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CNC CHARLESTON
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SAMPLING AND ANALYSIS PLAN AREA OF CONCERN 590 (AOC 590) AND SOLID WASTE
MANAGEMENT UNIT 102 (SWMU 102) ZONE E CNC CHARLESTON SC
8/6/2002
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



2600 Bull Street
Columbia, SC 29201-1708

August 6, 2002

Ms. Amy Daniell
Caretaker Site Office
Charleston Naval Complex
CSO 1895 Avenue F
North Charleston, SC 29405

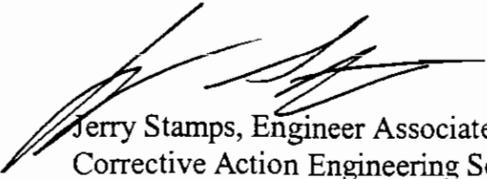
RE: Sampling and Analysis Plan (Revision 0), AOC 590 and SWMU 102, Zone E
Charleston Naval Complex (CNC)
SC0 170 022 560

Dear Ms. Daniell:

The Corrective Action Engineering and the Hydrogeology Sections of the South Carolina Department of Health and Environmental Control (Department) have completed the review of the above referenced document, which was received on July 11, 2002. This review was based upon applicable State and Federal Regulations, and the CNC Hazardous Waste Permit, effective May 22, 2002. Please note that it is not necessary to revise the above referenced document; however, the attached comments must be addressed as part of the RCRA Facilities Investigation (RFI) for AOC 590 and SWMU 102.

Thank you for your cooperation in this matter. If you have any questions or concerns, please contact me at (803) 896-4285.

Sincerely,



Jerry Stamps, Engineer Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

Attachment:

Memorandum from Jo Cherie Overcash to Jerry Stamps dated August 6, 2002

cc: Tony Hunt, PE, SOUTHDIV
Rob Harrell, PE, SOUTHDIV
Dean Williamson, PE, CH2M-Jones
Jo Cherie Overcash, Hydrogeology

Rick Richter, Trident EQC District
Dann Spariosu, PhD, EPA Region 4
Gary Foster, PE, CH2M-Jones

ENGINEERING COMMENTS
Prepared by Jerry Stamps
Charleston Naval Complex (CNC)
August 6, 2002

1. **SAP, SWMU 102, Section 3.1.2**

According to this section, BEQs have been identified as requiring further delineation in surface soil; however, Figure 3-1 illustrates that SVOC analysis will only be conducted for previous soil sample locations rather than for the proposed locations. Furthermore, it appears as though SVOC sampling is not planned near the area of sample E102SB040 which, according to the GIS, has a corresponding BEQ value of 8149.8 ppb. The Navy must delineate the extent of the BEQ contamination by analyzing the appropriate proposed sample locations for SVOCs.

