NCDENR
North Carolina Department of Environment and Natural Resources

Dexter R. Matthews, Director | Division of Waste Management | Michael F. Easley, Governor
William G. Ross Jr., Secretary

May 11, 2005

Ms. Joan Smyth, L.G.
G.N. Richardson & Associates
14 N. Boylan Avenue
Raleigh, N.C. 27603

RE: Black Bear Disposal, LLC,
a subsidiary of Waste Industries, USA, Inc.
Revised Site Hydrogeologic Report
Camden County, North Carolina

Dear Ms. Smyth,

The April 20, 2005, revisions to the Revised Site Hydrogeologic Report for the proposed Black Bear Disposal facility in Camden County have been reviewed for hydrogeologic concerns by the Solid Waste Section. There are still some items in the Report that need clarification and/or revision. Please respond to the following questions and comments:

Table of Contents: With the recent revisions to the text, the pagination referenced in the Table of Contents does not match the pagination in the text of the Report. Also, there is still no reference to section 4.7.3, regarding the Long-term Seasonal High Water Table.

4.3 In the third paragraph on page 8: The Response To Comments indicates that "THG-1 was installed with a hydrated 8-foot bentonite seal", however the text in the Report still indicates a 2-foot bentonite seal.

4.7.1 When the recent revisions were made to the last paragraph on this section (on page 14), it appears some of the text was left out and/or some revisions were inserted in the wrong location.

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4.8.2 Again, while the information currently presented in section 4.8.2 based on depth is useful, the Rules require that representative values for hydraulic conductivity, porosity, and effective porosity be provide for each lithologic (hydrogeologic) unit identified at the site. This information needs to be provided for the shallow soils characterized as having more silt/clay content.

4.8.2 In the discussion of the linear velocity of ground water on page 18, some of the text from the previous Reports has been left out. Was this an oversight, or was it done deliberately?

Table 1 The Screen Interval values for B-1 and B-7 do not match the Well Construction Logs. The Date of Construction for B-3S and B-7S appears incorrect.

Table 2 The values for Effective Porosity for B-5 and B-18 still appear to be too low. Applying the soil grain size values in Appendix C to the Soil Classification Triangle would appear to yield a value of 45 for B-5, and a value of 44 or 45 for B-18.

Table 4 I am still not able to duplicate the Annual Average value of 49.93 presented in this Table. How was this value determined? (The sum of the Monthly Average values is 49.80, and the average of the Annual values for which complete data is available is 51.46.)

Table 6 The Ground Elev. values for B-1s and B-1 still appear to be reversed in both of the tables included as part of Table 6.

Drawing 2A: The TOC Elevation for B-100D is incorrect.

Drawings 3 & 4: I have still not been able to correlate the information presented on the cross-sections with the Boring Logs and Water Table data in the Report. There still appear to be errors in the cross-sections. There also appears to be unsubstantiated assumptions used. (At least I am unable to find supporting documentation for some of the assumptions.) Perhaps it would be easier to resolve these problems if I could meet with whoever has prepared the cross-sections and we could discuss these issues.

Appendix E - Surficial Aquifer Pump Test and Model:

1.4 After the revisions to the text regarding the number of wells upgradient and downgradient, the verb tenses and language of the text needs to also be revised.

- An complete replacement package was submitted for Appendix E. Were there any revisions included in this package other than those specifically addressed in the Response To Comments? If possible, future revisions should be just for selected text, tables, etc. in order to facilitate easier review.

Please respond to these questions and comments, and provide revisions as necessary. A meeting would facilitate the resolution of the remaining questions regarding the hydrogeologic cross-sections. To arrange for a meeting and/or if you have any questions regarding items in this letter, please contact me at (919) 508-8507.

Sincerely,

Bobby Lutfy

Bobby Lutfy
Hydrogeologist
Solid Waste Section

cc: Jim Barber Solid Waste Section
Ed Mussler Solid Waste Section
John Crowder SWS - Wilmington
Chuck Boyette SWS - Washington
Jerry Johnson Waste Industries