



Facility Permit No: 60-04  
Permit to Operate  
McGuire Landfill Facility  
Issued July 7, 2009,  
Revised August 17, 2009  
DIN: 7505  
Page 1 of 9

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

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

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

**INDUSTRIAL SOLID WASTE LANDFILL FACILITY**  
**Permit No. 60-04**

DUKE ENERGY – MCGUIRE NUCLEAR STATION

is hereby issued a

**PERMIT TO OPERATE**  
**MCGUIRE LANDFILL FACILITY**  
**PHASES 3 AND 4**

Located off of NC Highway 73, 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.

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

## ATTACHMENT 1

### PART I: PERMITTING HISTORY

1. Permit amendment, 5 year renewal, July 7, 2009.

Permit Type	Date Issued
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	March 31, 2004
<b>Permit to Operate, Amendment</b>	<b>July 7, 2009</b>

### PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN

#### **Industrial Solid Waste Landfill Unit**

1. *Permit Application Report and Project Manual for McGuire Landfill Lined Expansion.* Prepared by Duke Energy. Prepared for Duke Energy. September 26, 1990.
2. *Additions and Revisions to Project Manual, Land Quality Section Approval, DEM Approval, Design Calculations, Final Contour Plan (Drawing CFD-MG-6433C-C-0090).* April 11, 1991.
3. *Revision to Permit Application Report.* Prepared by Duke Energy. Prepared for Duke Energy. April 11, 1991.
4. *Revisions and Additions to Permit Application Report and Project Manual.* Prepared by Duke Energy. Prepared for Duke Energy. June 20, 1991.
5. *Operation Plan and trial period documentation for permanent use of Fabrisoil as alternative daily soil cover.* Prepared by Duke Energy. Prepared for Duke Energy. July 26, 1994.
6. *Duke Power Company, McGuire Nuclear Station, Mecklenburg County, Information Package.* Prepared by Duke Energy. Prepared for Duke Energy. November 19, 1996.

7. *Duke Power Company, McGuire Nuclear Station, Mecklenburg County, Compliance Demonstration Report.* Prepared by Duke Energy. Prepared for Duke Energy. November 25, 1997.
8. *Duke Power Company, McGuire Nuclear Station, Mecklenburg County, Ground Water Monitoring Program Sampling and Analysis Plan..* Prepared by Duke Energy. Prepared for Duke Energy. November 19, 1996.
9. *Geology/Hydrogeology of the McGuire Landfill Site.* Prepared by Duke Energy. Prepared for Duke Energy. May 17, 1999, revised July 6, 1999.
10. *Duke Power Company, McGuire Nuclear Station, Mecklenburg County, Final Cap System (Revised) for Cell 1 Closure.* Prepared by Duke Energy. Prepared for Duke Energy. February 24, 2000.
11. *Responses to Comments.* Prepared by Duke Energy. Prepared for Duke Energy. November 17, 2003.
12. *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. Prepared for Duke Energy. March 10, 2009. DIN 6987
13. *McGuire Nuclear Station, Landfill #2, Permit Number 60-04, Groundwater Monitoring Program, Sampling and Analysis Plan.* Prepared by Duke Energy. Prepared for Duke Energy. March 10, 2009. DIN 6988

**PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY**

<b>Mecklenburg County, N.C. Register of Deeds</b>				
<b>Book</b>	<b>Page</b>	<b>Grantor</b>	<b>Grantee</b>	<b>Acres</b>
16064	87-97	Charlotte Consolidated Construction	Duke Energy Corporation	457
				Total Site Acreage: 457 acres

#### PART IV: GENERAL PERMIT 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 Operate shall expire July 7, 2014. 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. (Intentionally blank)
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 must 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, “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.

- End of Section -

## **ATTACHMENT 2**

### **CONDITIONS OF PERMIT TO CONSTRUCT**

#### **PART I: GENERAL FACILITY CONDITIONS**

*Not Applicable*

#### **PART II: INDUSTRIAL SOLID WASTE LANDFILL UNIT SPECIFIC CONDITIONS**

*Not Applicable*

#### **PART III: MISCELLANEOUS SOLID WASTE MANAGEMENT SPECIFIC CONDITIONS**

*Not Applicable*

- End of Section -

## **ATTACHMENT 3**

### **CONDITIONS OF OPERATING PERMIT**

#### **PART I: GENERAL FACILITY CONDITIONS**

1. The Permit to Operate shall expire July 7, 2014. Pursuant to 15A NCAC 13B .0201(e), no later than April 7, 2014, 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.

2. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4.

#### Operational Requirements

3. This facility is permitted to receive solid waste generated by Duke Energy Corporation as described in the approved plan and as defined in G.S. 130-290 (a)(35), except where prohibited by the N. C. General Statutes Article 9 of Chapter 130A, and the rules adopted by the Commission for Health Services.
4. 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 on-site 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 in accordance with G.S. 130A-309.25 and addressed by memorandum dated November 29, 2000.
5. The use of different alternative daily cover requires approval, prior to implementation, by the Solid Waste Section. Requests for alternative daily cover approval must include a plan detailing the comprehensive use and a demonstration of the effectiveness of the alternative daily cover. The plan must be developed according to Section guidelines. Plans which are approved by the Section will be incorporated into, and made a part of, the approved documents listed in Attachment 1.
6. The facility must maintain records for all solid waste materials accepted as alternative cover material and used as alternate daily cover. The records must include: the date of receipt, weight of material, general description of the material, identity of the generator and transporter, and county of origin. Such records must be made available to the Solid Waste Section upon request.

#### Monitoring and Reporting Requirements

7. Groundwater, surface water, and methane monitoring locations must be established and monitored as identified in the approved plans.
8. 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.

9. Groundwater monitoring wells and surface water sampling locations must be sampled in accordance with the approved water quality monitoring plan listed in Attachment 1, Part 2, Approved Document Number 13 (DIN 6988) and the current policies and guidelines of the Section in effect at the time of sampling.
10. 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, surface water, and leachate analytical data must be kept as part of the permanent facility record.
11. The four independent samples which comprise the initial baseline sampling event must be collected from each groundwater monitoring well and the report must be submitted to the Section within six months after issuance of the Permit to Operate.
12. Untreated leachate must be sampled and analyzed in accordance with the approved water quality monitoring plan listed in Attachment 1, Part 2, Approved Document Number 13 (DIN 6988) and the current policies and guidelines of the Section in effect at the time of sampling.
13. Test results must be submitted to the Section along with groundwater and surface water test results. In the event leachate is recirculated, additional leachate sampling may be required.
14. A readily accessible unobstructed path must be cleared and maintained so that four-wheel vehicles may access monitoring well locations at all times.
15. A field log book 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.
16. 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.
17. Copies of this permit, the approved plans, and all records required to be maintained by the permittee must be maintained at the facility and made available to the Section upon request during normal business hours.
18. 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.

19. 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 scale records, disposed in landfill cells from July 30, 1992 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

## PART II:INDUSTRIAL SOLID WASTE LANDFILL UNIT SPECIFIC CONDITIONS

20. This permit approves the operation of Phases 3 and 4 of the industrial solid waste landfill, as well as the onsite environmental management and protection facilities as described in the approved plans.
21. 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).

22. 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.

**PART III: MISCELLANEOUS SOLID WASTE MANAGEMENT SPECIFIC CONDITIONS**

*Not Applicable*

*-End of Conditions-*