



FACILITY COMPLIANCE INSPECTION REPORT
Division of Waste Management
Solid Waste Section

Table with columns for Unit Type (Lined MSWLF, Closed MSWLF, CDLF, LCID, HHW, Tire T&P/Collection, YW, White goods, Tire Monofill, Transfer, Incin, Industrial Landfill, Compost, T&P, DEMO, SLAS, FIRM, SDTF) and County/Permit/File Type information.

Date of Site Inspection: June 30, 2016 Date of Last Inspection: July 16, 2015

FACILITY NAME AND ADDRESS:

Industrial Landfill No. 1
Duke Energy Carolinas, LLC - Marshall Steam Station
8320 East NC Highway 150
Terrell, North Carolina 28682

GPS COORDINATES: N: 35.616972 W: -80.969116

FACILITY CONTACT NAME AND PHONE NUMBER:

Tyler Hardin, 980-373-5697, tyler.hardin@duke-energy.com

Kim Witt, 336-215-4576, kimberlee.witt@duke-energy.com

FACILITY CONTACT ADDRESS:

Same as above

PARTICIPANTS:

- Kyle Baucom - Duke Energy
Tim Russell - Duke Energy
Jeff Jones - Duke Energy
Chris Randazzo - Duke Energy
Tyler Hardin - Duke Energy
Scott LaSalla - Duke Energy
Shawn McKee - NCDEQ, Solid Waste Section
Larry Frost - NCDEQ, Solid Waste Section
Elizabeth Werner - NCDEQ, Solid Waste Section

STATUS OF PERMIT:

Table with 2 columns: Permit Type, Date Issued. Rows include Site Suitability approved, Permit to Construct, Permit to Operate (Modification), and Permit to Construct (Phase 1).

PURPOSE OF SITE VISIT:

Comprehensive Inspection

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STATUS OF PAST NOTED VIOLATIONS:

None.

OBSERVED VIOLATIONS:

None.

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

The facility is an industrial landfill permitted to receive waste generated by any Duke Energy Corporation. Waste types include, but are not limited to: coal combustion residuals, asbestos, construction and demolition debris, land clearing and inert debris, coal mill rejects, waste limestone material, and remediation wastes This facility is permitted to receive solid waste generated by or at any Duke Energy Corporation property, as described in the approved plan and as defined in G.S. 130-290 (a)(2b), except where prohibited by the N. C. General Statues Article 9 of Chapter 130A, and the rules adopted by the Environmental Management Commission.

1. The Marshall Steam Station Industrial Landfill No. 1 is constructed on a Coal Combustion By-Products structural fill built in accordance with the requirements specified in North Carolina Administrative Code 15A NCAC 13B .1700 which is utilized as subgrade to the landfill. This structural fill is identified as CCB0072.
2. The Permit and Operations Plan are maintained on-site as required and were reviewed during the inspection. The permit shall expire March 7, 2026. **No later than September 7, 2025, the owner or operator must submit a request to the Section for permit review.**
3. The facility is operated by Charah, Inc. which is responsible for hauling materials to the landfill, daily operations of the landfill, and conducting other associated activities.
4. All required quality assurance compaction testing (Field Density) appears to be complete, and within expected parameters. These records are maintained by Charah, Inc.
5. Weekly logs of onsite inspections are maintained documenting monitoring and maintenance of storm water conveyance systems, erosion and sedimentation controls, and status/confirmation of repairs.
6. Leachate is sampled semiannually from dedicated sample ports located on the leachate collection system. Access to the sampling ports for Cell 1 and Cell 2 and the areas surrounding the ports were well maintained. Semi-annual leachate sampling records were reviewed during the inspection. The sampling was conducted 8/25/15 and 2/28/16 as required.
7. Leak detection records were reviewed during the inspection. Leachate collection system and detection system flow readings were conducted monthly as required. No leakage rate exceedances were documented in the records reviewed. Once the landfill reaches 40 feet the flow readings will be conducted quarterly.
8. Dust Control records were reviewed during the inspection. The records were complete and well documented.
9. NPDES permit expired on 4/30/2015. A renewal application has been submitted.
10. Air Quality Permit expired 8/31/2015. A renewal application has been submitted.

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11. Leachate collection system pipes were cleaned out with camera monitoring on 2/22/16. The Operations Plan states that "LCS pipes will be cleaned out by the use of a clean-out snake or high-pressure water flushing at least once a year, and the LCS piping will remote-camera monitored if cleaning indicates a blockage in the leachate collection system pipes."
12. Financial assurance documentation for the facility was reviewed during the inspection. The financial assurance was submitted by Duke Energy Carolina on March 22, 2016. The approved financial assurance includes \$2,754,125 for closure, \$1,277,371 for post-closure care, and \$2,000,000 for potential assessment and corrective action.
13. Charah, Inc. personnel are responsible for daily landfill operations; certified staff are always present when the landfill is in operation. Training records were documented and maintained on-site. The following Charah personnel are NC Certified Landfill Managers:
 - Sam Byrd, 13-02M-00093, expires 9/19/16
 - Chris Emory, 13-02M-00079, expires 7/23/2016
 - Steven Faussete, 13-02M-000114, expires 7/23/17
 - Steve Avery, 16-02M-00160, expires 5/20/2019
 - David Vanuiken, 16-02M-00161, expires 5/20/2019
 - Jeffery Lomax, 15-02M-00154, expires 12/3/2018
 - Ben Hildebran, 15-02M00151, expires 12/3/18
 - Walter Fox, 13-02M-0092, expires 9/19/2016
14. The total tonnage placed in the landfill from 1/1/16 to 6/23/16 was 200,942.62 tons.
15. No monitoring wells are required for the landfill because it is double lined with a leak control system and leak detection system. Leachate ports were well maintained at the time of the inspection. One of the vaults had filled with storm water because of rains the night before; facility staff began storm water removal during the inspection.
16. Landfill Operations have resumed as of October 2015 and waste is currently being placed in Phase 1, Cells 1 and 2.



Phase 1, Cells 1 and 2

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- 17. The access road to the site was of all-weather construction and maintained in good condition. A truck wash station is located adjacent to the haul road to clean trucks exiting the site.
- 18. Edge-of-waste markers delineating the permitted disposal area were visible and being maintained. The markers are offset from the edge of the landfill liner.
- 19. There was no water observed ponded over waste. Chimney drains convey the flow of leachate to the leachate control system.
- 20. Dust was being well controlled at the time of the inspection.
- 21. Exterior landfill slopes were vegetated. There was no erosion observed on exterior landfill slopes. Reseeding is done as needed.

Reminders:

- o The permittee must conduct a preconstruction meeting at the facility prior to initiating construction of any unit/cell and must notify the Section at least 10 days prior to the meeting.
- o The following conditions must be met prior to approval for operation of any phase, cell or construction sequence of the landfill:
 - o Financial assurance must be made current if any adjustment is warranted.
 - o A construction quality assurance documentation report shall be prepared in accordance with the approved plan and submitted to the Section for review prior to placement of waste.
 - o New groundwater monitoring wells associated with each new phase or cell shall be installed and background sampling shall be completed for the constituents listed in the approved Water Quality Monitoring Plan listed in Attachment 1, List of Documents for Approved Plan.

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



Shawn McKee
Environmental Senior Specialist
Regional Representative

Phone: 919-707-8284

Sent on: July 15, 2016		Email: X		Hand delivery		US Mail		Certified No. []
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- 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
 - Elizabeth Werner, Permitting Hydrogeologist, Solid Waste Section
 - Larry Frost, Engineering Project Manager, Solid Waste Section