

# ALTAMONT ENVIRONMENTAL, INC.

ENGINEERING & HYDROGEOLOGY

231 HAYWOOD STREET, ASHEVILLE, NC 28801

TEL. 828.281.3350 FAC. 828.281.3351

WWW.ALTAMONTENVIRONMENTAL.COM

July 29, 2011

North Carolina Department of Environment and Natural Resources  
Division of Waste Management/Solid Waste Section  
Attn: C. T. Gerstell  
610 East Center Avenue  
Mooresville, NC 28115

Subject: Industrial Waste Landfill—Facility Annual Report  
Marshall Steam Station Flue Gas Desulfurization (FGD) Residue Landfill, Phase 1, Cell 1  
Permit # 18-09  
Duke Energy Carolinas, LLC—Marshall Steam Station  
Terrell, Catawba County, North Carolina 28682

Dear Mr. Gerstell,

Attached is the completed Industrial Waste Landfill Facility Annual Report form for Duke Energy's Marshall Steam Station, Flue Gas Desulfurization (FGD) Residue Landfill, Phase 1, Cell 1 (Permit# 18-09) for the period July 1, 2010 through June 30, 2011.

The landfill primarily accepts waste generated at Marshall Steam Station. However, in accordance with the conditions of the Permit to Operate, the landfill also accepts asbestos waste from Duke Energy facilities within the service area in the Piedmont Carolinas. A total of approximately 93,784.63 tons of waste was received by the landfill during the twelve month period, with >99.9% of this waste being generated at Marshall Steam Station.

The Duke Energy facilities where waste was generated and then disposed in the landfill are located in 20 counties. As required, the County Managers of these counties will be sent copies of the report.

Please feel free to call or respond with any questions or comments related to this project.

Sincerely,

ALTAMONT ENVIRONMENTAL, INC.

  
William M. Miller, P.E.



Enclosures: Industrial Waste Landfill—Facility Annual Report, including Figure 1

Mr. Charles Gerstell

July 29, 2011

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cc: Duke Energy Carolinas, LLC—Marshall Steam Station  
8320 East NC Highway 150  
Terrell, North Carolina 28682  
Attn: Donna Burrell

Duke Energy Carolinas, LLC  
Post Office Box 1006  
Charlotte, NC 28201-1006  
Attn: Ed Sullivan, P.E. Mail Code EC13K

Duke Energy Carolinas, LLC  
Post Office Box 1006  
Charlotte, NC 28201-1006  
Attn: Chris Usery Mail Code EC10C

According to (G.S. 130A-309.09D(b)) completed forms must be returned by August 1, 2011 and a copy of this report must be sent to the County Manager of each county from which waste was received. If you have questions or require assistance in completing this report, contact your Regional Environmental Senior Specialist.

Facility Name: Marshall Steam Station - FGD Residue Landfill, Phase 1, Cell 1 Permit: 1809-INDUS- ID: P1151

Facility Website (URL): http://duke-energy.com/power-plants/coal-fired/marshall.asp

Physical Address	Mailing Address
Street 1: <u>8320 East NC Highway 150</u>	Street 1: <u>8320 East NC Highway 150</u>
Street 2: _____	Street 2: _____
City: <u>Terrell</u> County: <u>Catawba</u>	City: <u>Terrell</u>
State: <u>North Carolina</u> Zip: <u>28682</u>	State: <u>North Carolina</u> Zip: <u>28682</u>
Primary Facility Contact Person	Billing Contact Person
Name: <u>Donna Burrell</u>	Name: <u>Donna Burrell</u>
Phone: <u>(828) 478-7820</u> Fax: <u>(828) 478-7679</u>	Phone: <u>(828) 478-7820</u> Fax: <u>(828) 478-7679</u>
Email: <u>Donna.Burrell@duke-energy.com</u>	Email: <u>Donna.Burrell@duke-energy.com</u>

1. Tipping Fee: \$ 0.00 per Ton (Attach a schedule of tipping fees if appropriate.)

2. Indicate types of disposal activity occurring at this facility (Check all that apply).

- Landfilling of industrial waste (specify waste): FGD - Clarifier Sludge and Gypsum
- Landfilling of construction and demolition waste
- Landfilling of asbestos
- Landfilling of ash
- Landfilling of sludge
- Landfilling of other waste (specify): Mill Rejects

3. What other activities occur at this facility? (check all that apply)

- Recycling/Reuse Collection  Scrap Tire Collection  White Goods Collection  Household Hazardous Waste Collection

If you checked Recycling/Reuse Collection, please indicate the materials accepted: (check all that apply)

- Paper  Wood  Concrete/rubble/asphalt  Gypsum/drywall
- Cardboard  Glass  Aluminum Cans  Steel Cans
- PETE (#1) Plastic  HDPE (#2) Plastic  Computer Equipment  Televisions
- Fluorescent lightbulbs  Used oil/oil filters  Other Metal  Other Plastic
- Other (specify) \_\_\_\_\_

**Airspace (Capacity):** Questions in this section relate to all cells/units of the facility operated under the current 4-digit permit number regardless of whether the cells/units are closed or are not contiguous at the time of this report. Tonnage questions must be based on scale records and cover the period between the opening date and the date of the last survey unless another time period is approved. Airspace measurements include weekly, intermediate and final cover.

