in this section. However, the Division does not concur that the existing monitoring well network is adequate. The TCE contamination in the deeper portion of the aquifer is of specific concern. Monitoring Well E570GW03D has TCE above the MCL, yet there are currently no down-gradient wells being monitored. If existing deep wells are located in areas to fill this data gap, then they should be included in the long-term monitoring program for this site. Otherwise, additional deep wells should be installed, down-gradient of E570GW03D.

CH2M-Jones Response:

Monitoring well E569GW01D is downgradient of well E570W03D, suitably located, and can be added to the list of wells monitored. VOCs detected in groundwater samples from this well have all been below 10 µg/L; no MCL exceedances have been observed. CH2M-Jones believes that no additional (new) deep wells are needed.

4. Table 3-1, Summary of Chlorinated VOC Concentrations in Select Wells

This table shows that the laboratory detection limit for Vinyl Chloride (VC) is too high. The MCL for VC is 2 µg/L. The detection limit should be below the MCL, otherwise, there is no way to adequately verify that chlorinated solvent degradation is not creating further contamination with the daughter products. All future analyses must be performed with suitable detection and reporting limits.

CH2M-Jones Response:

The analytical method, SW846 8260, that has been used for all VOC analysis for this project since the RCRA Corrective Action program was initiated in 1995 is not capable of achieving a detection limit of 2 µg/L for vinyl chloride. Method 8260 is widely used on RCRA Corrective Action and Superfund projects and the limitation of its detection limit with regard to vinyl chloride's MCL is widely recognized. In spite of this limitation, Method 8260 is considered to be the most suitable overall GC/MS method for VOC analysis. CH2M-Jones does not think it advisable to change the analytical method at this point of the project.

5. Section 4.1, Alternative 1: Monitored Natural Attenuation with Land Use Controls

This section should be revised as necessary to address additional wells, sampling, and analyses congruent with the response to Comment 3 (above).

CH2M-Jones Response:

Sampling for well E569GW01D will be included.

6. Section 4.3, Comparative Evaluation of Corrective Measure Alternatives

Same as Comment 5.

CH2M-Jones Response:

Sampling for well E569GW01D will be included.