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LETTER AND CONCURRENCE FROM U S EPA REGION III REGARDING REDLINE DRAFT  
FINAL ENGINEERING EVALUATION AND COST ANALYSIS SITE 1 FORMER DISPOSAL  
PITS 1 AND 3 ALLEGANY BALLISTICS LABORATORY ROCKET CENTER WV  
2/28/2012  
U S EPA REGION III



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

February 28, 2012

Mr. Bill Fraser  
NAVFAC Mid-Atlantic  
Environmental Restoration OPHREV4  
Building N-26, Room 3208  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

**RE: Technical Comments on the Redline Draft Final EE/CA, Site 1, Former Disposal Pits 1 and 3 (Soil), Engineering Evaluation and Cost Analysis**

Dear Mr. Fraser:

The U.S. Environmental Protection Agency (EPA) has finished its review of the above-referenced document. Technical comments to the document are attached. Legal comments related to ARARs will be forthcoming. If you have any questions or concerns regarding our comments, please contact me by telephone at 215.814.3379 or electronically at [kloss.sarah@epa.gov](mailto:kloss.sarah@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Kloss".

Sarah Kloss  
Remedial Project Manager  
NPL / BRAC Federal Facilities Branch  
MC: 3HS11

cc (electronic only): Thomas L. Bass (WVDEP)  
Jamie Butler (CH2M HILL)  
John Aubert (NAVSEA)  
Lou Williams (NAVSEA)



**EPA Comments on the Redline Draft Final EE/CA  
Site 1, Former Disposal Pits 1 and 3 (Soil)  
Engineering Evaluation and Cost Analysis  
Part 1- Technical Comments**

EPA Responses to Navy Response to Comments

1. Response to General Comment 1: The response addresses the comment; however, EPA would like to note that groundwater investigations in the same area have noted the possible presence of DNAPL in the saturated zone (below the boundaries of the current excavation). Additional vertical excavation beyond the unsaturated zone may be beneficial. Given the difficulty treating DNAPL, the benefit of this removal may outweigh the additional technical issues and costs. Alternatively, the Navy may want to consider adding amendments at the bottom of the excavation.

Comments on Revised Approach to the Removal Action

1. Post-Removal Characterization Sampling: The EE/CA proposes to limit the excavation at Pit 3 due the presence of the adjacent burning pad. However, this burning pad was not present during the time the Pit was in use. Thus, contamination may have migrated beyond the boundary of the stabilization wall (north of the wall). This area north of the wall where no excavation will occur should be sampled as part of the post-removal characterization sampling.
2. Sidewall samples should be discrete so that the depth of residual contamination can be estimated. A composite sample will not give that level of information.