



Facility Permit No. 6004
McGuire Nuclear Station
September 25, 2014
DIN:21787
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North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

John E. Skvarla, III
Secretary

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

SOLID WASTE MANAGEMENT FACILITY
Permit No. 6004

DUKE ENERGY CAROLINAS, LLC
is hereby issued a

PERMIT TO CONSTRUCT
Not Applicable

PERMIT TO OPERATE

6004-INDUS-1981, DUKE POWER COMPANY MCGUIRE

PERMIT FOR CLOSURE
Not Applicable

Located within the *Duke Energy Carolinas, LLC – McGuire Nuclear Station property boundaries, off of NC Highway 73, near the Town of Huntersville, Mecklenburg 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., Supervisor
Permitting Branch, Solid Waste Section
Division of Waste Management, NCDENR

ATTACHMENT 1
GENERAL PERMIT CONDITIONS/INFORMATION

PART I: GENERAL FACILITY

Permit to Operate Date Table

Permit	Status	Issuance	Expiration	DIN
6004-INDUS-1981, Duke Power Company McGuire	Active	September 25, 2014	July 7, 2019	21787

General Conditions

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Construct must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.
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 solid waste management facility 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. Failure to comply may result in compliance action or permit revocation.

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, "List of Documents for 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 must 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.

Properties Approved for the Solid Waste Management Facility

Gaston County, N.C. Register of Deeds			
Book	Page	Property Owner	Acres
16064	87-97	Duke Energy Carolinas, LLC	457±
			Total Site Acreage: 457±

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Permitting History

Permit Type	Date Issued	DIN
Permit to Construct, Issuance	July 30, 1991	
Permit to Operate, Issuance	July 30, 1992	
Permit to Operate, Issuance	July 30, 1994	
Permit to Operate, Amendment – 5 Year Renewal	March 31, 2004	
Permit to Operate, Amendment – 5 Year Renewal	July 7, 2009	7505
Permit to Operate , Amendment – 5 Year Renewal	September 25, 2014	21787

List of Documents for Approved Plan

Historical documents can be found in the permit dated July 7, 2009, DIN 7505.

DIN	Description
6987	<i>Duke Energy Carolinas, LLC – McGuire Nuclear Station, Mecklenburg County, North Carolina, Lined Landfill, Permit #60-04, Permit to Operate Five Year Renewal, Permit to Operate Phases 3 & 4. Prepared by Duke Energy. March 2009.</i>
6988	<i>McGuire Nuclear Station, Landfill #2, Permit Number 60-04, Groundwater Monitoring Program, Sampling and Analysis Plan. Prepared by Duke Energy. March 2009.</i>
21481	<i>McGuire Nuclear Station, Landfill #2, Operations Manual, Permit No. 6004-INDUS. Prepared by Duke Energy. April 2014, revised July 2014.</i>
21788	<i>Groundwater Monitoring Program, Sampling and Analysis Plan, McGuire Nuclear Station, Landfill #2 (Synthetically Lined), Permit No. 6004-INDUS. Prepared for Duke Energy. Prepared by HDR Engineering. March 2014, revised September 2014.</i>

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

Not Applicable

- End of Section-

ATTACHMENT 2

CONDITIONS OF PERMIT TO CONSTRUCT

PART I: GENERAL FACILITY

Not Applicable

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Not Applicable

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

Not Applicable

- End of Section -

ATTACHMENT 3

CONDITIONS OF PERMIT TO OPERATE

PART I: GENERAL FACILITY

1. Financial assurance must be continuously maintained for the duration of the facility in accordance with NCGS 130A 295.2. The owner and operator must annually adjust cost estimates for inflation.
2. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act NCGS 113A-50, et seq., and rules promulgated under 15A NCAC 4. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
3. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 404 of the Clean Water Act, as amended.
4. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Solid Waste Section must be notified of any sedimentation and erosion control plan modifications.
5. Copies of this permit, the approved plans, and all records required to be maintained in the operating record by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
6. All forms, reports, maps, plans, and data submitted to the Section must include an electronic (pdf) copy.
7. The facility must be adequately secured by means of gates, chains, berms, fences, or other security measures approved by the Section to prevent unauthorized entry.
8. Interior roadways must be of all-weather construction and maintained in good condition..
9. The edge of the waste footprint for all disposal units must be identified and maintained with permanent physical markers.

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Operational Requirements

12. This facility is permitted to receive solid waste generated by Duke Energy Progress, Inc. as described in the approved plan and as defined in G.S. 130-290 (a)(2b), except where

prohibited by the N. C. General Statutes Article 9 of Chapter 130A, and the rules adopted by the Commission for Health Services.

13. The facility operator must complete an approved operator training course in compliance with G.S. 130A-309.25.
 - a. A responsible individual certified in landfill operations must be available during all operating hours of the facility to ensure compliance with operational requirements.
 - b. All pertinent landfill-operating personnel must receive training and supervision necessary to properly operate the landfill units.

