



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Admin.
National Ocean Service
Office of Response and Restoration
Coastal Protection and Restoration Division
c/o EPA Office of Site Remediation and Restoration (HIO)
1 Congress Street
Boston, MA 02203
28 October 1999

Ms. Kymberlee Keckler
U.S. EPA Waste Management Division
J.F. Kennedy Federal Building
Boston, MA 02203

Mr. Mark Evans
U.S. Department of the Navy
Northern Division - NAVFAC
10 Industrial Highway
Code 1811/PO - Mail Stop 82
Lester, PA 19113-2090

Dear Mark/Kymberlee:

I learned of the Feasibility Study for Soil and Groundwater at the Lower Subbase, Naval Submarine Base, New London, Groton, Connecticut dated July 1999 when I received EPA's comments dated 26 October 1999. NOAA trusts that the Navy inadvertently left us off the mailing list or the document was lost in transport. Nevertheless, NOAA has three comments, one of which duplicate that provided by EPA.

The first comment is a question, does this FS include the Thames River? It is unclear because although the Introduction (Purpose) states that sediment will be addressed, and the RI included the Thames River adjacent to each zone, Section 1.2.1.1, Location, does not make clear if the FS accounts for the adjacent river. NOAA will assume that the nearby river sediments are a part of this FS because such information was not separated during the Remedial Investigation.

Secondly, the Introduction, Section 1.1.1 - Purpose, states that "this FS is to develop and evaluate remedial alternatives for addressing impacted media (soil, sediment, and ground water) at the Lower Subbase . . ." NOAA's opinion is that the Navy neglects the sediment as a potential media for remedial activities. Previously, NOAA reviewed the Remedial Investigation in May of 1998. At that time we recommended that the Navy commence sediment sampling beneath piers (e.g., Pier 33 in Zone #5) to determine the extent of contamination and to determine if sediments beneath piers could pose continuing threats to biota of the river. In addition, we noted that although the sediments do not appear to be posing great risks to riverine biota, it may be advisable to remove "hot spots" (e.g., adjacent to Zone 4) to insure that potential risks are removed. Furthermore, the potential input from storm sewers should be addressed, as this could be a critical transport route of contamination to the river. EPA pointed out in their current review, and NOAA concurs, that a "tiered monitoring program is not developed."

Lastly, the FS Section 1.7, Ecological Risk Assessment Summary, does not include a discussion of any data pertaining to Thames River sediment. Hence the FS essentially

discounts the sediment for potential remedial measures despite the statement provided in Section 1.1.1, Purpose. As discussed during the RI, surface water and sediment samples were collected from the Thames River at locations upstream and downstream of NSB-NLON and at locations adjacent to the seven zones of investigation. Zones 3 and 4 had the highest sediment concentrations of total PAHs, with the maximum concentration of total PAHs in Zone 4 sediments exceeding the ERM concentration of 44.8 mg/kg. With the exception of the minimum total PAH concentration in sediments from Zone 5, total PAH concentrations were above the total PAH ERL concentration at all of the zones sampled. Elevated concentrations of trace elements were also detected in sediments of the Thames River adjacent to the site. Generally, the concentrations of cadmium, copper, lead, and zinc were higher in sediments adjacent to the site than those in upstream and downstream locations. Sediment mercury concentrations were above the mercury ERL at most stations, including those upstream and downstream of the NSB-NLON. The highest concentrations of chromium, copper, lead, and zinc were detected in sediments of the Thames River adjacent to Zone 4, with the concentrations of all these trace elements exceeding their respective ERM concentrations. Such information should require the Navy to consider this sediment throughout the Feasibility Study process.

Please let me know if you have any questions.

Sincerely,



Kenneth Finkelstein, Ph.D.

cc: Patti Tyler (EPA)