



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

| UNIT TYPE: | | | | | | | | | | | |
|--------------|--|-----------------------|--|---------------|--|---------------------|--|---------|--|------|--|
| Lined MSWLF | | LCID | | YW | | Transfer | | Compost | | SLAS | COUNTY: CATAWBA PERMIT NO.: 1804-INDUS-1983 FILE TYPE: COMPLIANCE |
| Closed MSWLF | | HHW | | White goods | | Incineration | | T&P | | FIRM | |
| CDLF | | Tire T&P / Collection | | Tire Monofill | | Industrial Landfill | | DEMO | | SDTF | |

Date of Site Inspection: July 16, 2015 **Date of Last Inspection:** 2/20/2014 (routine) and 3/7/2014 (follow-up)

FACILITY NAME AND ADDRESS:

Duke Energy Carolinas, LLC - Marshall Steam Station
 Industrial Landfill
 8320 East NC Highway 150
 Terrell, North Carolina 28682

GPS COORDINATES: N: 35.616972 W: -80.969116

FACILITY CONTACT NAME AND PHONE NUMBER:

Tim Russell, 828-478-7622, Tim.Russell2@duke-energy.com

Kim Hutchinson, 336-215-4576, Kim.Hutchinson@duke-energy.com

FACILITY CONTACT ADDRESS:

Same as above

PARTICIPANTS:

- Kim Hutchinson, PE – Duke Energy
- Kyle Baucom – Duke Energy
- Tim Russell – Duke Energy
- Margie Barnes – Duke Energy
- Chris Randazzo – Duke Energy
- Tyler DuBose – Duke Energy
- Scott LaSalla – Duke Energy
- Shawn McKee – NCDENR, Solid Waste Section
- Larry Frost – NCDENR, Solid Waste Section
- Elizabeth Werner – NCDENR, Solid Waste Section
- Deb Aja – NCDENR, Solid Waste Section
- Shannon Aufman – NCDENR, Solid Waste Section

STATUS OF PERMIT:

Inactive/Closed. The facility consists of a closed ash landfill, closed asbestos landfill, and a closed construction and demolition landfill. The portion of the landfill permitted to receive fly ash was closed in 2001. The portion of the landfill permitted to receive asbestos and construction and demolition debris has not received waste since before June 30, 2008. Closure documentation and closure certification has been submitted and received by the Solid Waste Section.

PURPOSE OF SITE VISIT:

Comprehensive Inspection

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 2 of 2

STATUS OF PAST NOTED VIOLATIONS:

None.

OBSERVED VIOLATIONS

General Permit Condition #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.”*

The current permit does not allow for disposal of land clearing debris in a separate location outside of the active working face of the FGD Landfill or Industrial Landfill #1. **Unpermitted disposal of land clearing debris outside of the active permitted landfills must cease and all waste located in the area designated as the “Compost Area” must be removed and properly disposed.**

After the site inspection, the facility immediately began working on a plan to address the removal of unpermitted land clearing debris in the “Compost Area”. As of August 12, 2015, an assessment of the waste had been conducted. Test pits were dug to determine the total amount of waste to be removed and a TCLP analysis was conducted to determine which type of permitted landfill was appropriate.

On August 24, 2015, Duke Energy provided documentation to the Solid Waste Section that all unpermitted land clearing debris in the “Compost Area” had been removed. According to the letter: approximately 507 tons of soil debris was hauled to the Marshall onsite lined landfill facility (FGD Landfill) using onsite disposal trucks; and approximately 116 tons of vegetative debris was hauled via disposal truck to the Republic Services CMS Landfill (Permit # 1304-MSWLF-1992) for disposal. A Waste Ticket Summary confirming the disposal at the CMS Landfill was provided to the Section. The letter stated that on August 21, 2015 the storage area was fine graded and stabilized using seed, and straw layer added for protection.

Based on the provided documentation, the observed violation appears to have been resolved. A follow-up inspection will be conducted to visually confirm that the waste has been removed and that the area has been graded and stabilized.

The item(s) listed above were observed by Section staff and require action on behalf of the facility in order to come into or maintain compliance with the Statutes, Rules, and/or other regulatory requirements applicable to this facility. Be advised that pursuant to N.C.G.S. 130A-22, an administrative penalty of up to \$15,000 per day may be assessed for each violation of the Solid Waste Laws, Regulations, Conditions of a Permit, or Order under Article 9 of Chapter 130A of the N.C. General Statutes. Further, the facility and/or all responsible parties may also be subject to enforcement actions including penalties, injunction from operation of a solid waste management facility or a solid waste collection service and any such further relief as may be necessary to achieve compliance with the North Carolina Solid Waste Management Act and Rules.

