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CNC CHARLESTON
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U S NAVY RESPONSE TO SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL COMMENTS TO RCRA FACILITY INVESTIGATION REPORT
ADDENDUM AND CORRECTIVE MEASURES STUDY WORKPLAN-AREA OF CONCERN 597
(AOC 597) ZONE E WITH TRANSMITTAL CNC CHARLESTON SC

11/6/2002
CH2M HILL

AOC 597 Zone E

RTC RFI Report Addendum + CR3 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 6, 2002

Re: CH2M-Jones' Responses to Comments by SCDHEC regarding the *RFI Report Addendum & CMS Work Plan, Area of Concern 597, Zone E, Charleston Naval Complex* (Revision 0)

Quantity	Description
4	CH2M-Jones' Responses to Comments by SCDHEC regarding the <i>RFI Report Addendum & CMS Work Plan, Area of Concern 597, Zone E, Charleston Naval Complex</i> (Revision 0) – Originally Submitted on July 30, 2002

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

Remarks:

Copy To:

Jerry Stamps/SCDHEC, w/att
Gil Rennhack/SCDHEC, w/att


Gary Foster/CH2M-Jones, w/att

Engineering Comments Prepared by Gil Rennhack

1. Wipe Sampling and Analysis

This section presents the results of the wipe sampling conducted in the electrical substation. Sample locations were biased toward areas of the highest possible contamination. Two of the three samples had a detectable quantity of PCBs at 2.7 $\mu\text{g}/\text{cm}^2$ and 2.8 $\mu\text{g}/\text{cm}^2$. However, the locations of these detects is not presented in the documents. Please indicate where these detections occurred.

Furthermore, there is no rationale as to why these detections are not of concern. The Department recommends using 40 CFR 761.125(c)(4)(ii) under the Toxic Substance Control Act (TSCA) as a reasonable screening tool to determine if additional action is required to remove residual PCB contamination from solid surfaces. This section of TSCA states that, for non-restricted access areas, high-contact outdoor solid surfaces shall be cleaned to 10 $\mu\text{g}/\text{cm}^2$. Considering the wipe samples have met this criterion, the surface of the storage area does not require any additional cleaning. Please provide this rationale or other rationale deemed appropriate by the Navy to demonstrate that the wipe sample results are not of concern. Please note that this comment applies to any future sites for which PCB wipe sampling was conducted.

CH2M-Jones Response:

Figure 10.46.2 from the Zone E RFI Report, Revision 0 (see attached copy) shows the wipe sampling locations. The figure indicates that these samples were collected within Building 91. The Revision 0 RFI report also indicates that concrete surfaces were wiped. Wipe locations were determined in the field based on an attempt to bias the sample results to worst-case situations, based on the location of PCB-containing equipment and any visual evidence of spills or leaks.

With regard to the question as to why no rationale was provided to explain why the PCB detections were not of concern, the answer is that there are no RCRA Corrective Action risk-based criteria to use as comparison for these values. Note that the TSCA-referenced cleanup value (10 $\mu\text{g}/\text{cm}^2$) is not a risk-based concentration.

The Navy and CH2M-Jones does not have a significant concern about using the TSCA remediation criteria as a screening step at this particular site for evaluating wipe samples. We agree to revise the section of the report that discusses the wipe sampling results and use the TSCA criteria as a justification for no further evaluation of this issue at AOC 597.

However, we do have a concern about the 10 $\mu\text{g}/\text{cm}^2$ screening criterion being applied as a screening step or de-facto cleanup/investigation standard for this or similar sites at the CNC. The wipe criteria referenced in 40 CFR 761.125 apply only to spills of PCBs at concentrations of 50 ppm or greater, which are subject to the requirements of 40 CFR 761. Therefore, at sites at which there is no evidence that a spill of this nature occurred, there is no basis to apply or make mandatory the TSCA requirements of 40 CFR 761 as cleanup or investigation criteria.

In addition, the 10 $\mu\text{g}/\text{cm}^2$ criterion applies to non-restricted access areas, high-contact outdoor solid surfaces locations. There is no indication that the transformers at AOC 597

