



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

John E. Skvarla, III  
Secretary

April 4, 2014

Sent Via Email – mike@griffinbrothers.com

Mr. Mike Griffin  
Greenway Waste Solutions, LLC  
19109 West Catawba Avenue, Suite 200  
Cornelius, NC 28031

Re: *Methane Gas Exceedances*  
North Mecklenburg C&D Landfill – Closed Phase I  
Solid Waste Permit Number 60-13  
DIN 20829

Dear Mr. Griffin:

The Solid Waste Section has completed a review of the March 24, 2014 methane gas monitoring results (DIN 20819) submitted by Enviro-Pro, P.C. on behalf of Greenway Waste Solutions, LLC for the North Mecklenburg C&D Landfill – Closed Phase I. New landfill gas monitoring wells were installed in March 2014, and the methane gas monitoring results were submitted in accordance with the approved *Landfill Gas Monitoring Plan* dated January 29, 2014 (DIN 20487 and 20490).

Based upon the methane gas monitoring results that were initially provided in a March 28, 2014 notification email, methane gas exceedances have been documented at landfill gas monitoring wells GW-3, GW-4, GW-5, and GW-6. All four of these landfill gas monitoring wells are located near the property boundary.

Pursuant to Solid Waste Management Rule 15A NCAC 13B .0503 (2)(a), 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. Because methane gas exceedances are documented near the property boundary, immediate action is required. The dynamics that influence gas movement and migration vary, and methane gas concentrations can fluctuate widely depending upon different conditions. As a result, Greenway Waste Solutions, LLC is required to prevent the migration of methane gas at the property boundary and take all steps necessary to ensure protection of public health. *Within 30 days of receipt of this letter*, please submit a detailed methane gas corrective action plan (CAP) for Solid Waste Section review and approval.

Also, due to the close proximity of homes and adjacent enclosed structures, the Solid Waste Section has determined that the installation of indoor continuous natural gas detectors in these residences and all adjacent enclosed structures located on their properties is recommended to detect methane gas above normal levels and to prevent harm to the residents. The installation of the detectors is being recommended as a precautionary measure. Greenway Waste Solutions, LLC should take the appropriate steps to (1) notify the adjacent property owners *in writing* of the methane gas exceedances documented near the facility's property boundary and (2) obtain *written* permission from the adjacent property owners

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to install the natural gas detectors in their residences and in any adjacent enclosed structures located on their property. Please also provide *written* acknowledgment if a property owner declines the installation of the detector(s). All executed documents with signatures and dates should be submitted to the Solid Waste Section.

Greenway Waste Solutions, LLC will be responsible for purchasing, installing, and maintaining (routine testing and routine battery replacement) the detectors. The property owners must be present during the installation. Also, during the installation, please provide each property owner with a *written* document that includes the detector's specifications, alarm tones when methane gas is detected above normal levels, the proper course of action to take if the alarm sounds (call 911 first), who will be notified if the alarm sounds (including all current contact information), and any evacuation procedures. Greenway Waste Solutions, LLC will need to establish with each property owner: 1) a schedule of routine maintenance in order to ensure proper maintenance, routine testing, and battery replacement; and 2) procedures for the property owner to follow and contact information on whom to notify if the property owner finds that the detector has become inoperable or malfunctioning outside of the routine maintenance schedule. Therefore, *within 7 days of receipt of this letter*, please submit a schedule and description of the steps for adjacent property notification regarding the methane gas exceedances near the property boundary, the notification of the recommendation to install continuous natural gas detectors within adjacent enclosed structures, the written approval or written rejection of the installation from the adjacent property owners, the maintenance schedule and procedures established with each property owner, and the actual installation of the detectors within the adjacent enclosed structures.

Finally, commencing this month, please begin monthly landfill gas monitoring at the closed Phase I Area of this facility until further notice from the Solid Waste Section. Please submit the monthly landfill gas monitoring results via email to the Solid Waste Section (Attention: Jaclynne Drummond) *within seven (7) days of monitoring* utilizing the approved forms.

If you have any questions or concerns regarding this letter, please feel free to contact me at 919-707-8294 or by email at [jaclynne.drummond@ncdenr.gov](mailto:jaclynne.drummond@ncdenr.gov). Thank you in advance for your anticipated cooperation with these matters.

Sincerely,



Jaclynne Drummond, Compliance Hydrogeologist  
Solid Waste Section, Division of Waste Management  
NCDENR

cc sent via email: Ellie Allen, Greenway Waste Solutions, LLC  
Jason Watkins, Western District Supervisor  
Teresa Bradford, Environmental Senior Specialist  
John Murray, Permitting Engineer  
Brian Wootton, Permitting Hydrogeologist  
Tom Bolyard, Enviro-Pro, P.C.  
Scott Brown, Civil and Environmental Consultants, Inc.