Monitoring and Reporting Requirements

14. Groundwater locations must be established and monitored as identified in the List of Documents for the Approved Plan.
15. A licensed geologist must be present to supervise the installation of groundwater monitoring wells. The exact locations, screened intervals, and nesting of the wells must be established after consultation with the SWS Hydrogeologist at the time of well installation.
16. Groundwater monitoring wells must be sampled for the constituents in the approved monitoring plan, at least semi-annually, according to the specifications outlined in the approved water quality monitoring plan and the current policies and guidelines of the Section in effect at the time of sampling.
17. Reports of the analytical data for each monitoring event must be submitted to the Section within 120 days of the respective sampling event. Analytical data must be submitted in a manner prescribed by the Section. Records of all groundwater and leachate analytical data must be kept as part of the permanent facility record.
18. Untreated leachate must be sampled and analyzed at least semi-annually concurrently with the groundwater water sampling, one sample per event. The leachate must be analyzed for the same constituents that the groundwater monitoring wells are the constituents in the approved monitoring plan. Test results must be submitted to the Section along with groundwater test results. In the event leachate is recirculated, additional leachate sampling may be required.
19. A readily accessible unobstructed path must be cleared and maintained so that four-wheel vehicles may access monitoring well locations at all times.
20. A log which details all development, sampling, repair, and all other pertinent activities associated with each monitoring well and all sampling activities associated with each surface water and leachate sampling location must be kept as part of the permanent facility record.
21. All well construction records and soil boring logs for new wells must be submitted to the Solid Waste Section Hydrogeologist for review within 30 days of completion.
22. The owner or operator must maintain a record of the amount of solid waste received at the landfill unit, compiled on a monthly basis. Scales must be used to weigh the amount of waste received.

23. The following, at a minimum, must not be accepted for disposal at the facility: hazardous waste, yard trash, liquid wastes, regulated medical waste, sharps not properly packaged, PCB waste as defined in 40 CFR 761, and wastes banned from disposal in North Carolina by G.S. 130A-309.10(f).
24. Closure or partial closure of any landfill unit must be in accordance with the Closure Plans described in the approved plans. Final Closure Plans must be submitted to the Division at least 90 days prior to implementation.

6004-INDUS-1981, Duke Power Company McGuire

Specific Conditions

25. This facility is permitted to receive solid waste generated by Duke Energy as described in the approved plan and as defined in G.S. 130-290 (a)(2b), except where prohibited by the N. C. General Statutes Article 9 of Chapter 130A, and the rules adopted by the Commission for Health Services.
26. The Permit to Operate shall expire July 7, 2019. Pursuant to 15A NCAC 13B .0201(e), no later than January 7, 2019, the owner or operator must submit a request to the Section for permit review and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.
27. This permit approves the continued operation of Phase 1, as well as the onsite environmental management and protection facilities as described in the approved plans.
28. Monitoring and Reporting shall be accomplished in accordance with the approved Operations Plan listed in the List of Documents for the Approved Plan, and the Response Action Plan contained therein in accordance with NCGS 130A-295.4(c).
29. Operations Quality Assurance shall be accomplished in accordance with Appendix II of the approved Operations Plan listed in the List of Documents for the Approved Plan. The Department may consider modification of the testing frequency, pending written request from Duke Energy. The submission requesting modification shall be based on demonstrated performance, observations and test results during operations.
27. On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste Section, on forms prescribed by the Section.
 - a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
 - b. The annual facility report must list the amount of waste received and landfilled in tons and be compiled:
 - i. On a monthly basis.
 - ii. By specific waste type.
 - iii. By disposal location within the facility.

- c. A measurement of volume utilized in the landfill cells must be performed during the second quarter of the calendar year. The date and volumes, in cubic yards, must be included in the report.
- d. The amount of waste, in tons from records, disposed in landfill cells from December 9, 2009 through the date of the annual volume survey must be included in the report.
- e. The completed report must be forwarded to the Regional Waste Management Specialist for the facility by the date due on the prescribed annual facility report form.
- f. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Waste Management Specialist by the date due on the prescribed annual facility report form.

28. The following table lists the estimated gross capacity, acreage and status details for the landfill units. Gross capacity is defined as the calculated volume from the elevation of initial waste placement to the top of the final cover.

Phase	Acres	Gross Capacity (cubic yards)	Status
Landfill #2	5	100,000	Constructed
Total	5	100,000	

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)
Not Applicable

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)
Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT
Not Applicable

- End of Section -

ATTACHMENT 4
CONDITIONS OF PERMIT FOR CLOSURE

PART I: GENERAL FACILITY

Not Applicable

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Not Applicable

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

Not Applicable

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

Not Applicable

- End of Conditions -