



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

UNIT TYPE:

Lined MSWLF	LCID	YW	Transfer	Compost	SLAS	COUNTY: CATAWBA PERMIT NO.: 18-09 FILE TYPE: COMPLIANCE
Closed MSWLF	HHW	White goods	Incin	T&P	FIRM	
CDLF	Tire T&P / Collection	Tire Monofill	Industrial Landfill	<input checked="" type="checkbox"/>	DEMO	

Date of Site Inspection: April 23, 2012 & May 2, 2012

Date of Last Inspection: April 1, 2011

FACILITY NAME AND ADDRESS:

Duke Energy Carolinas, LLC - Marshall Steam Station
 Flue Gas Desulfurization (FGD) Residue Landfill
 8320 East NC Highway 150
 Terrell, North Carolina 28682

GPS COORDINATES: N: 35.60463 W: -80.9774

FACILITY CONTACT NAME AND PHONE NUMBER:

Donna Burrell, Environmental Coordinator
 Duke Energy Carolinas, LLC
 (828) 478-7820
 donna.burrell@duke-energy.com

FACILITY CONTACT ADDRESS:

Principal Office: Duke Energy Carolinas, LLC
 526 South Church Street
 Charlotte, NC 28202-1904

PARTICIPANTS:

Donna Burrell, Duke Energy Carolinas, LLC (4/23/2012, 5/2/2012)
 Buddy Mayberry, Duke Energy Carolinas, LLC (4/23/2012, 5/2/2012)
 Larry Frost, Regional Permitting Engineer - NCDENR Solid Waste Section (4/23/2012)
 Deb Aja, NCDENR Solid Waste Section (4/23/2012, 5/2/2012)
 Ed Sullivan, Duke Energy Carolinas, LLC (5/2/2012)
 Jerry Comb, The SEFA Group (5/2/2012)
 Ronnie Puckett, The SEFA Group (5/2/2012)

STATUS OF PERMIT: Active.

INDUSTRIAL WASTE LANDFILL FACILITY: PERMIT NO. 18-09	ISSUANCE DATE
Original Permit to Construct	April 12, 2006
Modification PTC: HDPE Liner and Cap System	May 22, 2006
Permit to Operate: Phase 1, Cell 1	November 21, 2006
Amendment – 5 year renewal application submitted August 19, 2011	Review in progress.

PURPOSE OF SITE VISIT: Partial Inspection – Operations.

STATUS OF PAST NOTED VIOLATIONS:

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None.

OBSERVED VIOLATIONS

None.

ADDITIONAL COMMENTS

1. The facility is permitted to receive FGD gypsum, clarifier sludge defined as FGD residue material removed from the settling or clarifier stages associated with the waste water treatment facility, asbestos containing wastes, construction and demolition wastes, and mill rejects within the permitted facility.
2. A sign was posted at the entrance to the facility with the permit number and a statement that no hazardous or liquid waste is permitted per the approved operations plan.
3. The access road was maintained in excellent condition.
4. Edge-of-waste markers were in place to delineate the permitted disposal area.
5. Dust was well controlled at the time of the inspections.
6. The FGD gypsum, clarifier sludge, and other approved non-asbestos containing wastes appeared to be placed the landfill as required: in ten foot layers, spread in lifts no greater than 12 inches, working from upgradient to downgradient areas. Daily and intermediate soil cover are not required, however, the approved operation plan states that soil cover may be required for erosion control.
7. There was evidence of erosion of waste observed in the initial 10 foot lift. It was stated that there was a heavy rainfall event in the week preceding the April 23, 2012, inspection. In accordance with the approved operation plan, the sediment basins, embankments, and outlets must be inspected for erosion damage after each significant rainfall event and all necessary repairs made immediately. Recent repairs were made to the embankments surrounding the landfill by reshaping the eroded areas and installing erosion control matting and seeding. Grass was growing on the embankments.
8. The concrete lined stormwater basin appeared to be maintained below the level limit of the basin as indicated by markers installed at the perimeter of the basin.
9. A sign was posted clearly marking designated asbestos disposal area with a statement "Asbestos Waste Only".
10. The asbestos disposal area was inspected. Asbestos was last placed in the landfill on December 14, 2011. During the April 23, 2012 inspection soil cover material was stockpiled on site and it appeared that soil cover had been placed over the asbestos waste disposal area and then seeded with temporary seeding as required. The operation plan requires that eight inches of soil be placed over asbestos containing wastes. It was stated that as a practice approximately one foot over cover is used. The soil cover observed during the inspection had eroded and rills were present surface. While there was no exposed waste observed within the rills, a few pieces of black plastic material were visible at the landfill surface mixed with soil cover. At the time of the inspection facility staff made arrangements to place additional soil cover over the disposal area. The source and of the black plastic material was not known at the time of the inspection.
11. On April 26, 2012, photographs were provided showing that the asbestos disposal area had been covered with additional soil. Surface erosion appeared to be corrected and there was no plastic material visible in the photographs.
12. On April 27, 2012, the facility completed an investigation of the source of the plastic material and determined that the material observed on April 23, 2012 was silt fence made of a textured geotextile fabric. The silt fence material was embedded in with the stockpiled soil in the borrow area.
13. On May 2, 2012, a follow up inspection of the asbestos disposal area was conducted. It appeared that at least a foot of additional soil cover had been placed over the entire disposal area since the previous inspection. No waste was visible at the surface of the disposal area. The facility should take all necessary measures to prevent erosion of soil cover in accordance with the operation plans. Rule 15A NCAC 13B .0566 requires that "Adequate erosion control measures, structures, or devices shall be utilized to prevent silt from leaving the site and to prevent excessive on site erosion."
14. The stockpiled soil in the borrow area was also viewed during the May 2, 2012, inspection. Pieces of textured black plastic material (geotextile fabric) were embedded in the stockpile. The stockpile appeared to be established in place for some time as there was vegetation growing around areas of the pile not recently in

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use. Landfill operators were instructed by facility staff to carefully screen the stockpiled soil prior to placement as the required soil cover.

15. Environmental monitoring points and facility records will be reviewed during the next comprehensive inspection.

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



Deborah Aja
 Environmental Senior Specialist
Regional Representative
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Sent on May 4, 2012, to:	X	Email		Hand delivery		US Mail		Certified No.
Donna Burrell, Duke Energy Carolinas, LLC								
by;								

- Ec: Jason Watkins, Western District Supervisor
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 Ed Sullivan, Duke Energy Carolinas, LLC