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

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Secretary

SOLID WASTE SECTION
February 15, 2012

Mr. Andrew Ballentine, Solid Waste Manager
City of Hickory
Post Office Box 398
Hickory, North Carolina 28603

Subject: Request for Additional Information
Cloninger Mill Road, Large Type-1 Solid Waste Composting Facility, Permit No. 1806
Catawba County, DIN 16105

Dear Mr. Ballentine:

On August 3, 2010 the Division of Waste Management (Division) received your application for a Permit Amendment five (5) year renewal, entitled;
Application to Operate a Large Type 1 Composting Facility. Prepared by the City of Hickory. August 2010. DIN 16051.

On March 7, 2011, in response to the City's Application the Division performed a technical review of the Application and requested additional information, the letter entitled:
City of Hickory, Cloninger Mill Road Site, Large Type-1 Solid Waste Composting Facility, Permit Application and Operations Plan, Facility Permit No.: SWC-18-06. Prepared by Michael Scott and Zi-Qiang Chen. March 2011. DIN 16053.

The Division has no evidence that you have responded to this letter. Failure to respond will result in denial of the permit action and cancellation of the requested permitting activity. I have attached a copy of the Division's technical review letter for your consideration.

Should you have any questions regarding this matter you may contact me at (828) 296-4704 or larry.frost@ncdenr.gov.

Sincerely,

Larry Frost
Environmental Engineer

Enclosure

cc: Deb Aja – SWS/ARO

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March 7, 2011

Andrew S. Ballentine, Solid Waste Manager
City of Hickory Composting Facility
P. O. Box 398
Hickory, NC 28603

Permit No.	Scan Date	DIN
1806	February 7, 2012	16053

Subject: City of Hickory
Cloninger Mill Road Site
Large Type-1 Solid Waste Composting Facility
Permit Application and Operations Plan
Facility Permit No.: SWC-18-06

Dear Mr. Ballentine:

The Division of Waste Management, Solid Waste Section, has completed its technical review of the subject Permit Application and Operations Plan. The comments resulting from the review are attached for your reference. A revised Permit Application and Operations Plan of the facility that incorporates responses to these comments should be submitted for our review and approval as soon as possible. Providing thorough and complete responses to these comments in a timely manner is necessary to avoid delays of the Division's decision on the Permit Application.

If you or your engineer have any questions or need assistance in resolving the technical review issues, please contact Mr. Zi-Qiang Chen, PhD, at (919)-508-8523. Also, you may contact me at (919)-508-8508.

Sincerely,

Michael E. Scott, Supervisor
Composting & Land Application Branch

ZQC:dr

Attachment (all cc's)

cc:
Zi-Qiang Chen, Ph.D., Environmental Engineer II
DWM/SWS/CLA/PERMIT

1646 Mail Service Center, Raleigh, North Carolina 27699-1646
Phone: 919-508-8400 \ FAX: 919-733-4810 \ Internet: www.wastenotnc.org

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CITY OF HICKORY

Technical Review Comments
For A Large Type-1 Solid Waste Compost Facility Permit Application
And
The Facility's Operations and Maintenance Manual
Facility Permit No.: SWC-18-06

March 7, 2011

NOTE: Please provide a response to all of the comments on a "comment for comment" basis. Where appropriate, add or revise narrative in the text of both the Permit Application (§) and the Facility's Operations Manual (§§) that addresses the issues discussed in the comments. In addition, the comments and responses may be included as a part of the revised Permit Application and Operations Manual (e.g. in an appendix).

I. General

1. Provide a "Table of Contents" and number the pages of the Application and number all the attachments presented in the report.

II. Permit Application (§)

1. Confirm that the proposed facility will meet all the floodplain stipulations set by Rule 15A NCAC 13B .1404(a)(1).

2. An application for a Large Type-1 compost permit shall provide materials, as required by .1405(a): A recent aerial photograph or scaled drawing with a scale of 1" = 400'. Mark the facility's physical location on a recent aerial photo, show the adjacent (within the ¼-mile radiance) surroundings, and add the legend to denote these features and the *100-year* flood plan and other major hydro-geological features on the map.

3. Provide the following information:

   a). An updated as-built drawing: Per Rule .1405 (a)(7)(A), provide a preliminary engineering calculation to demonstrate that the facility can adequately handle the process capacity of 8,000 tons per year based on the pile dimensions (10~12' tall x 15'wide).

   b). Per Rule .1405 (a)(7)(B): a process flow diagram of the facility

   c). Per Rule .1405 (a)(9): Plans and Specifications for the facility, including manufacturer's performance data for all equipment selected.

4. Section "Curing Process", paragraph 3: Explain or correct the sentence: "*Product that will not hold an adequate temperature is sold or stockpiled in the mulch storage area.*"

5. Per Rule .1406(4), leachate shall be properly managed at site of the composting facility. As noted in the Division's site-visit on February 21, 2011, the on-site process wastewater management needs be improved across the site. It is recommended that compost socks be added along the drainage ways, that truck access points be minimized, and that drainage areas be seeded to filter and better manage flows that may leave the site.

6. The stormwater run-on and its flow must be properly diverted to the on-site retention pond. Make sure that the inlets and all piping are free from obstruction and properly maintained. Protection structures around the inlets shall be maintained to assure the free flow of stormwater / process wastewater, as well as worker's safety.

7. Per Rules .1407(d)(3) and .1408(c)(7), provide the sampling / testing protocol and frequency at the facility. A sampling and testing interval of every 20,000 tons of compost produced or every six months is recommended. The parameters and test methods are listed in "Table 3" of Rule .1408(a)(1).

8. Application pages, Section (10)(B) Vectors & Odor: Provide a detailed discussion in this section to address how to minimize offensive odor at the property boundary and what kinds of corrective actions would be taken if an offensive odor crosses the property boundary. It is a common practice to apply a 6-inch-thick compost product evenly on odorous windrows to reduce or eliminate odor during active composting.

9. Clarify how and how often the monitoring equipment, such as temperature and/or moisture probes, are calibrated?

III. Operations Manual (§§)

1. As partially discussed in item **II.3 b)** above, provide a fact sheet and process flow diagram that summarizes actual equipment sizing, aeration capacity, detention times, storage capacity, and waste flow rate for the system.

2. Specify how the facility handles the compost products which do not meet a federal Class-A and/or Class-B standards.

3. Confirm that the facility will meet Rule. 1407 requirements of classification and distribution of the compost products.

4. Confirm that the facility will meet Rule .1408 testing and reporting requirements.