



# NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Division of Waste Management

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

## Solid Waste Section

April 29, 2015

Ms. Amanda Bader, P.E.  
County Engineer  
Harnett County Solid Waste Department  
P. O. Box 2773  
Lillington, NC 27546

**Subject:** Comments on the Permit to Construct (PTC) Application  
Anderson Creek Construction and Demolition Debris Landfill (C&DLF) – Phase IIIA  
Harnett County, North Carolina,  
Permit No. 4303-CDLF-1997, Document ID No. (DIN) 24212

Dear Ms. Bader:

On April 24, 2015 the Division of Waste Management (DWM), Solid Waste Section (SWS) received an electronic copy of the revised portions of the PTC Application - Phase IIIA (permit application) for the above-referenced landfill which include:

- Application Table of Contents and Executive Summary
- Attachment B: Facility and Engineering Plan
- Attachment F: Closure and Post-Closure Plan
- Attachment J: Permit Drawings.

The above-mentioned documents that were prepared by Smith Gardner, Inc. on behalf of Harnett County (the County) are combined into a single document and placed in the DWM document tracking system with a DIN 24196. This submittal is replacing the Attachments B, F, and J of the original PTC Application (DIN 23989) dated February 2015.

The SWS conducted a review of the original PTC Application (DIN 23989) and the new submittal (DIN 24196) and has some comments on the permit applications which are stated below:

### Attachment B – Facility and Engineering Plan (DIN 24196)

1. (Section 1.0) Please remove the Phase IIIB from the last sentence because the PTC application is intended for Phase IIIA development and construction.
2. (Section 8.2 & Drawing Sheet No. 7, Detail D-1) Because the landfill gross capacity and design calculations including slope stability analysis in Appendix A are assuming the side

slope of the landfill cover system is 4 (horizontal) to 1 (vertical); the description of side slope of 3 to 1 in the Section 8.2 and drawing should be revised accordingly.

3. (Appendix A-2 Final Cover Infiltration Analysis) The vegetative soil layer for the regulatory final cover system shall be at least 18-inch thick, not 6 inches [Rule 15A NCAC 13B .0543(c)(1)(C)]. Please re-run the analyses for both Case 2A & Case 2B with correct data input.

#### Attachment D – CQA Plan (DIN 23989)

4. (Section 5.3.2.1) The preparation of subgrade surface which will receive the LLDPE must include the maximum particle size or gradation requirements as specified in the Paragraph D.3 of the Technical Specification Section 02778-6, and Record Tests - testing frequency & method should add to Table 8-1 of the CQA Plan. Please clarify.
5. (Section 7.3) Should there be the requirements (maximum soil particle size/gradation as specified in the Paragraph D.3 of the Technical Specification Section 02776-5, the smooth appearance, the certification of acceptance, etc.) for preparing the subgrade surface which will receive the GCL? Record Tests - testing frequency & method should add to Table 8-1 of the CQA Plan. Please clarify.
6. (Section 8.1.4) The Table 9-1 is likely a typographic error. Please verify and make necessary correction.
7. (Sections 8.1.5 & 8.1.7 & Table 8-1) The Record Tests - testing (method & frequency) soil particle sizes of the subgrade should add to Table 8-1 which should cross-reference in the Sections 8.1.5 & 8.1.7.

#### Attachment E – Operations Manual (DIN 23989)

8. (Figure1) The French drains on the north side of the C&DLF had been removed in 2014. The information on the drawing (including note field) needs to be revised accordingly. And the waste footprint of Phase 2 is incorrect.

#### Attachment F – Closure & Post-Closure Plan (DIN 24196)

9. (Section 1.2) Please revise the side slope of the proposed final cover system to 4 to 1 slope (also see Comment No. 2).
10. (Section 3.3, Table 3-1, & Appendix A) According to NCGS 130A-295.2(h1) the County shall establish financial assurance sufficient to cover a minimum of one million dollars (\$1,000,000) in costs for potential assessment and corrective action (PACA) at the C&DLF. Please revise the amount for PACA in this section, Table 3-1, & Appendix A.

11. (Table 2, Appendix A) The cost item Nos. 3 & 4 (prescribed cover system) in Table 2 are inconsistent with those components of the selected final cover system (alternative cover system) described in Section 1.2 of the Closure Plan.

Attachment G – Erosion and Sediment Control Plan

12. Please provide a copy of the approval of the Erosion and Sediment Control Plan (ESPC) for the proposed landfill (Phase IIIA) development and construction issued by the NC Land Quality Section. If the plan is currently undergoing a review, the construction of Phase IIIA shall not be initiated until the ESPC is approved by NC Land Quality Section. The approval letter must be forward to the SWS.

Attachment J – Permit Drawings (DIN 24196)

13. (Sheet No. 7/ Drawing No. D1) Please add the typical details of a gas well penetration through geosynthetic barrier layers – LLDPE or GCL on the drawing as described in Paragraph D.6 of the Technical Specification Section 13252 – Landfill Gas Wells/Vents.
14. (Sheet No. 7/ Drawing No. D1) Please change side slope in Detail D-1 to 4 to 1 (see Comment No. 2).

If you have any questions or requests for further clarification to the above-referenced comments, please contact me at (919) 707-8251 or [ming.chao@ncdenr.gov](mailto:ming.chao@ncdenr.gov).

Sincerely,



Ming-Tai Chao, P.E.  
Environmental Engineer  
Division of Waste Management, NCDENR

cc:

Pieter Scheer, P.E. Smith Gardner, Inc.  
Ed Mussler, Permitting Branch Supervisor  
Dennis Shackelford, DWM  
Central Files