



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

October 22, 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: Annual Landfill Inspection Report 2003 for Site No. 6, DRMO Landfill

Dear Mr. Evans:

EPA reviewed the *Annual Landfill Inspection Report 2003 for Site No. 6, DRMO Landfill, Naval Submarine Base - New London Groton, Connecticut*, dated October 2003, in light of its consistency of the inspection with the O&M manual requirements, and the completeness and technical accuracy of the information presented. This document presents a report for the annual landfill inspection at the DRMO Landfill conducted on July 11, 2003. In general, it appears that a comprehensive inspection was conducted by apparently qualified personnel, in accordance with the O&M Manual requirements. EPA believes, however, that this should be better documented by including additional information described in the comments. A few aspects of the inspection were not described in sufficient detail to determine if all aspects of the inspection were conducted as required by the O&M Manual. Detailed comments are provided in Attachment A.

The inspection checklist, which should have been included in the Attachments section, was missing. The inspection checklist is required to better document that all aspects of the inspection have been completed. Please include a copy of the inspection checklist in this report.

Photographs of deficiencies should be included in the Attachments Section.

The report should be edited to include an introductory section that lists the resources that were reviewed by the inspection contractor to provide background for conducting the inspection at this facility. This discussion should document that the inspection contractor had sufficient knowledge of the site and site history to properly and comprehensively conduct the inspection. The introductory section should also document the notification given to the regulatory agencies regarding the inspection schedule, as the agencies have requested and as the O&M Manual requires (*see* Section 1.7.1 of the O&M Manual). Please include the

notification dates and the regulatory personnel who were notified. Finally, include in either the introductory or attachments section information about the personnel who conducted the inspection, such as their Connecticut certifications and their relevant experience to demonstrate that the inspection was conducted by qualified personnel, as required by the O&M Manual.

A supplemental inspection is warranted to complete the inspection of those items that could not be properly inspected because of adverse weather or tidal conditions on the day the inspection was conducted. If this inspection has not already occurred, it should be performed as soon as possible. Please advise EPA regarding the schedule for this supplemental inspection. In the future, if inspection activities cannot occur because of weather conditions, the inspection activities should be performed the next day or as soon as weather conditions improve.

The inspection report has not addressed the apparent area of settlement in the capped area that was identified during the first five-year inspection on April 10, 2001. The five-year review inspection also stated that the monitoring wells and dedicated sampling equipment were not being properly maintained and were in need of maintenance or repair. The inspection report should be edited to address the former observation, and to the extent practical, should also address the later observation (with the understanding that well internal components would be inspected during groundwater monitoring activities).

Section 10.3.1.2 of the Interim Record of Decision (IROD) for the DRMO states that "The Navy shall review on a quarterly basis the status of adherence to the LURs (specified in Section 10.3.1.1 of the IROD). The Navy shall forward an annual report describing the present and anticipated land use and LURs at DRMO to EPA and the CTDEP certifying retention of the specified LURs for the DRMO site." The Navy should incorporate the specified reporting into the O&M Annual Report.

EPA recommends that this inspection report be revised as indicated in these comments, or that the additional information specified in the comments be provided to EPA. The next inspection report should include the items specified in the comments, as relevant.

EPA also notes that a Plan of Action, as required by the O&M Manual, was not submitted to address the corrective actions recommended in the inspection report. This Plan of Action must be completed promptly and corrective actions scheduled to address the deficiencies noted for this inspection. Since the inspection was completed over three months ago, EPA would have expected the Plan of Action and the corrective actions to have been completed. Please keep EPA apprized of the status of the corrective actions and the documents supporting the corrective actions taken.

I look forward to working with you and the Connecticut Department of Environmental Protection to ensure that the DRMO landfill remedy remains protective of human health and the environment. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kymberlee Keckler', written over a horizontal line.

Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

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

ATTACHMENT A

- | <u>Page</u> | <u>Comment</u> |
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| p. 1 | Under Purpose: In the second paragraph, please add the names of the personnel who conducted the inspection. |
| p. 2 | Under Signage: The text states that no signs were observed on the eastern and southern perimeter fencing. It should be noted that the Interim Record of Decision (IROD) stipulated that "Signs will be posted along the perimeter and at the front entrance to the site," (ROD Section 10.1.2). The ROD further states that "The Navy shall ensure that notice of the existence of the cover system and the LURs at the DRMO are conspicuously posted." Section 10.1.3.1 of the ROD lists the required LURs for the DRMO. The annual inspection report does not indicate that the LURs are posted. If the LURs are not posted, please edit the inspection report to add this as a deficiency. If they are posted, please edit the report to indicate where they are posted. |
| p. 2 | Under Asphalt Pavement: Please provide photographs in the Attachments Section documenting the extent of the damage owing to the sink hole and its spatial relationship to the monitoring wells. |

The text in the third paragraph suggests that the asphalt pavement could not be adequately inspected because of standing water over a portion of the capped area. In the future, if inspection activities cannot occur because of weather conditions, the inspection activities should be performed the next day or as soon as weather conditions improve. Inspection of the full extent of the asphalt pavement is required to properly inspect the DRMO cap. If standing water prevented the complete inspection of the asphalt in the capped area, a supplemental inspection should have been conducted to properly complete the inspection, and will be necessary to complete the inspection requirements. Please explain the impact of the standing water on the completeness of the inspection. Please discuss the depth of the standing water and include photographs of the standing water in the Attachments Section.

In the fourth paragraph, the text suggests that a portion of the capped area routinely becomes inundated by the high tide. This is a deficiency that appears to create a question regarding the protectiveness of the remedy. Further evaluation of the protectiveness of the remedy is warranted.

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| p. 3 | Under Asphalt Pavement: The first paragraph on this page suggests that some of the wells were beneath standing water so the exterior of the wells could not be |
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inspected. Please edit the text to identify the wells that actually were inspected and list the wells that were not inspected because of the standing water.

- p. 3 Under Storm Water Features: Please expand the discussion of storm water flow through the swale to clarify why storm water flow through the swale was characterized as not significant. Based on the weather conditions on the day of the inspection, which included moderate to heavy precipitation, a noticeable storm water flow would be expected. Also, (related to the last sentence on page 2 regarding the high tide) please clarify what impact the high tide may have on the flow through the swale given that the tide reportedly inundates the western edge of the cap. Does the high tide create conditions that would cause the storm water to back up in the swale or for storm water to overflow the swale onto the capped area?

The last sentence in the first paragraph states that accumulated sediment was not observed in the catch basin. This suggests that the interior of the catch basin was inspected and that little or no water was in the catch basin, which sounds odd given the weather conditions during the inspection. Please clarify this statement, indicating how it was determined that no sediment had accumulated in the catch basin. Furthermore, if the interior of the catch basin was observed, please indicate if water was running freely through the outlet of the catch basin or if the water was backed up in the catch basin owing to the tidal conditions. If the weather or tidal conditions prevented a complete inspection of the catch basin and its outlet, a supplemental inspection should have been conducted to properly complete the inspection of the DRMO cap, and will be necessary to complete the inspection requirements. Please clarify the impact of the weather and tidal conditions on the completeness of the inspection.

Deficiency Please add Item No. 6: High Tide inundation of the landfill cap. The deficiency is
Log that the capped area becomes flooded with standing water during high tide. (If necessary, an inspection of the DRMO during high tide should be conducted to verify this information.) Potential recommended actions should include more frequent routine inspections of the DRMO landfill for tidal damage.

Figure 1-1 Please edit the scale of the figure so that monitoring wells 6MW5S, 6MW5D, 6MW6S, and 6MW6D are also shown on the site plan.

Please annotate the site plan to show the limit of the standing water observed during the inspection and, based on facility personnel reports, the limit of standing water during high tides.