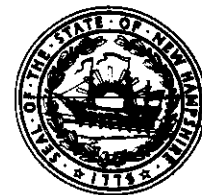




J.B.

**State of New Hampshire**  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095  
(603) 271-2900 FAX (603) 271-2456



March 23, 1999

Mr. Larry B. Lackey  
North Country Environmental Services, Inc.  
501 South Street, Box E, Suite 302  
Bow, New Hampshire 03304

**SUBJECT: BETHLEHEM - NORTH COUNTRY ENVIRONMENTAL SERVICES (NCES)  
LANDFILL; GROUNDWATER AND LEACHATE QUALITY MONITORING  
ISSUES (DES #198704033)**

Dear Mr. Lackey:

The Department of Environmental Services (Department) has reviewed the November 1998 Water Quality Monitoring Results, received January 12, 1999; the Addendum to 1998 Summary of Water Quality Monitoring, received February 1, 1999; and the Stage II-Phase I Sodium Bromide Application Report, received February 2, 1999. These reports have been prepared by Sanborn Head & Associates, Inc. (SHA) on behalf of NCES. Review comments were discussed with you and R. Scott Shillaber of SHA, at the meeting on March 4, 1999. Selected items from that meeting are listed below. These items either require a response from NCES/SHA or are provided to you as guidance for the future operation of Stage II/Phase II.

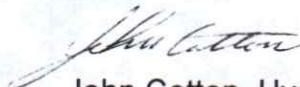
1. Please address the reason(s) for the recent occurrence of arsenic at concentrations generally exceeding Ambient Groundwater Quality Standards (AGQS) of 0.05 mg/L in the 100 series monitor wells. Arsenic concentrations in these wells were generally below the detection limit of 0.01 mg/L prior to 1997.
2. Please address the detection in 1998 of low levels of dichlorodifluoromethane and trichlorofluoromethane in monitor well MW-404U.
3. Please continue to investigate the potential sources of volatile organic compounds, including acetone and methylene chloride, in monitor wells MW-406U&L. Investigation should include comparison of the times of removal(s) of waste beyond the Stage I anchor berm, leachate breakouts, and secondary liner flows with the times of high acetone concentrations in MW-406L.
4. Please review and provide documentation on the past and recent occurrence of methylene chloride in all monitor wells near the former unlined landfill.
5. The Department concurs with the proposal to use bromide as a tracer in Stage II/Phase II. Protocols for the application of sodium bromide, target concentration of bromide in primary leachate and testing for bromide will be included in the Operational Approval.

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6. Please note that the Department will require leachate to be analyzed for bromide using both analytical procedures EPA 320.1 and EPA 300 because different laboratories used by NCES (and the City of Lebanon for a similar bromide application project) have reached different conclusions as to the better method. Please provide detailed documentation of sample collection and analyses.
7. The Department requests that the data for MW-804 and MW-805 be added to Cross Section C-C'. The data for MW-801 shall be added to Cross Section E-E'. A new Cross Section (I-I') shall be constructed from B-102S and B-102(D) through MW-801, B-103(S) and B-103D, MW-802, MW-803 and B-101 to MW-604. These cross sections may be submitted as a separate technical report or included with the hydrogeological report of Stage III.

If you have any questions pertaining to this letter, please contact me at (603) 271-2925.

Sincerely,



John Cotton, Hydrogeologist  
Waste Management Division

JEC/neoI:\gwlib\conman\solwaste\87043327

cc: Richard Reed, SWMB  
Pamela Sprague, P&DRS  
John Regan, HWRB  
R. Scott Shillaber, Sanborn, Head & Associates  
Town of Bethlehem, Board of Selectmen  
HWRB File