



**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



**BUREAU OF WATER MANAGEMENT
PERMITTING, ENFORCEMENT & REMEDIATION DIVISION
FEDERAL REMEDIATION PROGRAM**

February 21, 1997

Mr. Mark Evans
U.S. Department of the Navy
Northern Division, Naval Facilities Engineering Command, Code 1823
10 Industrial Way, Mail Stop 82
Lester, PA 19113-2090

Re: Request for Alternative Soil Remediation Criteria for Spent Acid Storage and Disposal Area (SASDA) at the Naval Submarine Base - New London (NSB-NLON), Groton, CT

Dear Mr. Evans:

I have received your letter dated January 8, 1997 regarding alternative soil remediation criteria for the Spent Acid Storage and Disposal Area. In this letter you request approval to apply an alternative Pollutant Mobility Criteria for lead in the soils at this site as provided in Section 22a-133k-2(c)(2)(D)(I) (bb) of the Regulations of Connecticut State Agencies (RCSA). That portion of the regulations allows for an alternative dilution factor to be applied in calculating the pollutant mobility criterion for a particular substance in a GB area. This alternative dilution factor is equal to "the ratio of the summation of the areas downgradient and upgradient of the release area to the release area...". The alternative Pollutant Mobility Criteria is equal to the relevant Ground Water Protection Criterion multiplied by the dilution factor.

You have calculated the dilution ratio to be 25. This calculation appears to be correct, and in accordance with the requirements of the regulations. However, this ratio was incorrectly multiplied by the GB Pollutant Mobility Criterion (0.15mg/l) specified in Appendix B of the Regulations to obtain a Pollutant Mobility Criterion of 3.75 mg/l. Under the regulations, the dilution ratio is multiplied by the Ground Water Protection Criterion (0.015 mg/l) specified in Appendix C, rather than the Pollutant Mobility Criterion. This results in a Pollutant Mobility Criterion for lead of 0.375 mg/l ($0.015 \text{ mg/l} \times 25 = 0.375 \text{ mg/l}$). The Ground Water Protection Criterion for a given substance is the same at any site regardless of the ground water classification. Some of the composite soil samples collected from the tank grave contained TCLP lead at concentrations exceeding the calculated Pollutant Mobility Criterion.

Your letter also addresses concerns previously raised by me regarding benzo(a)anthracene, benzo(a)pyrene, and benzo(b)fluoranthene, which were detected in a shallow soil sample collected in test boring 15TB9 at a depth of 0.5 to 2.5 feet. You indicated that the Navy feels that these soils meet the requirements for exception from the Pollutant Mobility Criteria specified in

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Spent Acid Storage and Disposal Area Soils

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RCSA Section 22a-133k-2 (c)(4)(C)(aa to ff). The Department agrees that these soils meet the specified criteria, and are, therefore exempt from the Pollutant Mobility Criteria. This exemption applies specifically to the soils in the sample collected from test boring 15TB9. All requirements of the Remediation Standard Regulations, including the Direct Exposure and Pollutant Mobility Criteria would apply to actions to remediate soils at other locations on the site.

If you have any questions regarding this letter, or you wish to arrange a meeting to discuss this issue, please contact me at (860) 424-3768.

Sincerely,



Mark R. Lewis
Senior Environmental Analyst
Federal Remediation Program
Permitting, Enforcement & Remediation Division
Bureau of Water Management

cc: Ms. Kymberlee Keckler, US EPA Region 1, Federal Facilities Section
Mr. Andy Stackpole, NSBNL Environmental Department
Mr. Corey Rich, Brown & Root Environmental
Mr. Matt Cochrane, Brown & Root Environmental