



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

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NSB NEW LONDON
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October 28, 1994

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: Site Characterization Report for Waste Oil Tank 5

Dear Mr. Evans:

I am writing in response to your request for EPA to review the Site Characterization Report for Waste Oil Tank 5. EPA is concerned with the methods used to develop Soil Screening Levels ("SSLs") and the possibility of contamination from the concrete entering the groundwater.

The SSLs developed for the groundwater pathway assume a dilution and attenuation factor ("DAF") of 10. EPA requests that a discussion of the rationale and basis for using the DAF method and a value of 10 be provided. The protectiveness percentile should also be reported concomitantly with the DAF. Site specific parameters (*e.g.*, location of water table, rainfall, size of the contaminated area, soil type) should be specified to either support use of the DAF listed or identify the need to use another method to develop SSLs. Usually, EPA applies the Summers Model, in which the dilution factor is calculated based on site-specific aquifer parameters such as hydraulic conductivity, hydraulic gradient, effective porosity, and aquifer thickness. EPA recommends that the Navy compare the results of the Summers model with those calculated in this report using the DAF method.

I understand that the Navy plans to close Waste Oil Tank 5 by emptying the tank, cleaning it, and backfilling it with clean fill. EPA is concerned, however, that the closure plan may not be protective of groundwater. The results presented in this report indicate that TCE was detected in groundwater at a level (6 $\mu\text{g}/\text{l}$) which exceeds the MCL (5 $\mu\text{g}/\text{l}$). Although this exceedance is marginal, confirmatory groundwater sampling should be performed. Groundwater elevations are historically variable at this location, as evidenced by occasional ponding of water during wet months. As a result, confirmatory sampling should be done when groundwater levels lower (*e.g.*, in the fall).

Based on the limited sampling performed in this investigation, it appears as though the soils above and below the tank should not be a source of groundwater contamination. However, the concrete samples were not analyzed for TCL/TAL; therefore it is unclear whether the



concrete could be a source of groundwater contamination. The results from the TCLP analyses from the tank bottom are not useful in determining the potential impact of the concrete on groundwater quality. I recommend analysis the concrete for all of the TCL/TAL contaminants contamination. Alternatively, long-term monitoring of the groundwater could be conducted to ensure that the groundwater is not contaminated.

The Site Characterization Report should discuss the vertical profile of contamination in the concrete that was stipulated in the January 1994 work plan.

I look forward to working with you and the Connecticut Department of Environmental Protection on this issue. 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, CT DEP, Hartford, CT
Andy Stackpole, NSBNL, New London, CT
Dan Winograd, USEPA, Boston, MA
Mary Sanderson, USEPA, Boston, MA
Patti Tyler, USEPA, Boston, MA
Dale Weiss, TRC, Lowell, MA