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LETTER AND THE U S EPA REGION III COMMENTS REGARDING THE SITE 4 AND YOUTH  
POND REMEDIAL INVESTIGATION REPORT FISC WILLIAMSBURG VA  
09/19/2014  
U S EPA REGION III PHILADELPHIA PA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

September 19, 2014

Mr. Scott Park  
NAVFAC MIDLANT, Building N-26, Room 3208  
Attention: Code OPHE3, Mr. Scott Park  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

Subject: Site 4 and Youth Pond Remedial Investigation, Naval Weapons Station Yorktown  
Cheatham Annex, Williamsburg, Virginia, May 2014

Mr. Park:

Thank you for the opportunity to review the subject document. Attached are EPA's comments on the document. The first set of comments are general comments regarding Site 4 and the process of moving forward with the RI/FS. With these general comments, I am trying to open up a dialogue between EPA, the Navy, and VADEQ as to the most efficient and practical approach to addressing the issues presented by this site. After the Navy has had an opportunity to consider them, I would suggest that the CAX Team discuss them in some detail. The second set of comments are more document specific comments. If you have any questions, please contact me at 215-814-2077.

Sincerely,

Gerald F. Hoover, RPM  
NPL/BRAC Federal Facilities Branch

cc: Wade Smith, VDEQ

## GENERAL COMMENTS

1. Sediment contamination in Upstream Pond: EPA believes that there is sufficient data to conclude that there is potential ecological risk from PCBs in Upstream Pond and that remedial alternatives should be evaluated as part of the FS.
2. It appears that soil sample SS06 is a hot spot for PAHs and pesticides. EPA recommends that the Navy further characterize this hot spot and propose remedial alternatives for addressing it in the FS.
3. EPA strongly suggests that the Navy consider addressing the waste and debris in the burial areas in the FS. Please evaluate if there are any VADEQ regulations or other State or Federal regulations that may apply.
4. Non-Site Contaminant Sources: EPA agrees that contaminated stormwater runoff from non-site related sources are impacting the site. There are relatively simple/straight forward measures that are available to address this contaminated runoff issue. EPA would like the Navy to evaluate this issue further in the FS and consider potential alternatives as a protective measure to ensure site cleanup in the long-term.

## DOCUMENT SPECIFIC COMMENTS

### TOX COMMENTS

#### PAGE IV

In the first paragraph on this page (under the bullets), the text indicates that some of the CoCs identified in the BLRA were not site-related and, therefore, will not be considered further. A few sentences explaining this determination (site-related vs. non site-related CoCs) should be added to this section of the report.

#### APPENDIX K

Based on the data presented in the RAGS – Part D Table 3's for soil inside and outside the fenced areas, it appears that hotspots for arsenic and lead may be present. (Maximum respective concentrations of arsenic and lead were 350 mg/kg and 790 mg/kg, as compared to the exposure point concentrations used to determine potential risk, 40 mg/kg and 37 mg/kg.) These hotspots will not affect risk-based conclusions for arsenic, since arsenic in soil is a CoC that will be evaluated in the pending FS, but it could impact lead (under a residential exposure scenario), which has not been identified as a CoC. A discussion of these hotspots should be included in the report.

### HYDRO COMMENTS

1. A couple of cross sections from north to south and west to east showing the monitoring wells details and lithology should be included in the report to better understand the nature and extent of contamination in groundwater.
2. The groundwater data from 2012 seems to be inconsistent with the groundwater data from 2009. There are not organics exceedances in 2012 contrasted with 2009 where few exceedances of organics were found. In 2012 the groundwater data was taken from permanent monitoring wells and the groundwater samples from 2009 were taken from temporary monitoring wells. A rationale about the use of the temporary wells versus the use of the permanent wells should be included in the report. Are the temporary wells installed in 2009 still useful for sampling or were abandoned?
3. The highest concentration of organics were detected at temporary wells CAA03-GW05 and CAA03-GW04 in 2009. Is there any plan to convert CAA03-GW05 and CAA03-GW04 to permanent monitoring wells.

## **BTAG COMMENTS**

1. Page L-23: Section L.5.2 BERA Approach – The bullet describing background concentrations specifically refers to only inorganic constituents. Please explain why concentrations of organic chemicals at the sites are not also compared to background concentrations.
2. Page L-25: Section L.5.3.1.1 – Regarding Site 4 NW and the assessment of risk to plants and soil invertebrates, the maximum concentrations of acetone (640 µg/kg) was greater than the minimum ESV (173 µg/kg) for similar VOCs (acetone does not have a specific ESV). Therefore, acetone needs to be included as a COPC for further risk evaluation.
3. Page L-30: Section L5.4.1.2 Surface Sediment – Regarding the Upstream Pond, the text indicates that arsenic and beryllium were not retained. This conclusion is wrong. The information provided (“Arsenic exceeded ESVs, and beryllium did not have an ESV, but the maximum background UTL ratios were only 1.03 and 1.15, respectively, and there was only a single background UTL exceedance for each metal....”) supports retaining these chemicals.
4. Page L-36: Section L.5.4.2 Aquatic Food Web Exposures – Regarding the Upstream Pond and Site 4 Streams, the conclusion is only PCBs were identified as COPCs for further risk evaluation. Please explain why endrin is not retained as a COPC.
5. Page L-41: Section L.5.5.2 – Regarding PCBs, the text refers to the use of EqP ESVs. Sediment quality guidelines should also be discussed.