



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Beverly Eaves Perdue
Governor

Dexter R. Matthews
Director

Dee Freeman
Secretary

July 31, 2009

Mr. Paul Dow
Altamont Environmental, Inc.
231 Haywood Street
Asheville, North Carolina 28801

Subject: Request for Additional Information
International Paper Company Landfill 5C
Haywood County, Permit #44-01, Document ID No. 8064

Mr. Dow:

The Division of Waste Management, Solid Waste Section (Section) has completed a review of the Environmental and Geotechnical Investigation submittal for the closed International Paper Company Landfill 5C. As stated, the investigation is necessary to determine the suitability of the landfill for a proposed Livestock Market and Events Center. It has been determined the Section requires clarification or additional information in order to make a decision on the proposed activities. Please provide a response for each of the following items:

Geotechnical Evaluation

1. All proposed boring locations must be indicated on a site plan including labels for the borings proposed for LFG monitoring.
2. A disposal plan for all waste material removed during boring activities must be presented.
3. Verify a volume of pure bentonite will be used at the bottom of each borehole including those planned as landfill gas probes.

Landfill Gas Monitoring

4. The proposed number of landfill gas monitoring probes is insufficient to monitor an approximate 30.4 acre area. Please install additional monitoring probes, with a concentration of wells positioned along the leachate force main shown on the western side of the property boundary area. Pipelines or trenches existing nearby can serve as potential conduits for landfill gas migration. If there are other known pipelines, trenches, or subsurface utility lines in the area, please install landfill gas monitoring probes in adjacent locations. Gas monitoring in on-site structures also needs to be implemented, with accumulation in gases likely occurring in corners along floors, ceilings, and at cracks in the floor.
5. Please describe equipment used to monitor the landfill gas monitoring probes.
6. Please describe the frequency of landfill gas monitoring. Subtitle D regulations require quarterly monitoring of methane.
7. Landfill gas probes are installed above the watering table using construction techniques similar to those methods used for installation of groundwater monitoring wells. It was unclear from the

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diagram provided whether the screen intersects the water table. Please clarify that the screen in the landfill gas monitoring probe is positioned above the water table.

If you should have any questions regarding this matter please contact me at (828) 296-4703, or by email at allen.gaither@ncdenr.gov .

Sincerely,

A handwritten signature in black ink, appearing to read 'Allen Gaither', with a long horizontal stroke extending to the right.

Allen Gaither
Environmental Engineer

Cc: Tom Richardson – International Paper
Christine Ritter – SWS/RCO
Andrea Keller – SWS/ACO