

State of North Carolina  
Department of Environment,  
Health and Natural Resources  
Division of Solid Waste Management

James B. Hunt, Jr., Governor  
Jonathan B. Howes, Secretary  
William L. Meyer, Director



November 22, 1994

*No written response submitted  
Phone call between  
Tom Beggs + Jim Bateson  
on Jan 24, 1995*

Law Environmental, Inc.  
P.O. Box 240674  
Charlotte, NC 28224-0674

Attention: Mr. Thomas F. Beggs, P.E.  
Mr. P. Greg Garrett, E.I.T.

Subject: Proposed C&D Landfill, Madison Co., NC  
Response to 5/6/94 Permit Application  
Hydrogeological Considerations  
Permit 58-A Revision

Fac/Perm/Co ID #	Date	Doc ID#
58-13 <i>mg</i>	7/19/94	DIN 19416

Gentlemen:

The Solid Waste Section recently performed a completeness review of the hydrogeological aspects of the above referenced application. Several items need to be addressed before a technical review of the application can be completed.

1. The buffer zone between the proposed C&D waste boundary and the property line to the northeast needs to be 200' wide, rather than 100'. This issue has been covered in previous discussions. The construction plans need to be revised to allow for this buffer.
2. The application lacks sufficient information to allow assessment of vertical separation between waste and long-term seasonal high groundwater levels, or to review the suitability of any proposed water quality monitoring plan. All items in .0504 (1)(c) of 15A NCAC 13B will need to be provided, except for the following: volume percent water of lithologic units, and remolded samples of cover soils, (.0504(1)(c)(i), items (E)(II) and (F)(I through III)).

Several piezometers will need to be installed in the footprint of the proposed C&D cell to provide the information needed. A meeting with the Solid Waste Section is recommended before mobilizing a drill rig.

Law Environmental, Inc.  
Madison Co. C&D Landfill  
November 22, 1994  
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On the dates that water level readings are taken in new piezometers, water level measurements should be taken from existing monitoring wells at the facility and from piezometers in borings B-1 through B-22, if they still exist. This will provide data useful in the estimation of long term seasonal high water table elevations.

3. The lined municipal landfill unit and the proposed C&D landfill unit are required to be monitored separately and distinctly from each other. A proposed water quality monitoring plan designed to meet this objective needs to be included in a revised permit application. The proposed monitoring plan, as well as the subsurface investigation requested above, must be prepared and sealed by a N.C. Licensed Professional Geologist.

Respectfully,



Jim Bateson,  
Hydrogeologist  
Solid Waste Section

cc: Jim Brown - Madison County  
Jan McHargue  
Bobby Lutfy  
Lula Melton

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November 22, 1994

*No written response submitted  
Phone call between  
Sam Beggs & Jim Bateson  
on Jan 24, 1995*

Law Environmental, Inc.  
P.O. Box 240674  
Charlotte, NC 28224-0674

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Mr. P. Greg Garrett, E.I.T.

Subject: Proposed C&D Landfill, Madison Co., NC  
Response to 5/6/94 Permit Application  
Hydrogeological Considerations  
Permit 58-A Revision

Fac/Perm/Co ID #	Date	Doc ID#
58-13 <i>mg</i>	7/19/94	DIN 1446

Gentlemen:

The Solid Waste Section recently performed a completeness review of the hydrogeological aspects of the above referenced application. Several items need to be addressed before a technical review of the application can be completed.

1. The buffer zone between the proposed C&D waste boundary and the property line to the northeast needs to be 200' wide, rather than 100'. This issue has been covered in previous discussions. The construction plans need to be revised to allow for this buffer.
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Respectfully,



Jim Bateson,  
Hydrogeologist  
Solid Waste Section

cc: Jim Brown - Madison County  
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State of North Carolina  
Department of Environment,  
Health and Natural Resources  
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James B. Hunt, Jr., Governor  
Jonathan B. Howes, Secretary  
William L. Meyer, Director

June 24, 1994

Mr. P. Greg Garrett, E.I.T.  
Law Environmental, Inc.  
2801 Yorkmont Road, Suite 300  
Charlotte, NC 28024-0674

RE: Completeness Review - Madison County Construction Plan  
Application of Proposed Construction/Demolition Landfill  
(Permit No. 58A)

Dear Mr. Garrett:

The Solid Waste Section (the Section) recently performed a completeness review, excluding the geological, hydrogeological, and ground and surface water monitoring aspects of the referenced application. The construction plan application for the proposed Madison County Construction Demolition (C/D) Landfill located near the town of Marshall on the former Brigman Property must meet the requirements of 15A NCAC 13B.0503(2) and .0504(2), as well as, Policy Memorandum No. 16.

The Section needs additional information from Law Environmental, Inc. in order to complete its review of the referenced application. The construction plan application dated May 6, 1994 does not address certain requirements of 15A NCAC 13B.0503(2). More specifically, 0503(2)(a)(i) and (ii) state that the concentration of explosive gases generated by the site shall not exceed:

- (i) twenty-five percent of the limit for the gases in site structures (excluding gas control or recovery system components) and
- (ii) the lower explosive limit for the gases at the property boundary.

Please submit Madison County's gas monitoring plan to illustrate how the above requirement will be met.

In addition, the construction plan application does not address some of the requirements of .0504(2)(h). More specifically, the following must be submitted in a written report in accordance with the following rule citations:

.0504(2) (h) (iv) - anticipated lifetime of the project; Please submit the volume of construction/demolition material expected, volume of the C/D cell, and calculations for determining the lifetime of the C/D cell.

.0504(2) (h) (vi) - earthwork calculations; and

.0504(2) (h) (vii) - seeding specifications and schedules.

Page 4-3 of the referenced application states that the landfill unit is designed so that the bottom elevation of landfilled waste will be a minimum of four feet above the seasonal high ground water table. Please submit settlement calculations demonstrating this four feet of separation.

As stated above, ground water monitoring aspects will be reviewed by the Section's Hydrogeologist and submitted under separate cover. However, additional ground water monitoring wells will be required in the vicinity of the C/D cell.

Drawing 2 of the construction application indicates that LCID waste has been placed in the proposed C/D cell, and it is the Section's understanding that C/D waste will be placed in the remainder of this C/D waste cell. Although a 200-foot buffer is not required between the LCID waste and property lines, the Section requests that a 200-foot minimum buffer exist between the C/D waste and property lines.

In order to expedite review of the proposed construction application, please submit information requested herein to the Section as soon as possible. If you have any questions, please contact me or Ellis Cayton at (919) 733-0692.

Sincerely,

*Lula M. Harris*

Lula M. Harris, E.I.T.  
Solid Waste Section

cc: James Patterson  
Julian Foscue  
Jan Mchargue, P.E.  
Jim Brown (Madison County)  
Bobby Lufty  
Ellis Cayton, P.E.