



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
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BOSTON, MASSACHUSETTS 02114-2023

July 30, 2003

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: Year 3 Annual Groundwater Monitoring Report for the Area A Landfill at the
Naval Submarine Base – New London

Dear Mr. Evans:

EPA reviewed the *Year 3 Annual Groundwater Monitoring Report for the Area A Landfill* in light of its responsiveness to EPA's previous review comments. The Navy's responses to EPA's March 10, 2003 comments (dated July 9, 2003) conclude two open issues, and the final version of the Year 3 Annual Groundwater Monitoring Report has been revised accordingly. General comment 5 concerned the adjustments to the monitoring program to reduce well coverage in the dredge spoil at the foot of the landfill, and a concern that coverage of the more conductive alluvium is minimal. Specific comment 6 concerned trace metals that are found in the dredge-spoil wells in exceedance of the new, proposed primary monitoring criteria.

In General comment 5, previous EPA comments noted that monitoring coverage of the deep alluvium that underlies the dredge spoil (and possibly portions of the landfill fill material) is minimal. It was suggested that the a decrease in monitoring coverage for the dredge spoil would free resources to increase monitoring of the alluvium. Navy proposes to sample monitoring wells 2LOW1D and 2LMW29A (2LOW1D is screened in both dredge spoil and alluvium, and 2LMW29A is screened in the alluvium; both are within the footprint of the landfill). Navy proposes to sample "...both wells for one round to determine the geochemical conditions present in each well and to determine if any contaminants of concern are present in the alluvium groundwater." This information will be used to select one of these wells. The text goes on to state that "The selected monitoring well will be included in the monitoring program as long as it continues to provide useful information." The Navy should provide an assessment of the data from these two wells and recommend which wells will remain in the program, in the next appropriate annual monitoring report.

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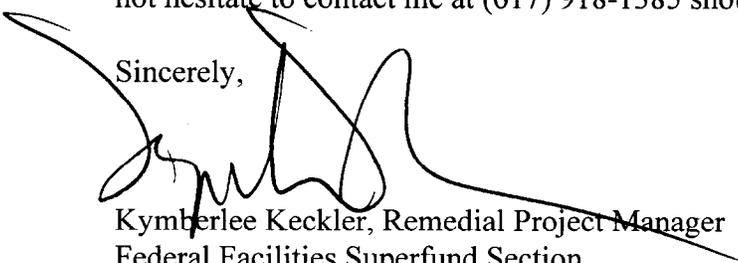
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The follow-up comment to specific comment 6 (page 5-2, §5.1) noted that questions associated with trace metals other than arsenic (Cd, Cr, Cu, Zn) have taken on greater significance in view of recently recommended adjustments to the primary monitoring criteria. Because the new criteria will cause some historical analytical results to become exceedances, EPA requested a rationale for the presence of these elements. The final response indicates that the text will be revised as requested. Section 4.5.4 in the final document has, in fact, been expanded to include a brief discussion of the metals of concern and their occurrence in the dredge-spoil wells. The discussion is limited by what Navy characterizes as “ambiguity in the data sets.” It is plausible that the mechanisms that mobilize the additional trace metals is the same as those that control arsenic (*i.e.*, reductive dissolution of ferric oxide and oxidation of ferrous sulfide). The added text will serve as a point of reference should issues surrounding apparently elevated trace metals arise in the future.

I look forward to working with you and the Connecticut Department of Environmental Protection to protect the groundwater resources of the Naval Submarine Base. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,



Kimberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

cc: Mark Lewis, CTDEP, Hartford, CT
Dick Conant, NSBNL, Groton, CT
Jennifer Stump, Gannett Fleming, Harrisburg, PA