ADDITIONAL COMMENTS

Inspection of the Closed Ash Landfill (Area 1):

1. The access road was maintained in good condition.
2. Edge-of-waste markers were in place and maintained. Some of the Edge-of-waste markers have been placed across the perimeter road. Facility staff will confirm the boundaries of the ash and
3. The cover system appeared to be in good condition. The vegetative cover was mowed and in good condition. There was no erosion observed. Over-seeding will be performed in the Fall.
4. There was no ponding of water observed on the landfill surface. Slope drains and other stormwater control structures appeared to be maintained in good condition.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 3 of 3

5. Environmental monitoring records were reviewed during the inspection. Semi-annual sampling of groundwater, surface water, and leachate was conducted in March, 2015 and September, 2014 [Monitoring wells MW-1, MW-2, MW-3, MW-4, MW-5].
6. An inspection of all monitoring points was conducted during the inspection. Observations are noted below:

| 1804-INDUS-1983: Dry Ash Landfill | | | |
|--|----------|--------------|----------------------------|
| Monitoring Well ID | Well Tag | Concrete Pad | Comments |
| MW-1 | Yes | Yes | |
| MW-2 | Yes | Yes | |
| MW-3 | Yes | Yes | |
| MW-4 | Yes | Yes | background/upgradient well |
| MW-5 | Yes | Yes | |
| OB-1 | Yes | Yes | water level readings only |



7. An area identified as the “Compost Area”, located to the west of Area 1 of the Dry Ash Landfill, was being used at the time of the inspection for disposal of land clearing debris from onsite clearing of woody vegetation generated by monitoring well installation activities. Per General Permit Condition #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.” The current permit does not allow for disposal of land clearing debris in a separate location outside of the active working face of the FGD Landfill or Industrial Landfill #1

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 4 of 4

The current permit does not allow for disposal of land clearing debris in a separate location outside of the active working face of the FGD Landfill or Industrial Landfill #1. **Unpermitted disposal of land clearing debris outside of the active permitted landfills must cease and all waste located in the area designated as the “Compost Area” must be removed and properly disposed.**

After the site inspection, the facility immediately began working on a plan to address the removal of unpermitted land clearing debris in the “Compost Area”. As of August 12, 2015, an assessment of the waste had been conducted. Test pits were dug to determine the total amount of waste to be removed and a TCLP analysis was conducted to determine which type of permitted landfill was appropriate.

On August 24, 2015, Duke Energy provided documentation to the Solid Waste Section that all unpermitted land clearing debris in the “Compost Area” had been removed. According to the letter: approximately 507 tons of soil debris was hauled to the Marshall onsite lined landfill facility (FGD Landfill) using onsite disposal trucks; and approximately 116 tons of vegetative debris was hauled via disposal truck to the Republic Services CMS Landfill (Permit # 1304-MSWLF-1992) for disposal. A Waste Ticket Summary confirming the disposal at the CMS Landfill was provided to the Section. The letter stated that on August 21, 2015 the storage area was fine graded and stabilized using seed, and straw layer added for protection.

Based on the provided documentation, the observed violation appears to have been resolved. A follow-up inspection will be conducted to visually confirm that the waste has been removed and that the area has been graded and stabilized.

Inspection of the Asbestos Landfill (Area 2):

8. The access road was maintained in good condition.
9. Edge-of-waste markers were in place and maintained.
10. The landfill cover system was maintained in good condition. A vegetative cover consisting of clover and grass was established and mowed.
11. There was no erosion observed. Riprap is being used on the western slope of the landfill to control erosion in that location.
12. There was no ponding of water observed on the landfill surface. Stormwater control structures appeared to be maintained in good condition.

Inspection of Closed Construction and Demolition Landfill (Area 3):

13. The access road was maintained in good condition.
14. Edge-of-waste markers were in place and maintained.
15. The landfill cover system was being maintained in good condition. A vegetative cover consisting of clover and grass was established and mowed.
16. There was no erosion observed.
17. There was no ponding of water observed on the landfill surface. Stormwater control structures were maintained in good condition.

FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Page 5 of 5

Inspection of the Closed Ash Landfill (Open between 1984-1986):

- 18. The access road was maintained in good condition.
- 19. There was no erosion observed. There was no ponding of water observed on the landfill surface. Stormwater control structures were maintained in good condition.
- 20. The cap of this unit is heavily wooded. Duke Energy routinely inspects the landfill unit for damage from fallen trees. Slope drains have been installed to reduce slope erosion. A vegetation management plan will be drafted and submitted to the SWS



Please contact me if you have any questions or concerns regarding this inspection report.

S. A. Miller

Phone: 919-707-8284

Environmental Senior Specialist
Regional Representative

| | | | | | |
|------------------------------------|--|-------------|---------------|---------|-------------------|
| Sent on: August 26, 2015 | | Email: X | Hand delivery | US Mail | Certified No. [] |
|------------------------------------|--|-------------|---------------|---------|-------------------|

- Copies:**
- Ellen Lorscheider, Section Chief, Solid Waste Section
 - Ed Mussler, Permitting Branch Head, Solid Waste Section
 - Jason Watkins, Field Operations Branch Head, Solid Waste Section
 - Deb Aja, Western District Supervisor, Solid Waste Section
 - Elizabeth Werner, Permitting Hydrogeologist, Solid Waste Section
 - Larry Frost, Engineering Project Manager, Solid Waste Section
 - Shannon Aufman, Permitting Engineer, Solid Waste Section
 - Jessica Montie, Compliance Officer, Solid Waste Section