



Facility Permit No: 36-12
Duke Energy Allen Steam Station
Retired Ash Basin (RAB) – Ash Landfill
Permit to Construct
September 2, 2008
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Document ID No. 5552

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

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

INDUSTRIAL SOLID WASTE LANDFILL FACILITY

PERMIT NO. 36-12

DUKE ENERGY ALLEN STEAM STATION

is hereby issued a

PERMIT TO CONSTRUCT
AN INDUSTRIAL SOLID WASTE LANDFILL

Retired Ash Basin (RAB) – Ash Landfill
Phase 1

Located within the Duke Energy Allen Steam Plant property boundaries at 253 Plant Allen Road (off of NC273) south of the City of Belmont, Gaston County, North Carolina, in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated thereunder and subject to the conditions set forth in this permit. The legal description of the site is identified on the deeds recorded for this property listed in Attachment No. 1 of this permit.

Edward F. Mussler, III, P.E.,
Permitting Branch Supervisor
Solid Waste Section

ATTACHMENT 1

PART I: PERMIT HISTORY

INDUSTRIAL SOLID WASTE LANDFILL FACILITY PERMIT NO: 36-12	ISSUANCE DATE	DOCUMENT ID NO.
Original PTC Issue Date	September 2, 2008	5552

PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN

NO.	DOCUMENT DESCRIPTION	DOCUMENT ID NO.
1	<i>Proposed Test Fill, Retired Ash Basin Ash Landfill – Allen Steam Station. Prepared by S&ME, Project No. 1356-06-825. Prepared for Duke Energy. September 14, 2007</i>	3080
2	<i>Duke Energy – Allen Steam Station, Retired Ash Basin CCP Landfill, Ash Structural Fill – Section .1700 Notification. Prepared by Duke Energy. Prepared for Duke Energy. October 8, 2007.</i>	3215
3	<i>Notification of Site Suitability, Duke Power – Allen Steam Station, Retired Ash Basin (RAB) Ash Landfill, Gaston County. Prepared by the Division of Waste Management. December 7, 2007.</i>	3482
4	<i>Site Suitability Study, Retired Ash Basin (RAB) – Landfill, Duke Energy – Allen Steam Station, Belmont, North Carolina, S&ME Project No. 1356-06-852. Prepared by S&ME. Prepared for Duke Energy. August 31, 2007.</i>	3483
5	<i>Engineering Plan, Retired Ash Basin (RAB) – Ash Landfill, Allen Steam Station, Belmont, North Carolina, S&ME Project No. 1356-06-825. Prepared by S&ME. Prepared for Duke Energy. March 21, 2008.</i>	4251
6	<i>Duke Energy – Allen Steam Station, Retired Ash Basin CP Landfill, Permit to Construct Application, Response to Comments. Prepared by S&ME. Prepared for Duke Energy. June 13, 2008.</i>	4869
7	<i>Duke Energy – Allen Steam Station, Retired Ash Basin CP Landfill, Permit to Construct Application, Additional Information Request Response. Prepared by S&ME. Prepared for Duke Energy. June 13, 2008.</i>	5499

Part III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Gaston County, N.C. Register of Deeds				
Book	Page	Acreage	Grantor	Grantee
2681	0586	481±	Duke Power Company	Duke Energy Corporation
		481±	Total Facility Acreage	

End of Section -

ATTACHMENT 2

Conditions of Permit

PART I: GENERAL FACILITY CONDITIONS

1. [Intentionally Blank]
2. The persons to whom this permit is issued (“permittee”) are the owners and operators of the solid waste management facility.
3. The permit shall not be effective until the certified copy of this permit which shows current ownership and references legal descriptions for all land within the solid waste management facility boundary is recorded in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit affixed with the Register's seal and the date, book, and page number of recording must be returned to the Section within 30 calendar days of issuance of this permit. If the Section does not receive the certified copy of the recorded permit within 30 calendar days of issuance of the permit, then and in that event, the permit is suspended and of no effect until the date the Section receives the certified copy of the recorded permit.
4. When this property is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer shall contain in the description section in no smaller type than that used in the body of the deed or instrument, a statement that the property has been used as a sanitary landfill and a reference by book and page to the recordation of the permit.
5. By receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.
6. Operation of this solid waste management facility shall be in accordance with the Solid Waste Management Rules, 15A NCAC 13B, Article 9 of the Chapter 130A of the North Carolina General Statutes (NCGS 130A-290, et seq.), the conditions contained in this permit; and the approved plan. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition.
7. This permit is issued based on the documents submitted in support of the application for permitting the facility including those identified in Attachment 1, Part II: *List of Documents for the Approved Plan* and which constitute the approved plan for the facility. Where discrepancies exist, the most recent submittals and the Conditions of Permit shall govern.

8. This permit may be transferred only with the approval of the Section, through the issuance of a new or substantially amended permit in accordance with applicable statutes and rules. In accordance with NCGS 130A-295.2(g) the permittee shall notify the Section thirty (30) days prior to any significant change in the identity or business structure of either the owner or the operator, including but not limited to a proposed transfer of ownership of the facility or a change in the parent company of the owner or operator of the facility.
9. The permittee is responsible for obtaining all permits and approvals necessary for the development of this project including approval from appropriate agencies for a General or Individual NPDES Stormwater Discharge Permit. Issuance of this permit does not remove the permittee's responsibilities for compliance with any other local, state or federal rule, regulation or statute.
10. Modifications to the facility may be required in accordance with rules in effect at the time of review of the request.
11. The Retired Ash Basin (RAB) – Ash Landfill has two phases, this permit is for Phase 1 only which occupies roughly 25 acres within the approximate 62 acre facility boundary.
12. Duke Energy shall submit an amendment to this permit for any subsequent phase of development.
13. The landfill is permitted to accept combustion products in accordance with NCGS 130A-290 (2b), including; fly ash, bottom ash, boiler slag, mill rejects and flu gas desulfurization (FGD) residue produced by the Duke Energy, Allen Steam Station located in Gaston County.
14. The facility is subject to the requirements of all applicable sections of the most recent version of the North Carolina Solid Waste Management Rules 15A NCAC 13B and the specific conditions contained herein.
15. Leachate shall be contained on site or properly treated prior to discharge. A NPDES Permit may be required prior to discharge of leachate to surface waters.
16. The Leachate Collection System shall be constructed and maintained in accordance with NCGS 130A-295.6(h)(3) through (4).
17. A closure and Post-closure plan must be submitted for approval at least 90 days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the Industrial Solid Waste Landfill unit in

