1823/ME

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
10 INDUSTRIAL HIGHWAY
MAIL STOP, #82
LESTER, PA 19113-2090

IN REPLY REFER TO

5090
Code 1823\ME
JAN 08 1997

Mr. Mark Lewis
Connecticut Department of Environmental Protection
Bureau of Water Management
Permitting, Enforcement, & Remediation Division
79 Elm Street
Hartford, CT 06106-5127

Subj: SPENT ACID STORAGE AND DISPOSAL AREA (SASDA) AT THE NAVAL SUBMARINE BASE - NEW LONDON (NSB-NLON), GROTON, CT

Dear Mr. Lewis:

As you know, the Navy would like to proceed with a No Further Action Record of Decision (ROD) for the SASDA this fiscal year. I understand that the CTDEP has concerns about compliance with the State's Pollutant Mobility Criteria.

The Navy is eager to receive CTDEP's concurrence on its plans to close out the SASDA site. Therefore, I propose the following two options to reach consensus on remedial plans for the SASDA.

Although the Navy is still evaluating the need to perform SPLP analysis on soil samples at the SASDA, I have recently become aware of Remediation Standard Regulations (RCSA Section 22a-133k-2)(c)(2)(D)(i)(bb) that appears to allow a less stringent standard if dilution is considered that may obviate the need to perform the SPLP test. The dilution factor described in the regulation is "...the ratio of the summation of the areas downgradient and upgradient of the release area to the release area...." This ratio was estimated by the Navy, as shown in Attachment A, to be **25**. It is my interpretation that **25** times the criteria in Appendix B, or **3.75 (25 x 0.15)** TCLP for lead, would be the revised pollutant mobility standard for the SASDA. Since the highest concentration of lead detected in the TCLP tests was 3.32 mg/l, lead at the SASDA does not appear to endanger groundwater. I hope that this alleviates your concerns about lead at the SASDA site.

Your letter on the Site Management Plan dated October 7, 1996 raised concerns about benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene. The Navy believes the PAH contamination in shallow soils at the SASDA meets the definition of the exception detailed in RCSA Section 22a-133k-2 (c)(4)(C)(aa to ff). The

six parts of the criteria are documented as follows; (aa) the highest PAH contamination was detected in the first two feet of borings 15TB9 and 15MW2S, which is described as containing brick and coal fragments, (bb) no VOC's have been found in the same fill layer in the borings, (cc) the levels of PAH do not exceed the criteria for Direct Exposure Criteria (subsection b), (dd) the PAH's have not been detected in ground water, and the ground water is not used as a public or private water supply, (ee) the entire Naval Submarine Base is served by the City of Groton, (ff) the fill was most likely placed before the construction of buildings 409 and 410 and would not have been prohibited at that time.

I would appreciate it if you could respond to this letter within 30 days as I would like to begin preparation of the Proposed Plan and ROD soon. Please do not hesitate to call me at (610) 595-0567 ext. 162 if you have any questions.

Sincerely,

Mark D. Evans

Mark D. Evans
Remedial Project Manager
By direction of the
Commanding Officer

Copy to:
Ms. Kymberlee Keckler, USEPA
Mr. Andy Stackpole, NSB-NLON
Mr. Corey Rich, B & R, Pittsburgh
Mr. Matt Cochran, B & R, Pittsburgh

ATTACHMENT A

SITE 15 - SPENT ACID AND DISPOSAL AREA
NAVAL SUBMARINE BASE, NEW LONDON
GROTON, CT

DILUTION RATIO

Assumptions:

1. The ridge northeast of the SASDA is a local groundwater divide.
2. The Thames river is the groundwater destination.
3. The source are removed is approximate triangle 48 ft. by 48 ft.
   Thus, area of removal is 1152 sq. ft.
4. Assume remaining contaminated soil is a triangle 100 ft by 100 ft.
   Area of remaining contaminated soil is 5000 sq. ft.
   (Does not account for the 1152 sq. ft. clean fill during the excavation.)

From the groundwater divide to the river take a 100 foot wide "path" of groundwater flow. The path length is approximately 270 feet upgradient and 1350 feet downgradient of the SASDA.

5. The upgradient area is 20% paved (mainly Building 440).
6. The downgradient area is mainly roads and parking areas.

Alternative dilution factor is

SUM (upgradient + downgradient)/source

(100x270)0.8 + (100x1050)1.0/5000

which yields **25.32** if groundwater flow goes through Goss Cove Landfill.