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LETTER AND COMMENTS FROM MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL
PROTECTION REGARDING 30% REMEDIAL DESIGN SUBMISSION FOR WEST GATE
LANDFILL SITE 1 NAS SOUTH WEYMOUTH MA
12/09/2009
MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION



COMMONWEALTH OF MASSACHUSETTS
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Mr. Brian Helland, RPM
BRAC PMO, Northeast
4911 South Broad Street
Philadelphia, PA 19112

Re: 30% Remedial Design Submission
West Gate Landfill
Former South Weymouth NAS
RTN 4-3002621
December 9, 2009

Dear Mr. Helland:

The Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Site Cleanup, has reviewed the draft *30% Remedial Design Submission, Site 1, West Gate Landfill, Naval Air Station South Weymouth, Weymouth, Massachusetts*, dated November 2009. Comments are attached.

If you have any questions about the comments, I can be reached at (617) 348-4005.

Sincerely,

David Chaffin
Federal Facilities Project Manager
Bureau of Waste Site Cleanup

CC: D. Barney, USN-S. Weymouth
K. Keckler, USEPA
Chief Executive Officer, SSTTDC
RAB Members
A. Malewicz, MassDEP-Boston

**MASSDEP COMMENTS ON
30% REMEDIAL DESIGN SUBMISSION
WEST GATE LANDFILL
FORMER SOUTH WEYMOUTH NAVAL AIR STATION (RTN 4-3002621)
DECEMBER 9, 2009**

1. Section 3.1: The design should ensure that alterations to regulated resource areas are minimized in accordance with the Wetlands Protection Act. Accordingly, in addition to addressing the wetlands located west and south of the site, the proposed design of the east side of the cover system should be modified to minimize alterations to the riverfront area located within 200 feet of French Stream (310 CMR 10.58).

The west bank of the stream is a particular concern because the vegetation established there, which inhibits erosion, controls stormwater, and provides wildlife habitat and shade for aquatic species, would not be fully restored. For example, to maintain the integrity of the cover system, trees would not be reestablished on the cover system or the proposed stream-lining rip-rap. In addition, the proposed design would replace the existing bank, which has been stable for almost 70 years, with a cover system that would be extremely vulnerable to erosion due to flooding and high velocity currents during storm events.

A preliminary review of historic aerial photographs, topographic maps, and subsurface data obtained during the pre-design investigation (e.g., boring logs, test pit logs, and EM survey results) indicates that removal of the stream bank may not be necessary. More specifically, these records indicate that the eastern limit of buried waste is not located as close to French Stream as assumed; a 60-foot wide soil berm may have been constructed to create the west side of the stream channel before waste was first disposed at the site, potentially forming a waste-free barrier between the stream and the site. Such construction may have been necessary during initial phases of base construction to dewater upstream wetlands that existed prior to base construction. The absence of waste in this embankment area could potentially allow a design that does not entail any disturbance of the west bank of French Stream, as the toe of the cover system could be shifted westward and a rip-rap-lined drainage ditch could be located at the toe of the cover system to divert stormwater from the west bank of French Stream.

2. Section 3.2: Stormwater controls should meet the requirements of 310 CMR 19.115. In particular, the controls should be developed in accordance with the *Massachusetts Stormwater Management Handbook*. Similarly, erosion and sedimentation controls should meet the requirements of the *Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas*. In addition, preparation of a Stormwater Pollution Prevention Plan (SWPPP) will be necessary to manage stormwater discharges during construction. Refer to the Navy's January 2008 *Corrective Action Design for Small Landfill, NAS South Weymouth, Weymouth, Massachusetts*, for an example of a site-specific remedial design that addresses these requirements.

3. Section 3.2: The proposed diversion swale/berm could be eliminated and replaced with a more effective rip-rap-lined channel if the design can be modified as suggested in Comment 1.
4. Drawings C-1, C-2, and C-3 should identify the riverfront area associated with French Stream.
5. Drawing C-1 should be updated to reflect the work done during the pre-design investigation (e.g., sample and well locations, extent of debris/contamination, geotechnical boring locations, and wetland delineation), and the proposed fence location should be deleted from the drawing.
6. Drawing C-3, Detail 2: As explained in Comment 1, the significant alterations proposed for the riverfront area may not be necessary. The design should be modified to the extent possible to minimize the portion of the riverfront area that would be altered. In particular, alteration of the west bank of the stream should be minimized.
7. Drawing C-3, Detail 5: The proposed diversion swale/berm could be eliminated and replaced with a more effective rip-rap-lined channel if the design can be modified as described in Comment 1.
8. Drawing C-3, Detail 6: The gas vents should be secured to protect against vandalism. A chain-link fence equipped with a locking gate, similar to that used at the Rubble Disposal Area, is suggested.
9. Appendix C, Page 3, Part B: The reason for assessing discharge velocities assuming a 10-year storm, rather than the 25- and 100-year storms assumed in the preceding section, should be explained.