



North Carolina Department of Environment and Natural Resources

Division of Waste Management

Dexter R. Matthews

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Secretary

Solid Waste Section

June 26, 2012

Robert C. Sallach, P.E.  
CHA  
8720 Red Oak Blvd. Suite 505  
Charlotte, NC 28217-4938

RE: Cramerton (#36-01), Biggerstaff (36-02), Auten Road (#36-03) Landfills  
Gas Monitoring Plan Updates  
Gaston County, NC  
Request for Additional Information  
Document ID No. 16818

Dear Mr. Sallach:

The North Carolina Solid Waste Section (SWS) is presently conducting a technical review of three (3) landfill gas monitoring plans you submitted on June 20, 2012, associated with the closed landfills mentioned above. The SWS requests the landfill gas monitoring plans you submitted be revised according to the NCDENR Division of Waste Management, Solid Waste Section, Landfill Gas Monitoring Guidance - November 2010. The guidance can be downloaded from the Solid Waste Section's web page.

[http://portal.ncdenr.org/c/document\\_library/get\\_file?uuid=da699f7e-8c13-4249-9012-16af8aefdc7b&groupId=38361](http://portal.ncdenr.org/c/document_library/get_file?uuid=da699f7e-8c13-4249-9012-16af8aefdc7b&groupId=38361)

Some of the items/criteria that need to be revised in the landfill gas monitoring plans are:

1. Most, if not all the wells depicted on the drawings are constructed for groundwater monitoring. Some new gas wells need to be installed at each facility. The new gas wells are to be constructed similar to groundwater monitoring wells with two exceptions. Each landfill gas monitoring well should be constructed just above the seasonal high water table, screened within the unsaturated zone, and be equipped with a stopcock valve or a quick connect coupling on the cap, which allows for accurate landfill gas measurements. The stopcock valve must be equipped with flexible tubing and a barb connection that will fit the gas meter's inlet tube. The stopcock valve or a quick connect coupling must be closed between monitoring events. Each landfill gas monitoring well must also be capped, locked, and labeled with a permanently affixed identification plate

Mr. Robert C. Sallach, P.E.  
Cramerton (#36-01), Biggerstaff (36-02), Auten Road (#36-03) Landfills  
Gas Monitoring Plan Revision Requests  
Gaston County, NC  
Request for Additional Information  
Page 2 of 2

stating the well contractor name and certification number, date of well completion, total depth of well, well screen length, and well ID number.

2. For reference, see detailed schematics of a landfill gas monitoring well (Figure 1) and Section 5 located in the NCDENR Division of Waste Management, Solid Waste Section, Landfill Gas Monitoring Guidance, November - 2010. Note: Section 5 of this guidance mentions well construction / installation, location, and abandonment criteria.
3. Revise the landfill gas monitoring plans to include sampling the gas monitoring wells and structures quarterly, instead of annually.
4. Revise the facility /site maps to include location and names of proposed new gas monitoring wells, facility property boundaries, streams, edge of waste, neighboring residences/commercial buildings, and any facility structures. Also, the revised maps need to include a scale (in feet) and north arrow.
5. Revise Section Section 3.0 "Continued Long-Term Monitoring Plan" of all three (3) landfill gas monitoring plans to incorporate language and reporting documentation / form(s) similar the format/ language stated in the Solid Waste Section, Landfill Gas Monitoring Guidance, November - 2010.

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If you have any questions or wish to schedule a meeting to discuss the items referenced in this letter, please call me at 919-707-8258.

Sincerely,



Brian Wootton  
Hydrogeologist  
Solid Waste Section

cc:	Marcie Smith	Gaston County
	Ed Mussler	Solid Waste Section
	Bill Wagner	Solid Waste Section
	Ervin Lane	Solid Waste Section