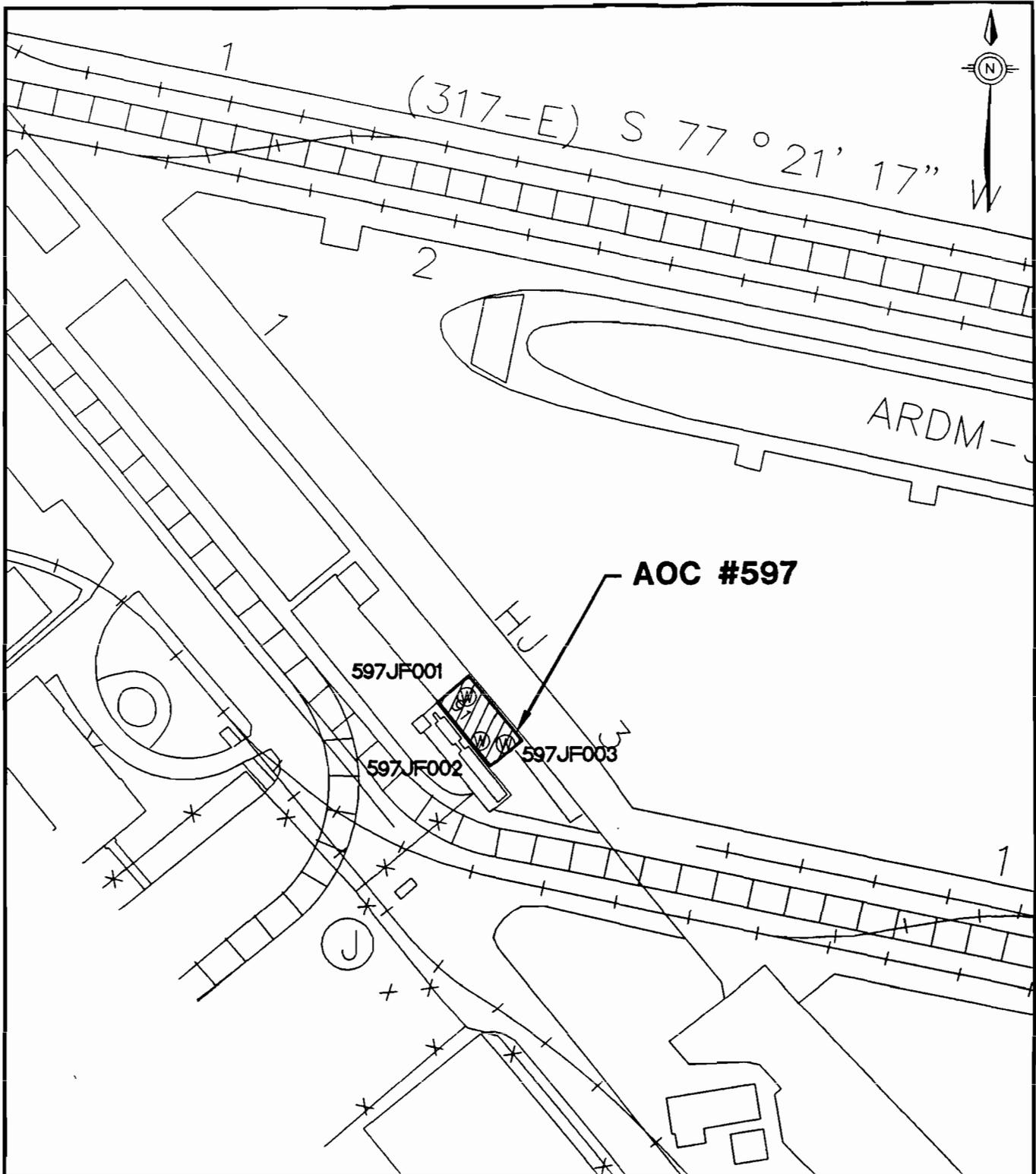
meet the criteria for designation as a non-restricted access areas, high-contact outdoor solid surfaces location. Given the location of AOC 597 in the industrialized portion of the CNC, the term "non-restricted access area" does not appear to apply, as this area is not accessible to the general public. Given the location of these wipe samples within Building 91, they do not appear to be in non-restricted access areas. Since the wiped surfaces were inside a building, the sample locations do not meet the criteria for "outdoor solid surfaces."

The term "high-contact surface" in an industrial setting refers to a surface which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. Examples of low-contact industrial surfaces include ceilings, walls, floors, roofs, roadways and sidewalks in the industrial area, utility poles, unmanned machinery, concrete pads beneath electrical equipment, curbing, exterior structural building components, indoor vaults, and pipes. Therefore, the concrete that was wiped would be considered a low-contact surface. A more appropriate criterion for AOC 597 or similar sites would be the allowable cleanup level for low-contact, outdoor surfaces in restricted areas of 100 $\mu\text{g}/\text{cm}^2$.

Because all of the detected concentrations are below both the 10 $\mu\text{g}/\text{cm}^2$ and the 100 $\mu\text{g}/\text{cm}^2$ criteria, CH2M-Jones believes that the detected PCBs in the wipe samples are not significant. Appropriate revisions to the Revision 0 RFI Report Addendum/CMS Work Plan will be made and provided to SCDHEC.

For future PCB sites where wipe samples were collected, we will evaluate the applicability of these TSCA criteria and will try to include some appropriate discussion of them in the interpretation of wipe samples.

Attachment



LEGEND

- - SOIL BORINGS
- ⊙ - CORE SAMPLES
- ⊖ - DEEP MONITORING WELLS
- ⊕ - SHALLOW MONITORING WELLS
- ▲ - SEDIMENT SAMPLES
- Ⓣ - THICKNESS SAMPLES
- Ⓜ - WIPE SAMPLES
- Ⓢ - SURFACE WATER SAMPLES



ZONE E
RFI REPORT
NAVAL BASE CHARLESTON
CHARLESTON, S.C.

FIGURE 10.46.2
WIPE SAMPLE LOCATIONS
AOC #597
SUBSTATION
BUILDING 91

