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

October 30, 2000

Atlantic Division, Naval Facilities Engineering Command
Attention Mr. Tim Reisch
1510 Gilbert Street
Norfolk, VA 23511-2699

Re: Naval Station Norfolk, St Juliens Creek Annex, Site 17 WP/SAP

Dear Mr. Reisch:

Thank you for the opportunity to review the Workplan (WP) Sampling and Analysis Plan (SAP) for the investigation of Site 17 (Building 279). The following comments are offered for your consideration with particular attention to toxicological and risk assessment, ecological, hydrological concerns.

Toxicological/Risk Assessment Comments:

Overall, the document was very well written. The only comments from a toxicity standpoint apply to section 3.4.3, Human Health Risk Assessment.

1. When screening surface water and sediment data, EPA Region III commonly assumes receptors will be exposed approximately ten times less to surface water and sediment compared to groundwater and surface soil, respectively. Therefore, it is recommend that a 10 fold factor be applied to the RBC screen. In other words, multiply the RBC value by 10 for the surface water and sediment screen to account for lower exposure.

2. Following the screen, recommend that we add the HQs and ICRs for all COPCs to get a picture of the approximate total risk. If the HI is greater than one, then separate by target organ. This will make the overall human health risk more clear.

BTAG (Ecological) Comments:

1. BTAG had previously recommended, and has the understanding, that one ecological risk assessment will be performed for this watershed area in order to provide for a more technically sound and cost effective ecological risk assessment. This should be clearly presented in Section 3.4.2 of the Expanded SI work plan. Currently the text suggests that a screening ERA will be performed only for Site 17.

2. The text implies that the ecological effects evaluation of this Screening Ecological Risk Assessment (SERA) will be limited to a comparison with the appropriate EPA Region III BTAG screening values. This comparison, however, does not consider potential food chain effects. The proposed approach to the SERA should address this concern.

3. The work plan suggests that three meetings are planned to address technical issues with this project. One meeting is to develop the preliminary problem formulation for the ecological risk assessment. BTAG again recommends that a watershed approach be used in the problem formulation/ecological risk assessment. We also recommend that the topic of incorporation of the Site 17 ESI data into ongoing ecological risk assessment efforts be discussed during the meeting currently being scheduled to discuss these efforts.

Hydrology Comments:

1. The location and number of monitoring wells are fine for the ESI. However, a low flow sampling method should be used to obtain the samples. The Master Project Plan indicates that either double check valve bailers or low flow apparatus are appropriate for sampling; low flow should be used in this case (and in most cases).

2. Additionally, filtering inorganic samples is not necessary with the low flow technique unless there are some real problems with turbidity.

If you have any questions concerning the above comments, please feel free to contact me either via e-mail (Richardson.Todd@epa.gov) or by phone at (215) 814-5264

Todd Richardson
RPM, Federal Facilities Section

Copy to: Devlin Harris (RPM,Va Department of Environmental Quality)