2. **SWMU 102, Subsurface Soil Investigation**

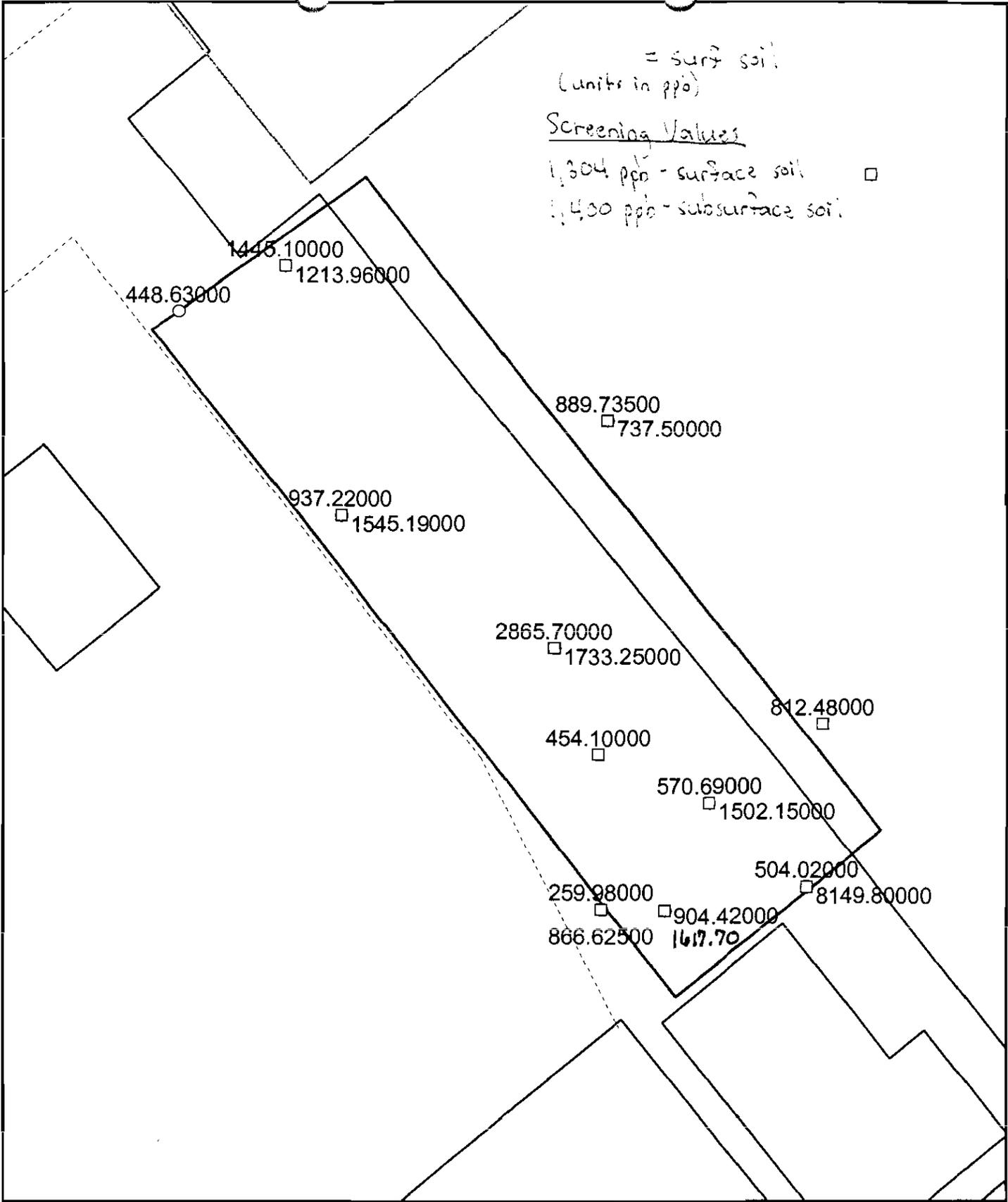
Given the lead detection of 9,930 ppm in sample E102SB036, the Department recommends sampling the proposed sample locations to the northwest and southwest of sample E102SB036 for lead in addition to mercury.

3. **AOC 590, OWS Investigation**

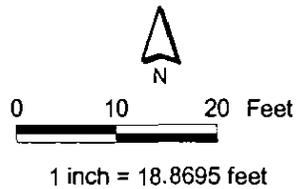
On November 5, 2001, the Navy collected soil samples in the vicinity of AOC 590 at a depth that was to correspond to the bottom of the Oil-Water Separator (OWS). In a correspondence dated March 1, 2002 (Beisel to Bergstrand), it is stated that soil samples E590SB007 and SB008 were collected at a depth of 4 to 5 feet below land surface. However, according to a figure attached to this correspondence, the OWS extended to a depth of 7 feet below land surface. Consequently, the sample depths did not coincide with the bottom depth of the OWS. It appears as though the OWS extends below the surface of the water table. If so, then it is reasonable to assume that a release from the bottom of the water table would release directly to the groundwater. Consequently, the Department recommends the use of the down gradient well as required by the Division of Hydrogeology in lieu of collecting soil samples to determine if a release has occurred from the OWS. However, if it is determined that the OWS does not extend below the water table, then additional soil samples at the base of the OWS will be necessary as agreed to in past discussions between CH2M-Jones and SCDHEC.

4. **AOC 590, BEQ Investigation**

According to the GIS, additional investigation for BEQs is warranted for AOC 590. Several exceedances of the BEQ screening values as documented in the *Project Team Notebook and Instructions* were identified. Please see the attached figure identifying the distribution of the BEQ contamination at AOC 590.



- SB
- SP
- SS
- Fence
- Railroads
- AOC Boundary
- SWMU Boundary
- Buildings



DRAFT

For Discussion Only

Figure 1
AOC 590 BEQS
Soil Samples
Charleston Naval Complex