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CNC CHARLESTON
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U S NAVY RESPONSE TO REGULATOR COMMENTS TO RCRA FACILITY INVESTIGATION REPORT ADDENDUM AREA OF CONCERN 562 (AOC 562) ZONE E WITH TRANSMITTAL
CNC CHARLESTON SC
11/14/2002
CH2M HILL

AOC 562 Zone E
Response to Comments on RFI Report Addendum

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: November 14, 2002

Re: CH2M-Jones' Responses to Comments by SCDHEC regarding the *RFI Report Addendum, Area of Concern 562, Zone E, Charleston Naval Complex* (Revision 0)

Quantity	Description
4	CH2M-Jones' Responses to Comments by SCDHEC regarding the *RFI Report Addendum, Area of Concern 562, Zone E, Charleston Naval Complex* (Revision 0) – Originally Submitted on July 30, 2002

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

Remarks:

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Engineering Comments Prepared by Jerry Stamps

1. General Comment.
The primary concern for AOC 562 was the potential release of dielectric fluid from leaking transformers. Samples collected from these leaking transformers showed detections of less than 50 ppm PCBs. Upon review of this document, the Department was initially concerned that the soil samples collected around AOC 562 were not analyzed for metals given the potential for the dielectric fluid to contain metals. However, none of the soil samples resulted in a single detection of PCBs; thus indicating that a release of the dielectric fluid has not occurred. Consequently, it is reasonable to believe that metals contamination has not occurred as a result of a release of the dielectric fluid. As such, the Department has determined that AOC 562 has been adequately investigated and agrees that No Further Action is appropriate. No response is necessary to this comment.

2. Section 2.2, Wipe Sampling and Analysis.
This section presents the results of the wipe sampling conducted in the transformer storage area. Sample locations were biased toward areas of the highest possible contamination. Only one of the four samples had a detectable quantity of PCBs at 9.8 µg/cm2. However, the location of this detect is not presented in the documents. Please indicate where this single detection occurred.

   Furthermore, there is no rationale as to why this detection is 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 form solid surfaces. This section of TSCA states that, for non-restricted access areas, high-contact outdoor solid surfaces shall be cleaned to 10 µg/cm2. 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:
   AOC 562 is an electrical substation set on a concrete slab on which three transformers were previously located. The wipe samples were collected at the locations shown in Figure 10.30.2 from the Zone E RFI Report, Revision 0 (a copy of the figure is attached to this response).

   In an effort to ascertain which of the four wipe samples had the PCB detection, CH2M-Jones reviewed Appendix H of the Zone E RFI Report (which contained all of the analytical data summaries for samples collected and analyzed during the RFI) as well as the analytical database we received from EnSafe. We were unable to locate the wipe sample results in either of these sources, and consequently are unable to identify which wipe sample had the detection. However, because the detection was below the TSCA wipe sample screening level discussed below, this does not appear to be a significant issue.

With regard to the question as to why no rationale was provided as to why the PCB detections were not of concern, the answer is that there are no RCRA Corrective Action risk-based criteria to compare to these values. Note that the TSCA-referenced cleanup value (10 µg/100 cm²) is not a risk-based concentration.

The Navy and CH2M-Jones do not have a significant concern about using the TSCA remediation criteria as a screening step at this particular site for evaluating wipe samples. However, we do have a concern about the 10 µg/100 cm² screening criterion being applied as the only acceptable 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, we question whether there is a basis to apply or make mandatory the TSCA requirements of 40 CFR 761 as cleanup or investigation criteria.

In addition, the 10 µg/100 cm²criterion applies to non-restricted access areas, high-contact outdoor solid surface locations. There is no indication that the transformers at AOC 562 meet the criteria for designation as a non-restricted access areas, high-contact outdoor solid surface location. Given the location of AOC 562 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.

