



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

July 19, 1995

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

Re: Follow-up to our June 29, 1995 meeting regarding the Draft Phase II Remedial Investigation Report

Dear Mr. Evans:

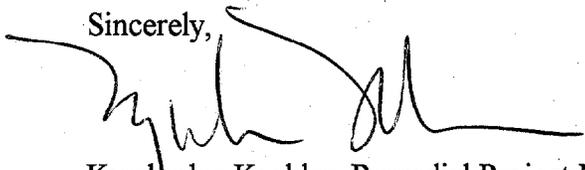
I am writing in response to our June 29, 1995 meeting regarding the Draft Phase II Remedial Investigation ("RI") Report where several action items were identified. During that meeting, EPA agreed to provide information concerning the identification of sites where an ecological risk-based soil screening approach would be necessary. EPA also agreed to provide specific reference to soil screening guidelines that would be compared with site-specific analytical results detected in surficial soils. These guidelines will be used to determine whether concentrations of contaminants in the soils pose risks to soil invertebrates or terrestrial vegetation. After this screening evaluation, additional data may be need to be collected in a Phase III RI to address the extent of contamination. Although this letter only identifies two sites, the actual number of sites is subject to change based upon EPA's review of your responses to our previous comments on the ecological risk memorandum from Menzie-Cura & Associates.

EPA recommends that soil data from the Rubble Fill Area at Bunker A86 (Site 4) be screened in accordance with the ecological guidelines. Table 10-3 (page 10-12) from the Draft Phase II RI, lists concentrations of PAHs, arsenic, copper and zinc that exceed soil screening values (Beyer, 1990; Will & Suter, 1994). The Canadian Council of Ministers of the Environment Subcommittee on Environmental Quality for Contaminated Sites (CCME, 1995) has developed soil guidance levels for agricultural, residential, and commercial land use. Average and maximum contaminant concentrations should be evaluated in light of appropriate risk-based guidelines (*see attached References*). Use of a particular guideline should be based on potential contaminant exposure to both soil invertebrates and terrestrial vegetation. Additional work may be warranted for bioaccumulating compounds. Site-specific concentrations should also be compared with regional background values. A similar approach for screening site-specific soil contaminants collected at the Over Bank Disposal Area Northeast (Site 14) will be need to be performed.



I look forward to reviewing the ecological risk assessment and a discussion of the methods described herein in the next iteration of the Phase II RI. Please do not hesitate to contact me at (617) 573-5777 should you have any questions or wish to arrange a meeting.

Sincerely,



Kimberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

- cc: Mark Lewis, CTDEP, Hartford, CT
Andy Stackpole, NSBNL, Groton, CT
Dan Winograd, USEPA, Boston, MA
Patti Tyler, USEPA, Boston, MA
Dale Weiss, TRC, Lowell, MA
Ken Finkelstein, NOAA, Boston, MA
Matthew Cochran, HNUS, Pittsburgh, PA

REFERENCES

Beyer, W. Nelson. 1990. *Evaluating Soil Contamination*. Biological Report 90 (2). United States Fish and Wildlife Service.

Canadian Council of Ministers of the Environment Subcommittee on Environmental Quality Criteria for Contaminated Sites ("CCME"). 1995. *A Protocol for the Derivation of Ecological Effects-Based and Human Health-Based Soil Quality Guidelines*.

Fitchko, J. 1989. *Criteria for Contaminated Soil/Sediment Cleanup*. Pudvan Publishing Co. Northbrook, Illinois.

Will, M.E. and G.W. Suter II. 1994. *Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Terrestrial Plants: 1994 Revision*. Oak Ridge National Laboratory, Oak Ridge, TN. ES/ER/TM-85/R1.