



## NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor  
William G. Ross Jr., Secretary

December 23, 2008

Michael Lambert, Public Works Director  
704 Arlington Ave  
Albemarle, NC 28002

Re: Application for Permit to Continue Operation  
City of Albemarle C&D Landfill  
Stanly County, North Carolina  
Permit No. 8401-CDLF-1997  
Doc ID No. 6509

Dear Mr. Lambert:

An application for a C&D Landfill Permit to continue operation has been submitted to the Division of Waste Management, Solid Waste Section (Division) on the City of Albemarle's behalf by Municipal Engineering Services Company, P.A. The Division has conducted a review of compliance with the Solid Waste Management Rule, 15A NCAC 13B .0547(4). There are few items in the application that require clarification and/or revision before the review can be completed. Please respond to the comments below:

### **Cover Sheet**

In accordance with 15A NCAC 13B .0533 (b), the cover sheet of all applications should have the following critical components: project title, location, applicant's name and address, engineer's name, address, signature, date of signature. Cover page needs to be revised.

A statement defining the purpose of the application signed and dated by the applicant is also needed.

### **Operation Plan**

The Operation Plan prepared in accordance with 15A NCAC 13B. 0542 should serve as a manual suitable for use by the landfill personnel. It should be detailed enough to give a step by step guidance as to how the facility operation will be in compliance with the rule 15A NCAC 13B.0542. Specifically the following should be addressed:

1. The operation plan proposes a program at the landfill for detecting and preventing the disposal of hazardous and liquid wastes. Explain the details of the proposed program. And what action will the City take if hazardous waste delivery is detected?
2. What cover material will the City use in the cap system and where is the material coming from? What volume of the material is currently available on-site?

3. Please provide an updated engineering plan. Reference slopes and drawings in the engineering plan. Indicate slopes on the drawings.
4. An updated CQA plan is also needed. Reference the drawings wherever necessary to link the drawings to the CQA plan.

### **Closure Plan**

1. The plan states 33 acres as the largest surface area that will need closure but 15 acres was used in the closure cost estimate. Please clarify. An estimate of the maximum inventory of wastes on-site over the active life of the landfill is needed.
2. Is there sufficient volume of soil from the site borrow pit for constructing final soil cover? If not, has an off-site soil borrow source been identified? Please clarify. The plan proposed the use of Wyoming bentonite as erosion protection layer. The plan should demonstrate how vegetation will be grown on the bentonite?
3. What are the post-settlement surface slopes and side slopes of the proposed final soil cap system? The plan should demonstrate the post-settlement slope of the proposed soil cover stability and safety during post-closure period. Please provide the slope stability analysis data to support the final cap design. If the above-requested data are not available, an alternative soil cap system consisting geosynthetic material and earthen material may be warranted in the Closure Plan.
4. The Rule .0543(b) (1) requires a closure plan to contain a CQA plan which must be prepared in accordance with the Rule .0541(b). Please revise the closure plan accordingly.
5. Does the cost estimate item 2.6 for closure factor in the following cost items:
  - Survey, as-built drawings
  - Recordation/ notation fee
  - Machine/equipment costs
  - Fuel costs
  - Construction administrative fee
  - 10% contingency reserve
  - Surface preparation
  - Construction document and bidding
  - CQA field monitoring and lab testing
  - CQA reporting and certification

### **Post-Closure Plan**

1. Indicate a grass mowing frequency in the Post-Closure Plan. The cost estimate for post-closure care did not include costs for maintaining the vegetation by mowing, re-sod, and fertilization. Please revise the plan accordingly.
2. Amend the plan to include a statement that post-closure use of the property must not disturb the integrity of the cap system, base line system, or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the rules.

3. Post-closure care must include maintenance of gates, fencing, access roads, and signs. Please revise the plan accordingly.
4. Does the cost estimate item 3.2 for post-closure factor in the following cost items:
  - Mowing
  - Revegetation
  - Administrative and record keeping
  - 10% contingency reserve
  - Construction document and bidding
  - Access road, fence, sign, and gate maintenance.

**Electronic Copy**

Please submit electronic copies of the application and all the drawings.

Please note the comments and questions raised above and provide additional information and revisions as needed. If you have any questions or wish to schedule a meeting to discuss the items referenced in this letter, please call me at 919-508-8520 or email me at [agyeman.adupoku@ncmail.net](mailto:agyeman.adupoku@ncmail.net).

Sincerely,

Agyemang Adu-Poku  
Environmental Engineer II  
Solid Waste Section

cc: Wayne Sullivan/Municipal Engineering Services Co., P.A.  
Edward F. Mussler III, P.E./DWM/Solid Waste Permitting Branch Supervisor  
Mark Poindexter/DWM/Field Operations Branch Supervisor  
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