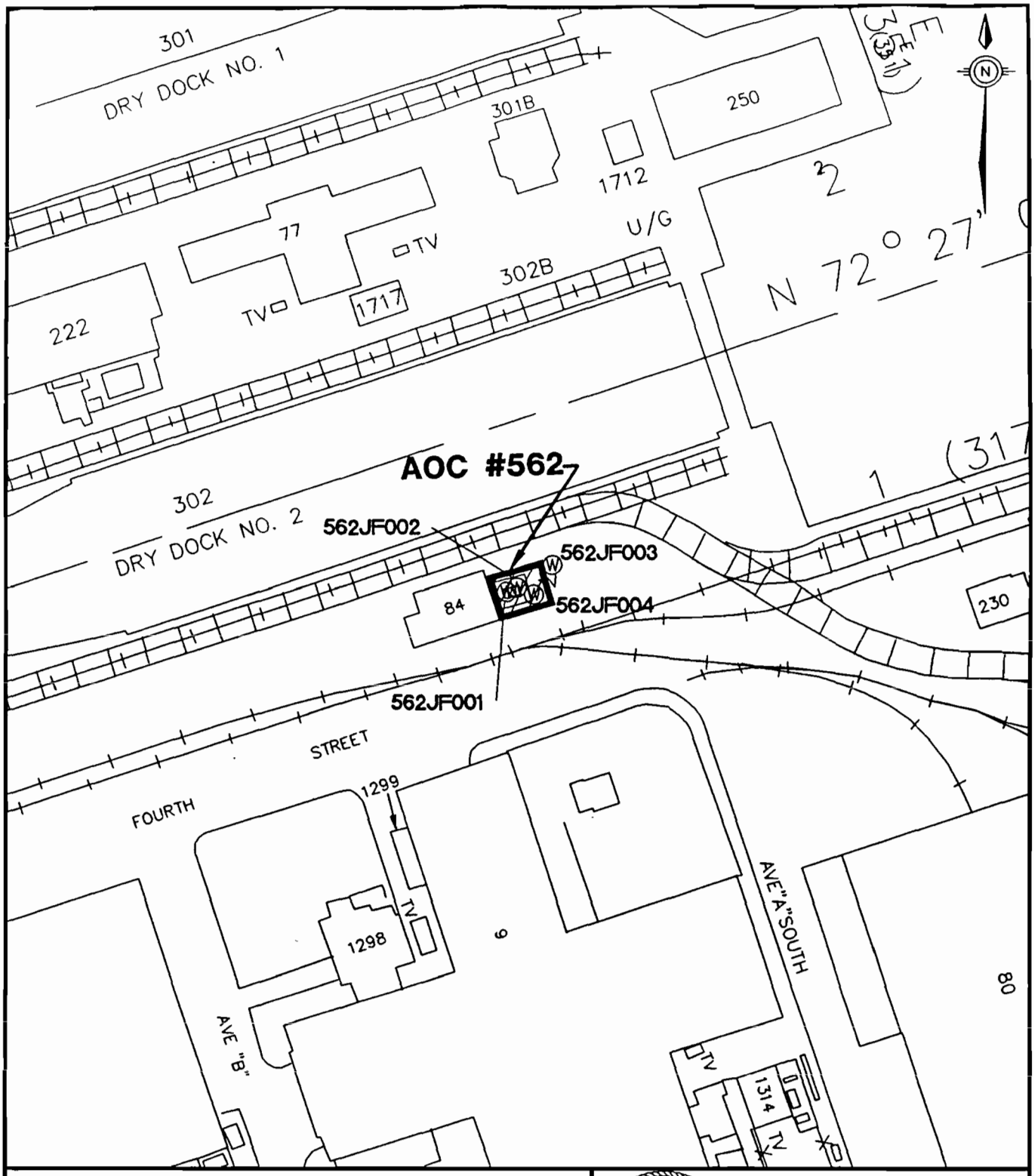
The term "high-contact surface" in an industrial setting refers to a surface which is repeatedly touched, often for relatively long periods of time. Manned machinery and control panels are examples of high-contact industrial surfaces. Examples of low-contact industrial surfaces include ceilings, walls, 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. The concrete that was wiped would be considered a low-contact surface.

A more appropriate criterion for this or similar sites would be the allowable cleanup level for low-contact, outdoor surfaces in restricted areas of 100 µg/100 cm².

Because all of the detected concentrations are below both the 10 µg/100 cm² and the 100 µg/100 cm² criteria, CH2M-Jones agrees with SCDHEC that the detected PCBs in the wipe samples are not significant.

For future PCB sites where wipe samples are collected, we will, in coordination with SCDHEC, evaluate the applicability of these TSCA criteria and 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

GRAPHIC SCALE 100 0 100 200

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

FIGURE 10.30.2
WIPE SAMPLE LOCATIONS
AOC #562
SUBSTATION
BUILDING 84

DWG DATE: 09/02/97 | DWG NAME: 10-30-2