



## NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Division of Waste Management  
Dexter R. Matthews  
Director

Beverly Eaves Perdue  
Governor

Dee Freeman  
Secretary

### Solid Waste Section

September 16, 2010

Mr. Kipling McClary  
Solid Waste Director  
288 Legion Drive  
Whiteville, NC 28472

**Subject:** Authorization for Constructing Landfill Gas Collection and Control System (LFGCCs)  
Columbus County Landfill, Columbus County, North Carolina  
Permit #24-01, Document ID No. (Doc ID) 15139

Dear Mr. McClary:

On September 7, 2011 the Division of Waste Management (DWM), Solid Waste Section received the following document submitted on your behalf by Carlson Environmental Consultants, PC (CEC):

- *“Request for Post-Closure Permit Modification, Construction of Landfill Gas Collection and Control System, Columbus County Landfill - Whiteville, NC”* dated September 6, 2011 including a letter proposal and a set of drawings - a total of four figures (Doc ID 15109).

Briefly in summary of the above-reference proposal, Columbus County intends to:

- Install twelve (12) new gas wells and convert three (3) existing gas vents into wells at the closed unlined Columbus County MSWLF.
- Construct a LFGCCS by connecting to the gas wells to a blower/flare station via new header/lateral piping, valves, sumps, and other apparatuses.
- Dispose of excavated wastes in the course of constructing LFGCCS to the Columbus County Solid Waste Transfer Facility (Permit No. 24-03T).
- Dispose of aqueous wastes generated from the LFGCCS at a wastewater treatment facility owned by the City of Whiteville.

Cooperating with the County's schedules and considering the LFGCCS project is a time-constraint project, which is financially supported through the NC State Energy Office from American Recovery and Reinvestment Act, the Solid Waste Section will assist the County in moving forward of this project by

granting the approval for installing the proposed LFGCCS at the Columbus County Landfill in accordance with the permit application document (Doc ID 15109). An electronic copy of the approved documents (pdf format) can be obtained from the DWM's website located at <http://acp.ncdenr.org/pls/apex/f?p=2136:25:1590838597629807>. To review the document, please type in the Document ID Number into the "Search Box." Please note that this authorization for the installation of LFGCCs does not remove any responsibilities Columbus County may have to comply with any permit condition, or any local, state or federal regulation.

#### Permit To Construction Conditions

To initiate construction activities at the landfill, Columbus County agrees to accept and implement following requirements in addition to the specifications stated in the approved application document:

1. In order to address potential nuisances, such as odors and vectors, the pipe trench encountering wastes shall not left open more than 200 feet in advance of pipe installation and be backfilled so there is no exposed waste at the end of each working day. The excavated wastes generated from gas well installation and trenching must be disposed of at the Columbus County Solid Waste Transfer Facility (Permit No. 24-03T) in the conclusion of each working day.
2. Since the landfill has accepted asbestos containing material or asbestos wastes for disposal, the Asbestos Removal Plan approved by the Health Hazards Control Unit of the Division of Public Health, Department of Health & Human Services must be implemented in the course of gas well installation and trenching activities.
3. Columbus County may need to consult the NC Division of Land Resources, Land Quality Section to obtain an approval of the modification of Erosion and Sediment Control Plan pertaining to land disturbing and site restoration activities at the landfill.

#### Interim Permit to Operation Conditions

The issuance of this authorization letter is also granting Columbus County an interim status for trial runs and testing the LFGCCS after the system is completely installed and constructed. The interim operating status will allow the County to conduct the following tasks, but not limited to:

1. Operating and adjusting the control system in the manner that meets the requirements and conditions stated in the Air Quality Permit No. 10078R00 issued by the North Carolina Division of Air Quality on July 14, 2010.
2. Adjusting the well field and collection system to optimize the gas flow and system efficiency.
3. Collecting and analyzing the condensate/leachate generated from the system to obtain a liquid disposal permit.
4. Conducting other tasks required by the Energy Efficient and Conservation Block Grant Program.

#### Pre-Operating Conditions

Upon completion of the construction of LFGCCs project, the Solid Waste Section may approve Columbus County to operate the constructed systems. This authorization will be issued pending receipt and approval of the following:

1. Statutorily required permit fee in the amount of \$1,500 for modification to Post-Closure land use.
2. The Record Documentation Report and as-built drawings as described in the approved plan (Doc 15109). The report and as-built drawings must be signed and certified by an Engineer registered in the State of North Carolina, and the as-built survey drawings must be signed and certified by a Surveyor registered in the State of North Carolina.
3. The copy of approval letters of the Asbestos Removal Plan and the Erosion and Sediment Control Plan issued by the Health Hazards Control Unit of the Division of Public Health and the Land Quality Section of the Division of Land Resources, respectively.
4. The copy of the approval letter issued by the City of Whiteville to accept the condensate/leachate generated from the LFGCCS.
5. The revised post-closure care cost estimates and updated financial assurance mechanism by including the costs for decommissioning the components of the LFGCCS at the end of their useful life.

The Solid Waste Section will be glad to assist the County in the successful completion of this LFGCCS project, if you have any questions regarding the matters described above please contact me at 919-508-8507.

Sincerely,



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

cc: Kristofer L. Carlson, P.E., CEC  
Wes Hare, DWM  
Central Files

Ed Mussler, Permitting Branch Supervisor  
Dennis Shackelford, DWM