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DEPARTMENT OF THE NAVY

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IN REPLY REFER TO:

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18222:RGS:swj

DEC 20 1999

U.S. Environmental Protection Agency  
Region III  
Federal Facilities Branch  
Attn: Mr. Rob Thomson, P.E. (3HS50)  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Re: EPA's Final Site Inspection Narrative Report for  
the Penniman Shell Loading Plant at Cheatham  
Annex, dtd 9 August 1999

Dear Mr. Thomson:

Thank you for providing the Navy with a copy of the above referenced document. We have reviewed the subject document and offer the following comments. Specific Comments #1, 2, & 3 were previously forwarded to your office and Robert McGlade of Roy Weston, by email dated 8 October 1999.

**General Comment:**

While the investigation did indicate potential human health and ecological risk, the risks were primarily attributable to the presence of contaminants in waste materials (slag, sediment in the bottom of old process tanks and drains), rather than those contaminants found in the various environmental media (soil, surface water, and sediment). Based on your own report (Pg 33, Par 2) one of the waste materials (slag) is very hard and the contaminants contained within it will not easily leech out. Potential contamination detected in waste material included cadmium, lead, manganese, chlordane, 2,4,6 -TNT, and polynuclear aromatic hydrocarbons (PAHs). Chromium was detected at a potentially elevated level in the surface water. The remaining constituents were detected at levels consistent with the study background or with the Naval Weapons Station Yorktown background levels. A review of the sampling results indicates that the contaminants in the waste material are not effecting the soil, surface water, or sediment.

Quality Performance ... Quality Results

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Therefore, we recommend that the SI report should be re-organized, with the sampling results for waste material broken out separately from the soil, surface water, and sediment results. Additionally, the waste sources should be broken out into those groups where receptors will be exposed, versus those with limited potential for direct exposure (i.e. waste sources from drains, sumps and underground tanks).

Specific Comments:

1. It appears that the data contained in the report should be double-checked prior to quantitative use to determine whether the reported units are accurate. For example, referring to Table 6 of the report, the reported concentrations are presented in mg/L. However, on the analytical summary tables in Attachment 2, the concentrations are reported in ug/L.
2. It is uncertain whether the correct EPA Region III RBCs for noncarcinogens was used for comparative purposes. It appears that the RBCs may have been twice modified by a factor of 10 for conservatism. Typically, the RBCs for noncarcinogens are modified by a factor of 10 only once to account for additivity.
3. Table 6 may also contain some unit errors (mg/L instead of mg/kg). Upon review of the analytical data presented in Attachment 2, it is likely that either the data was not subjected to data validation, or that errors occurred during data manipulation.
4. Sediment samples # 11 & 12 on Sample Location Map #1 do not appear in the Sample Summary log. Is it possible that these samples were identified as SO 11 & 12?
5. Sample DW- 01: The location of this sample is shown on Sample Location Map #1- however, no data from this sample appears in this report.

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In conclusion, we feel that if you re-organize your information into the format presented above, and correct the errors indicated above, you will find that the soil, surface water, and sediment at Cheatham Annex have been unaffected by the waste material. With few exceptions, this report indicates that the environmental contamination detected at Cheatham Annex is similar to background levels encountered at the Naval Weapons Station, Yorktown, and certainly does not warrant the placement of Cheatham Annex on the National Priorities List (NPL).

Should you have any questions on the above comments, please feel free to contact me at (757) 322-4751.

Sincerely,

*Robert G. Schirmer*

R. G. SCHIRMER, P.E.  
Remedial Project Manager  
Installation Restoration Section  
(North)  
Environmental Programs Branch  
Environmental Division  
By direction of the Commander

Copy to:

WPNSTA Yorktown (Ms. Carolyn Neill)  
VDEQ (Ms. Sharon Wilcox)  
Roy F. Weston (Mr. Bob McGlade)  
Baker Environmental (Mr. Marty Taube)  
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