



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

JOHN F. KENNEDY FEDERAL BUILDING
BOSTON, MASSACHUSETTS 02203-0001

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NSB NEW LONDON
5090.3a

January 12, 1998

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: Draft final report Area A Landfill Interim Remedial Action at the Naval Submarine Base-
New London

Dear Mr. Evans:

EPA reviewed volumes I through VI of the *Draft Final Report Area A Interim Remedial Action* (Draft FR) at the Naval Submarine Base New London, Groton, Connecticut dated November 1997. EPA evaluated the Draft FR compliance with respect to the following documents developed for the Area A Landfill Interim Remedial Action and remedial action guidance document: *Material Quality Assurance/Construction Quality Assurance (MQA/CQA) Plan*, Brown & Root Environmental, March 1997; *Revised Design Analysis Report (RDAR)*, Brown & Root Environmental, December 1996; *Project Specifications (PS)*, Halliburton NUS Corporation, May 1995; and *EPA Oversight of Remedial Designs and Remedial Actions Performed by PRPs*, U.S. EPA Publication 9355.5-01/FS, February 1990. Detailed comments are provided in Attachment A.

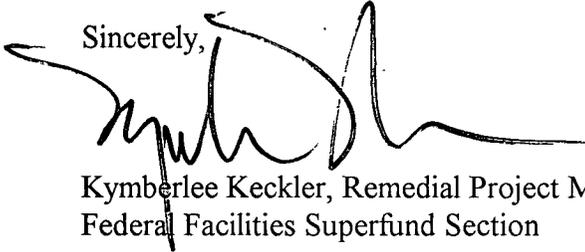
Although EPA reviewed the Draft FR in its entirety, special attention was directed towards review of the field changes and adherence to the PS requirements for the landfill capping system. This included reviewing: QC and material submittal conformance, the requests for information and field change requests submitted by Foster Wheeler Environmental Corporation, the frequency of field and laboratory conformance testing for geosynthetics and on-/off- site borrow materials, and as-built plans and details.

This Draft FR was reviewed and found to be in general, but not full, compliance with the above-mentioned documents. There are certain items noted in Attachment A that contradict the contract documents. There are also minor comments that need to be addressed. The construction procedures, inspection activities, field and laboratory test results, and as-built survey conducted during the interim remedial action at the Area A Landfill site documented in the Draft FR, were performed in accordance with the Material Quality Assurance/Construction Quality Assurance Plan, the Revised Design Analysis Report, and the Project Specifications.

The overall condition of the appendices could be improved by beginning each appendix with a table of contents. Also, inserting separators for major items and organizing with regard to laboratory or field test would make each appendix easier to follow and read.

I look forward to working with you on this issue. Please do not hesitate to contact me at (617) 573-5777 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kimberlee Keckler', written over a vertical line that extends from the signature down to the typed name below.

Kimberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Mark Lewis, CTDEP, Hartford, CT
Dick Conant, NSBNL, Groton, CT
Yoon-Jean Choi, USEPA, Boston, MA
Jennifer Stump, Gannett Fleming, Harrisburg, PA
Corey Rich, Brown & Root, Pittsburgh, PA

ATTACHMENT A

Page

Comment

The following items contradict contract document language.

- p. 6-8, § 6.2.2.5 In accordance with Specification Section 02777, the minimum width for destructive seam testing samples should be 18 inches. The report identifies the sample width as being 12 inches. Please explain why the samples were only 12 inches wide.
- p. 7-8, § 7.5.3 The text states destructive test samples are collected every 5,000 linear feet of seam. Specification Section 02777 requires destructive seam sample testing one per 500 linear feet of seam. Please explain the contradiction of sample collection frequency.
- Appendix E The frequency for testing common/select fill per the MQA\CQA was every 200 feet along the temporary road baseline. However, no test data is available for material excavated from Stations 8+00 to 10+00 and 22+00 to 28+50. Please explain why there are no data available or provide missing data.
- Appendix H.7.1 Two Field Inspection Forms were not completed. One is dated 5/21/97, the other is neither signed nor dated. These reports should be revisited and properly completed.

Minor Comments

- p. 4-9, § 4.3 The Nicolon HS 1150 woven geotextile was “installed over the completed subgrade surface to minimize future landfill settlement” as stated in Section 5.2.1 under Field Change Request (FCR) No. 1. This geotextile is not part of the original design, and consequently, is not shown in Figure 4-2. This should be shown in Figure 4-2 with a note attached stating that its only use is for Area 4 subgrade reinforcement.

Additionally, the above quoted sentence from the text indicates that the geotextile will minimize future landfill settlement. The purpose of the geotextile is for minimizing the *impact* future landfill settlement may have on the integrity of the final cover system. If the geotextile is placed on the subgrade surface, it is protecting the final cover system from settling simultaneously with the landfill. This should be clarified in the text.

- p. 4-14, § 4.3.3 The text identifies a 5-year warranty for the Geosynthetic Clay Liner (GCL) provided by the manufacturer, CETCO. The appendix containing this warranty should be stated in the text of this section so it can be easily located.
- p.4-15, § 4.3.4 The text identifies a limited warranty for the geomembrane provided by the manufacturer, GSE. The appendix containing the warranty should be stated in the text of this section so it can be easily located.
- p. 6-6, § 6.2.1 The as-built drawings are identified in the text as being included in Appendix I. The drawings were found in Appendix J, and therefore, the text should be revised accordingly.
- p. 6-11, § 6.5 The text identifies the two Non-conformance Reports. The appendix containing these reports should be stated in the text of this section so they can be easily located.
- Appendix J.3 The side slopes of Detail 1 of 3 of Drawing No. C-30 are labeled 4 and 2.5 (MIN):1. These labels should be revised to reflect the report text and be changed to “4 and 2.5 (MAX):1.”

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