



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

SOLID WASTE SECTION

August 1, 2008

Mr. Christopher Hallman, P.E.
Waste and Remediation Management
Duke Energy Corporate EHS
Post Office Box 1006
Charlotte, North Carolina 28201-1006

Subject: Additional Information Request
Permit to Construct Application
Retired Ash Basin (RAB) - Ash Landfill
Duke Energy - Allen Steam Station
Gaston County
Document ID No. 5439

Dear Mr. Hallman:

On March 26, 2008 I received Duke Energy's Application for a Permit to Construct entitled:

- *Engineering Plant, Retired Ash Basin (RAB) – Ash Landfill, Allen Steam Station, Belmont, North Carolina, S&ME Project No. 1356-06-825. Prepared for Duke Energy. Prepared by S&ME, Inc. Dated March 21, 2008. Document ID No. 4251.*

This letter constitutes a review of the Duke Energy's Permit to Construct Application for the Retired Ash Basin (RAB) – Ash Landfill, located at the Allen Steam Station. The application was determined to contain the elements of a complete application. I have shared the list of items with you by phone and email. You have responded to many already. Accordingly, you are requested to respond to the remaining items, to expedite the review of this application:

1. A review of the site suitability report and permit to construct application reveal that local government approvals have not been granted. In accordance with 15A NCAC 13B .0504(1)(e) you must submit approval from the Board of Commissioners of the county and a letter from the unit of government having zoning jurisdiction, before a permit to construct can be issued.

2090 US Highway 70, Swannanoa, North Carolina 28778
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- You supplied a copy of the local government approval documentation in your letter entitled:

Duke Energy – Allen Steam Station, Retired Ash Basin CP Landfill, Permit to Construct Application, Response to Comments. Prepared for Duke Energy. Prepared by Duke Energy and S&ME, Inc. Dated June 13, 2008. Document ID No. 4869.

The information you provided has been determined to be adequate for a complete application.

2. Regarding 15A NCAC 13B .0503 (2)(a), the Application indicates, in Table 1, that rules regarding the concentration of explosive gas are not applicable for ash landfills. The proposed landfill will contain flue gas desulfurization (FGD) residue as well as ash. Please provide a written narrative and any necessary documentation to support this assertion.

- This narrative is still needed to complete the application.

3. Please provide a written narrative and any necessary documentation addressing 15A NCAC 13B .0104(f) and 15A NCAC 13B .0201(f) regarding the storage and operation of a solid waste management facility in such a manner as to not create a nuisance. The concern regards that of nuisance odor from the degradation of FGD residue, primarily hydrogen sulfide and sulfur dioxide.

- This narrative is still needed to complete the application.

4. Please provide a copy of the Station's NPDES permit, for inclusion in the Application package, with Division of Water Quality approval of the acceptance of the leachate from the landfill.

- You supplied a copy of NPDES Permit No. NC0004979 in your letter entitled:

Duke Energy – Allen Steam Station, Retired Ash Basin CP Landfill, Permit to Construct Application, Response to Comments. Prepared for Duke Energy. Prepared by Duke Energy and S&ME, Inc. Dated June 13, 2008. Document ID No. 4869.

The information you provided has been determined to be adequate for a complete application.

5. The Operation Plan:

- a. Section 3.2

- i. Section 3.2.1 states "If Duke Energy contracts landfill operations to a private company, the contract operator will be responsible for maintenance of the leachate management system". Please remove this language and submit a revised Plan. The Owner/Operator of the solid waste management facility is jointly and severally liable for the operation of the facility and this responsibility cannot be contracted to another. The maintenance may be contracted but the responsibility remains the Owner/Operator's.
- ii. All Leachate Collection System (LCS) pumps should be equipped with leachate high level visual and audible alarms. Revise both Engineering and Operation Plans to include these alarms.
- iii. LCS pump controls and alarms should be inspected at least weekly for proper operation and all inspections documented. All documents should be retained on site and should be available for inspection. Revise the Operation Plans to include these inspections.

- b. Section 3.3

- i. The section states "If Duke Energy contracts landfill operations to a private company, the contract operator will be responsible for maintenance of the leak detection system". Please remove this language and submit a revised Plan. The Owner/Operator of the solid waste management facility is jointly and severally liable for the operation of the facility and this responsibility cannot be contracted to another. The maintenance may be contracted but the responsibility remains the Owner/Operator's.
 - ii. Leak Detection System LDS pump controls and alarms should be inspected at least weekly for proper operation and all inspections documented. All documents should be retained on site and should be available for inspection. Revise the Operation Plans to include these inspections.
- You supplied the requested revisions in the Operations Plan "Revised June 9, 2008" in your letter entitled:

Duke Energy – Allen Steam Station, Retired Ash Basin CP Landfill, Permit to Construct Application, Response to Comments. Prepared for Duke Energy. Prepared by Duke Energy and S&ME, Inc. Dated June 13, 2008. Document ID No. 4869.

The information you provided has been determined to be adequate for a complete application.

6. The Operations Plan:
Incorporate the proposed revisions to sections 3.3 and 3.3.3, regarding an "*initial response leakage rate (IRLR)*", that were discussed in our meeting of July 30, 2008. In the proposed revision please incorporate an IRLR of 300 gallons per acre per day and submit a completely revised Operations Plan.

Please address the remaining issues and send your responses to my attention at the address below. If you should have any questions regarding this matter you may contact me at (828) 296-4704.

Sincerely,



Larry Frost
Regional Engineer

cc: Ken Daly – S&ME, 9781 Southern Pine Boulevard, Charlotte, NC 28273-5560
Jack Amar – S&ME