



North Carolina Department of Environment and Natural Resources

Division of Waste Management

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December 16, 2010

Mr. Jim Smith  
Clay County Solid Waste Director  
P. O. Box 118  
Hayesville, North Carolina 28904

Subject: Landfill Gas Monitoring Plan  
Clay County Closed MSW Landfill  
Permit 22-01  
Doc ID 12317

Dear Mr. Smith:

The Solid Waste Section (SWS) reviewed the Landfill Gas Monitoring Plan (plan) for the Clay County Municipal Solid Waste Landfill (MSW). The plan consists of a cover letter, description of the plan, well construction detail, monitoring data form, and map. McGill Associates, P.A (McGill) submitted the plan, which has been entered into the SWS database as Doc ID 12299. Clay County MSW Landfill submitted the plan in response to a review by the SWS Field Operations Branch. Revision of the plan is necessary.

What follows are required revisions to comply with Regulation 15A NCAC 13B .503 (2) and current landfill gas monitoring requirements for landfills regulated by the SWS. Additional guidance for Landfill Gas Monitoring Plans can be found at the SWS website <http://portal.ncdenr.org/web/wm/sw>. Specified below are the required revisions.

Somewhere in the plan state that all well construction will be in accordance to applicable standards specified in Regulation 15A NCAC 2C.

**Outline entitled "Landfill Gas Control"**

In Part (b) specify frequency at which landfill gas monitoring wells will be monitored.

**Appendix 1**

In the first paragraph, explain how the proposed "six foot depth" for the landfill gas monitoring well meets SWS recommendations. SWS guidance recommends well depths that extend to seasonal high groundwater elevation and screen intervals that span the majority of the unsaturated zone, including bedrock above the water table. Because landfill gas monitoring wells

Jim Smith  
Clay County MSW Landfill  
Page 2 of 2  
Doc ID 12317

compromised by flooding will not be sampled and be replaced with new wells, explain how the groundwater monitoring wells proposed for the plan meet this objective. Also specify that well joints should be connected with threaded couplings in lieu of slip couplings, screwed couplings, or glued couplings. Submit well construction records for the groundwater monitoring wells.

In the third paragraph, explain how the proposed "six foot depth" meets the criteria specified above.

In the fifth paragraph, clarify whether the wells are located on the property boundary or some distances from it.

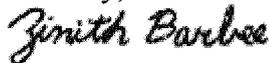
In the last paragraph, delete the word "try". If explosive and toxic gases are detected, their source must be found and addressed. Also, in the paragraph, specify that the sampling instrument will be recalibrated according to manufacturer's instructions.

## **Appendix 2**

Revise the detail for the landfill gas monitoring well. One, in the notes, replace "probe" with "well". Two, show a dimension indicating distance to seasonal high groundwater elevation. Three, show a screen interval that spans most of the unsaturated zone.

If you have any questions, I can be reached at 919-508-8401 or at [zinith.barbee@ncdenr.gov](mailto:zinith.barbee@ncdenr.gov).

Sincerely,



Zinith Barbee  
Hydrogeologist  
Solid Waste Section

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