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LETTER FROM SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL
CONTROL CONDITIONALLY APPROVING PHASE 2 INTERIM MEASURE WORK PLAN SLID
WASTE MANAGEMENT UNIT 3 (SWMU 3) ZONE G CNC CHARLESTON SC
3/29/2002
SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL



2600 Bull Street
Columbia, SC 29201-1708

March 29, 2002

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

RE: Phase II Interim Measure Work Plan, SWMU 3, Zone G
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 March 15, 2002. This review was based upon applicable State and Federal Regulations, and the CNC Hazardous Waste Permit, effective September 17, 1998. The Department has determined that the above referenced document is approved with the attached conditions.

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

Sincerely,

David Scaturo, P.E., P.G., Manager
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

Attachment:

Memorandum from Paul Bergstrand, P.G. to Jerry Stamps dated April 5, 2002.

cc: Tony Hunt, PE, SOUTHDIV
Rob Harrell, PE, SOUTHDIV
Dean Williamson, PE, CH2M-Jones
Gary Foster, PE, CH2M-Jones

Rick Richter, Trident EQC District
Dann Spariosu, PhD, EPA Region 4
Paul Bergstrand, PG, Hydrogeology

ENGINEERING COMMENTS
Prepared by Jerry Stamps
Charleston Naval Complex (CNC)
March 29, 2002

1. **General**

CH2M-Jones recently submitted a Sampling and Analysis Plan for SWMU 3, dated March 3, 2002, to further delineate contamination present at SWMU 3. The Department recently discussed this plan with Mr. David Lane of CH2M-Jones. The Department expressed concerns about the extent of subsurface soil sampling in some areas, the need for additional samples at select locations, and the suite of analysis for select samples. The Department was satisfied with the outcome of the discussion with the exception of the subsurface sampling, which was addressed by a revision to the Sampling and Analysis Plan received by the Department on March 27, 2002. This work plan is approved on the condition that an addendum to this Phase II IM Work Plan is submitted to the Department reflecting any changes to the limits of the excavation as a result of the additional data collected during the implementation of the sampling and analysis plan. This addendum must also include the analytical results of the sampling and analysis plan.

2. **Table 3-1**

This table is currently entitled "Background Concentration Ranges for Dieldrin (All Zones)". The Department recommends not using the term "background" when addressing organic contaminants. The Department recommends a term such as typical facility concentrations for Dieldrin.

The concentration ranges for Dieldrin apparently are based upon concentrations from zones B, C, E, G, and H for surface soil, and zones C, E, H, and I for subsurface soil. However, it is not clear if the process for comparing to background concentrations as outlined in the project team notebook was followed when developing these "background" ranges for Dieldrin. The process is to initially compare to zone specific background. If sufficient data does not exist to adequately represent background conditions, than data from adjacent zones may be used. If enough data still does not exist, then comparing to facility wide ranges may be appropriate as a last resort.

3. **Section 4.1.1**

This section states that "...a UCL₉₅ concentration that is below a target concentration (such as an MCS) indicates that risks are within or below acceptable limits." Though this may be true for a single constituent, it is possible to have many contaminants below the UCL₉₅; however, the cumulative risk may be above the allowable risk range. The Department recommends removing this sentence.

4. **Section 4.2.4**

As stated in this section, the need for remediation of VOC contaminated soils will be based upon the results of the additional data collected during the implementation of the sampling and analysis plan.

5. **Table 4-1**

This table should clarify that the Media Cleanup Standards (MCS) are based upon the EPA Region III Residential RBCs.

6. **Table 4-2**

According to Section 4.1.2 (Leachability-Based Evaluation for Soil), the contaminants with mean concentrations above the corresponding MCS are identified for potential remedial action. However, acetone and benzene have mean concentrations above their corresponding MCS are not identified as leachability COCs because they are not present in groundwater; however, additional groundwater investigation is warranted as previously discussed with and agreed to by CH2M-Jones. Until the groundwater investigation is complete these contaminants should be identified as potential leachability COCs. Furthermore, dieldrin, endrin, and tetrachloroethene also have mean concentrations above the MCSs and were not identified as leachable COCs. These contaminants will also be addressed through the pending groundwater investigation. Please revise this table accordingly.