accordance with all rules in effect at the time. At a minimum, the plan shall address the following:

- a. Design of final cover system as required by the solid waste management rules in effect at the time of closure;
 - b. Construction and maintenance/operation of the final cover system and erosion control structures;
 - c. Surface water, groundwater, and explosive gas monitoring.
18. This permit to Construct will be in effect for 18 (eighteen) months from the date of issuance:
- a. If significant construction does not commence within 18 (eighteen) timeframe, the owner shall submit a request for re-issuance of the Permit to Construct.
 - b. Modification to the facility may be required in accordance with rules in effect at the time of review of the request for re-issuance of the Permit to Construct.
 - c. A permit modification fee for an industrial landfill will be required to reissue the permit to construct..

Facility Construction Conditions

19. This permit approves the Facility Plan that defines the comprehensive development of the facility including the total industrial solid waste landfill capacity, the industrial solid waste stream, all on-site solid waste management facilities and related facility infrastructure in accordance with NCGS 130A-295.4 and the approved plans.
- a. The approved plans are described in Attachment 1, “Approved Documents.”
 - b. Where discrepancies may exist, the most recent approved submittal and Conditions of Permit shall govern.
20. Duke Energy shall conduct a preconstruction meeting, on site, prior to initiating construction of any unit/cell at the site and shall notify the Solid Waste Section 10 days prior to said meeting.
21. Construction of all solid waste management units within this facility shall be in accordance with the pertinent approved plans and only for those phases of development approved for construction as described in Attachment 1, Part II: *List of Documents for the Approved Plan*.
22. Additional conditions and revisions of the approved documents or changes during construction of any landfill unit/cell require approval by the North Carolina Solid Waste Section.

23. Any modifications in sedimentation and erosion control activities require approval by the Land Quality Section. The Solid Waste Section shall be notified of any sedimentation and erosion control modifications.
24. Prior to construction of cell(s), all piezometers, ground-water monitoring wells, and borings, located in the proposed cell, shall be properly abandoned by over-drilling first (exception of non-cased borings) and sealed with grout in accordance with 15A NCAC 2C.0113(b)(1), titled “Abandonment of Wells”:
 - a. In areas where soil is to be undercut, wells should not be grouted to pre-grade land surface, but to the proposed base grade surface to prevent having to cut excess grout and possibly damaging the wells.
 - b. Well abandonment record(s) (a completed GW-30 form) for each piezometer, ground-water monitoring well and boring shall be certified by the permit holder’s geologist and submitted to the Solid Waste Section in accordance with 15A NCAC 02C.0114(b).
25. The owner’s geologist shall examine the cell excavation and note any pertinent geologic features exposed during the construction process and shall notify the Solid Waste Section Hydrogeologist of these findings prior to placement of any liner materials.
26. The owner’s geologist shall be in the field to supervise all ground-water monitoring well installations. Any modifications to the approved water quality monitoring plan require approval by the Section Hydrogeologist. Documentation of all changes to the approved plan shall be submitted with the well construction records.
27. Any modification to the approved water quality monitoring plan shall be submitted to the Section Hydrogeologist for review and approval. Documentation of all changes to the approved plan shall be submitted with the well construction records.
28. For each well constructed, a well construction record (completed GW-1 form), well schematic, boring log, and a description of well development activities shall be submitted to the Section within 30 days of well completion.
29. After well completion, provide a scaled map depicting the location of the new ground-water monitoring wells; existing ground-water monitoring wells, and abandoned piezometer / ground-water monitoring wells.
30. Prior to receiving waste at any unit of this facility, a Permit to Operate must be obtained from the Solid Waste Section in accordance with 15A NCAC 13B .0201(b).

31. The following requirements shall be met prior to waste disposal for any unit of this facility:
- a. Site preparation shall be in accordance with the approved plans and the conditions specified herein.
 - b. The permittee shall arrange for a site inspection by a representative of the Solid Waste Section for the purpose of demonstrating that the facility construction is consistent with approved plans and specifications.
 - c. Prior to waste disposal in any new unit or cell, the permittee shall contact the appropriate regional Solid Waste Management Specialist to determine whether the Solid Waste Section chooses to hold a pre-operative meeting with key landfill personnel and representatives of the Solid Waste Section.

PART II: INDUSTRIAL LANDFILL SPECIFIC CONDITIONS

32. Development of Phase 1 shall only be in accordance with the Division approved plans. The construction of Phase 1 is permitted for approximately:
- a. 25 acres,
 - b. 2,082,500 cubic yards of available and reasonable obtainable air space, and 500,000 tons per year of waste over the 5-year planning period.

Pre Operational Conditions

33. Ground water monitoring wells and surface water sampling locations shall be sampled for the Appendix 1 constituent list prior to issuing the Permit to Operate in accordance with the approved plans.
34. Construction and Construction Quality Assurance shall be in accordance with the approved plans.