



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

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SOLID WASTE SECTION

May 27, 2009

Mr. Buddy Norris
Avery County Solid Waste - Director
PO Box 640
Newland, North Carolina 28657

Subject: Engineering Technical Review – Permit to Construct
Construction & Demolition Landfill Phase III
Avery County, Permit #06-03, Document ID No. 7376

Dear Mr. Norris:

The Division of Waste Management, Solid Waste Section (Section) has completed review of the document titled *Permit to Construct Application, Phase III, Avery County C&D Landfill, Ingalls, North Carolina*, February 2009 (DIN 6894). It has been determined the Section requires clarification or additional information in order to complete the permitting activity requested. Please provide a response for each of the following items:

Facility & Engineering Plan

1. Section 3.1 states *the exterior slopes will be at a maximum of 3:H to 1:V slope*. Rule .0543(c)(2)(A) requires post-settlement surface slopes to be a minimum of 5 (20:H to 1:V) percent and a maximum of 25 percent (4:H to 1:V).
2. Section 6.2 does not specify the maximum permeability of the cap system. Rule .0543(c)(1)(A) requires the cap system to be designed and constructed to have a permeability less than or equal to soils underlying the landfill, or the permeability specified for the final cover in the effective permit, or a permeability no greater than 1.0×10^{-5} cm/sec, whichever is less.
3. Section 8 and Appendix C provide a description and analysis of the underdrain system and indicates the system is designed properly to convey rain event infiltration. However, this design cannot be approved as there is no indication it protects surface or groundwater from leachate contamination. A new underdrain design should be discussed with the Section prior to submittal.
4. None of the Permit Drawings in Attachment H delineate borrow and stockpile areas as required by Rule .0537(d)(1)(C).
5. None of the Permit Drawings in Attachment H meet the engineering drawing vertical separation requirements of Rule .0539(e)(6).

Operations Plan

6. Section 1.2.2 incorrectly indicates Bill Wagner is in the RCO, Raleigh Central Office. Bill is base in the ARO, Asheville Regional Office.

7. Section 1.4 states *this sign(s) will provide information on operating hours, operating procedures, and acceptable wastes*. Please remember Rule .0505(9)(a) also requires the permit number be on all signage.
8. Section 2.2 refers to 15A NCAC 13B.0101(54) for the definition of Land Clearing and Inert Debris landfill. The proper rule reference is 15A NCAC 13B.0101(22).
9. Section 2.2 refers to 15A NCAC 13B.0101(53) for the definition of Land Clearing Waste. The proper rule reference is 15A NCAC 13B.0101(23).
10. Section 2.2 references C&D-Like wastes which actually meet the definition of Industrial Solid Waste as defined in Rule .532(11). Per Rule .0542(e)(4) industrial solid wastes are excluded from C&D landfill facilities unless a demonstration has been made and approved by the Division that the landfill meets the requirements of Rule .0503(2)(d)(ii)(A).
11. Section 2.5.4 states *at the completion of waste placement each week, or sooner if the area of exposed waste exceeds one acre in size, a 6-inch layer of earthen material or other material as approved by the DWM will be placed over the exposed waste*. Rule .0542(f)(2) requires six inches of earthen material when the waste disposal area exceeds one-half acre and at least once weekly. Cover must be placed at more frequent intervals if necessary to control disease vectors, fires, odors, blowing litter, and scavenging. A notation of the date and time of the cover placement must be recorded in the operating record as specified in Paragraph (n) of this Rule.

Mr. Zinith Barbee will provide a technical review of the Water Quality Monitoring Plan under separate cover.

If you should have any questions regarding this matter please contact me at (828) 296-4703.

Sincerely,



Allen Gaither
Environmental Engineer

Cc: Stacey Smith – RSG Engineers
Zinith Barbee – SWS/RCO
Bill Wagner – SWS/ARO