4. Date Facility Last Surveyed: No Survey Required

5. Airspace Used (cubic yards): \_\_\_\_\_

6. Total Tons Disposed in Airspace Used (tons): 274,575.88



Facility Name: Marshall Steam Station - FGD Residue Landfill, Phase 1, Cell 1 Permit: 1809-INDUS-

Address: 8320 East NC Highway 150

City: Terrell State: North Carolina Zip: 28682

Person completing Assessment: William M. Miller Date: Jul 29, 2011

Phone Number: (828) 281-3350 Fax: (828) 281-3351 Email: bmiller@altamontenvironmental.com

**Instructions:** Please indicate either *Yes* or *No* for each Receptor and Post Closure Maintenance question. Then please determine the distance or distances for each Receptor from the *Edge of Waste* (using range finders and/or GIS maps) and type that information into the form. Please attach additional information including GIS maps, lists of potable well locations, etc.

**Receptors**

1. Are there Residential Dwellings Within 1,500 feet of the Edge of Waste?  Yes  No  
 If Yes, how many? 5  
 What are the three closest distances from the *Edge of Waste*? 1000 Feet 1200 Feet 1250 Feet

2. Are there Potable Wells Within 1,500 feet of the Edge of Waste?  Yes  No  
 If Yes, how many? 8  
 What are the three closest distances from the *Edge of Waste*? 400 Feet 800 Feet 1000 Feet

3. Are there Community/Municipal Wells Within 1,500 feet of the Edge of Waste?  Yes  No  
 If Yes, how many? 1  
 What are the three closest distances from the *Edge of Waste*? 700 Feet \_\_\_\_\_ Feet \_\_\_\_\_ Feet

4. Are there Surface Water Bodies Within 1,500 feet of the Edge of Waste?  Yes  No  
 If Yes, how many? 1  
 What are the three closest distances from the *Edge of Waste*? 1000 Feet \_\_\_\_\_ Feet \_\_\_\_\_ Feet  
 Please list the names of the water bodies: Unnamed Intermittent Stream

5. Is Public Water Available Within 1,500 feet of the Edge of Waste?  Yes  No  
 If Yes, how many of the Residential Dwellings noted above are connected? Unknown

**Corrective Measures**

6. Is there an active methane extraction system (blower, flare, etc.)?  Yes  No  
 7. Is there a passive methane extraction system (trench, vents in cap, flare, etc.)?  Yes  No  
 8. Is there groundwater remediation taking place on site?  Yes  No  
 If Yes, what is the specific remedial technology used? \_\_\_\_\_

**Comments**

Information verified by Duke Energy Carolinas, LLC



NOTES:

1. ORTHOPHOTOGRAPHY (2009 FLIGHT) OBTAINED FROM CATAWBA COUNTY.
2. SURFACE WATER BODIES GIS DATA OBTAINED FROM NC DENR DWQ WEBSITE DATED 2007 AND 2010.
3. ONLY POTABLE WELLS WITHIN THE 1,500' BUFFER ARE SHOWN.
4. BASED UPON THE CATAWBA COUNTY UTILITIES AND ENGINEERING WEBSITE, A PUBLIC WATER LINE IS NOW LOCATED ALONG SHERRILLS FORD ROAD.
5. WELL LOCATIONS PROVIDED BY DUKE ENERGY CAROLINAS, LLC.
6. ALL EDGE OF WASTE BOUNDARIES AND PROPERTY INFORMATION PROVIDED BY DUKE ENERGY CAROLINAS, LLC.

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DRAWN BY: MARTA VANDUSSEN  
 PROJECT MANAGER: BILL MILLER  
 CLIENT: DUKE ENERGY CAROLINAS, LLC  
 DATE: 07/26/2011

SCALE (FEET)  
 300' 0 300' 600'  
 1" = 600'

FGD RESIDUE LANDFILL  
 PERMIT # 18-09

DUKE ENERGY CAROLINAS, LLC  
 MARSHALL STEAM STATION  
 CATAWBA COUNTY, NORTH CAROLINA

FIGURE

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