



North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

Solid Waste Section

August 13 2009

Mr. Joseph T. Cherry  
Lee County C&D Landfill  
PO Box 1968  
Sanford, North Carolina 27330

Re: Post-Closure Plan  
Lee County Construction and Demolition Landfill (C&DLF)  
Lee County, North Carolina  
Permit No. 53-01, Document ID No. (DIN) 8235

Dear Mr. Cherry:

The Solid Waste Section (Section) has reviewed the Closure Certification (DIN 8132) for the above-reference landfill facility dated August 3, 2009, prepared and submitted by Richardson Smith Gardner & Associates, Inc (RSG) on behalf of Lee County. The Section has preformed a review of the above-referenced document and has no comment on it at this time. However, the Section needs to know the Lee County plans for conducting post-closure cares at the C&DLF in accordance with the Solid Waste Management Rule (Rule) 15A NCAC 13B .0510(c) and the Solid Waste Permit Condition 17. Post closure care needs to be identified before the Section can issue a final Permit for Closure for the landfill facility. The Rules 15A NCAC 13B .0543(e) & (f) and the conditions of permit can be used as the reference for preparing a Post-Closure Plan for Lee County.

Additionally, the Section encourages Lee County to install a landfill gas venting system in the cover system at the closed C&DLF. Although the rules do not specifically require such vents, it is the experience of the Section and it is also well documented in the waste industry, academia, and other regulatory agencies that volatile organic compounds (VOCs) in the groundwater underneath a landfill (both MSWLF and C&DLF) potentially exceed the groundwater protection standards several years after the landfill was closed and capped with a cover system without a landfill gas venting system. Landfill gas carries the VOCs downward to the shallow groundwater. This has been conclusively identified as a cause of increasing of VOC concentrations in the groundwater. Should the concentrations of VOCs in the groundwater underneath the closed C&DLF exceed the groundwater protection standards (NC 2L Standards), more money and effort will be spent later by the county on a corrective action remedy. Less costly measures, installation of passive vents for example, could be used right now. A proposal to install landfill gas vents or a venting system of the closed C&DLF can be included in the Post-Closure Plan, if Lee County accepts the Section's suggestion. Retrofit at a later time could be subject to permit modification or amendment fees.

Please respond to the Section's requests within 15 days or contact the Section to establish a mutually suitable time frame. The Solid Waste Section appreciates your efforts and cooperation in this matter. If you have any questions or would like to schedule a meeting to discuss this matter further, please contact me at (919) 508- 8507 or by email at [ming.chao@ncdenr.org](mailto:ming.chao@ncdenr.org).

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Chao', written in a cursive style.

Ming-Tai Chao, P.E.  
Environmental Engineer II  
Permitting Branch, Solid Waste Section

cc: Pieter K. Scheer, P.E., RSG  
Geof Little – DWM  
Watkins – DWM  
Central file

Ed Mussler – Permitting Branch Supervisor  
Jaclynne Drummond – DWM  
Brad Bailey – DWM