



Facility Permit No: 5504  
Lake Norman Landfill  
March 2, 2015  
DIN: 23790  
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North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

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

**SOLID WASTE MANAGEMENT FACILITY**

**Permit No. 5504**

LAKE NORMAN LANDFILL, INC.

is hereby issued a

**PERMIT TO CONSTRUCT**

5504-CDLF-1999, LAKE NORMAN LANDFILL – CELLS 3A, 3B, 4A AND 4B

**PERMIT TO OPERATE**

5504-CDLF-1999, LAKE NORMAN LANDFILL – CELLS 1A, 1B, 2A, AND 2B

**PERMIT FOR CLOSURE**

*Not Applicable*

Located at *7099 Quarry Lane near the Town of Stanley, Lincoln 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 1 of this permit.

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Edward F. Mussler, III, P.E., Supervisor  
Permitting Branch, Solid Waste Section  
Division of Waste Management, NCDENR

**ATTACHMENT 1**  
**GENERAL PERMIT CONDITIONS/INFORMATION**

**PART I: GENERAL FACILITY**

**Permit to Operate Date Table**

Permit	Status	Issuance	Expiration	DIN
5504-CDLF-1999, Lake Norman Landfill	Active	March 2, 2015	March 2, 2020	23790

**General 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 Construct must be implemented in accordance with Attachment 2 of this permit. 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. The Permit to Operate for this facility dated August 21, 1998, was recorded in the Lincoln County Register of Deeds on February 8, 1999, in Deed Book 1095, Pages 173-182. DIN 13225.
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 solid waste management facility 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 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. Should the approved plan and the rules conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition. Failure to comply may result in compliance action or permit revocation.
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.

Properties Approved for the Solid Waste Management Facility

Lincoln County NC Register of Deeds			
Book	Page	Property Owner	Acres
1078	766	Lake Norman Landfill, Inc.	117.09±
Total Site Acreage: 117.09± acres			

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

*Not Applicable*

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

5504-CDLF-1999, Lake Norman Landfill

Permitting History

Permit Type	Date Issued	DIN
Permit to Construct – Cells 1A, 1B, and 1C.	August 21, 1998	13224
Permit to Operate – Original, Cell 1A.	March 25, 1999	13226
Permit to Operate – Modification, Cell 1A.	November 21, 2000	13227
Permit to Operate – Modification, Cell 1B.	April 23, 2002	13228
Permit to Operate – Modification, Cell 1B.	May 31, 2002	13229
Permit to Operate – Modification, Cells 1A and 1B.	March 31, 2005	13230
Permit to Construct – Amendment, Cells 2A through 4B.	August 30, 2005	13231
Permit to Operate – Modification, Cell 2A.	October 12, 2005	13232
Permit to Operate – Modification, Cell 2B.	June 28, 2007	2593
Permit to Operate – Amendment, five (5) year renewal.	April 1, 2011	13233
Permit to Operate- Amendment, five (5) year renewal.	March 2, 2015	23790

List of Documents for Approved Plan

*The descriptions of previous/historical documents may be found in the Permit to Operate issued April 1, 2011(DIN 13233).*

DIN	Description
13296	<i>Construction Plan Application, Construction and Demolition Landfill, Lake Norman Landfill, Inc., Lincoln County, North Carolina, S&amp;ME Project No. 1356-97-394. Prepared for BFI-Lake Norman Landfill, Inc. Prepared by S&amp;ME. July 1998.</i>
13296	<i>Methane Migration Monitoring - Permit # 55-04. Prepared by BFI. June 1999.</i>
2596	<i>Application for Permit to Operate a Construction &amp; Demolition (C&amp;D) Landfill, Construction Quality Assurance (CQA) Certification, Lake Norman C&amp;D Landfill Cell 2B, Lincoln County, North Carolina. Prepared for Lake Norman, Inc. Prepared by Atlantic Coast Consulting. June 2007.</i>
13198	<i>Operation Plan for the Lake Norman Construction and Demolition Debris Landfill, Facility Permit No. 55-05. Prepared for BFI-Lake Norman Landfill. Prepared by SCS Engineers. October 2008, revised January 2009, revised October 2010. March 2011.</i>
21087	<i>Permit Amendment, 5-year Permit to Operate for Cells 1A, 1B, 2A and 2B and, Permit to Construct for Cells 3A, 3B, 4A and 4B, BFI-Lake Norman Construction and Demolition (C&amp;D) Landfill, Permit No. 55-04. Prepared for Lake Norman Landfill. Prepared by SCS Engineers. May 2014.</i>
23810	<i>Operations Plan for the Lake Norman Construction and Demolitions Debris Landfill Facility Permit No. 55-04. Prepared for Lake Norman Landfill. Prepared by SCS Engineers. October 2010.</i>

PART IV: INDUSTRIAL LANDFILL UNIT(S)  
*Not Applicable*

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)  
*Not Applicable*

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)  
*Not Applicable*

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT  
*Not Applicable*

- End of Section -

## ATTACHMENT 2

### CONDITIONS OF PERMIT TO CONSTRUCT

#### PART I: GENERAL FACILITY

1. 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.
2. Modifications or revisions of the approved documents or changes during construction of any landfill unit/cell require approval by the Section, and may constitute a permit modification and be subject to a permitting fee.

#### Geologic, Ground Water and Monitoring Requirements

3. Prior to issuing the Permit to Operate, samples from new ground water monitoring wells and surface water stations shall be sampled for the constituent list approved in the Environmental Monitoring Plan.
4. Prior to construction of the phase or cell(s) within the phase, all piezometers, borings, and groundwater monitoring wells within the footprint must be properly abandoned in accordance with 15A NCAC 2C .0113 (b)(1), entitled "Abandonment of Wells.
5. In areas where soil is to be undercut, abandoned piezometers, monitoring wells and borings must not be grouted to pregrade land surface, but to the proposed base grade surface to prevent having to cut excess grout and possibly damage the wells.
6. A Licensed Geologist must report any pertinent geological feature(s) exposed during phase or cell excavation. Prior to placing any landfill liner, the geologist must submit to the Section hydrogeologist a written report that includes an accurate description of the exposed geological feature(s) and effect of the geological feature(s) on the design, construction, and operation of the cell, phase, or unit.
7. A Licensed Geologist must supervise installation of groundwater monitoring wells and surface water sampling stations.
8. Any modification to the approved water quality monitoring, sampling, and analysis plan must be submitted to the Section Hydrogeologist for review.
9. Within 30 days of completed construction of each new groundwater monitoring well, a well construction record (GW-1 form), typical well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section.
10. The permittee must provide a plan sheet-sized, scaled topographical map, showing the location and identification of new, existing, and abandoned wells and piezometers after installation of groundwater monitoring wells.
11. Within thirty (30) days of the completed permanent abandonment of a ground-water monitoring well, the well abandonment record (GW-30 form) and any additional information included in the abandonment record) must be submitted to the Section. The well abandonment records must be submitted to the Solid Waste Section in accordance with 15A NCAC 2C .0114(b) and be certified by a Licensed Geologist.

#### Erosion and Sedimentation Control Requirements

12. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
13. All earth disturbing activities must be conducted in accordance with the Sedimentation Pollution Control Act of 1973 (15 NCAC 4) and consistent with any other local, state or federal requirements.
14. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 404 of the Clean Water Act, as amended.
15. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)  
*Not Applicable*

PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)  
5504-CDLF-1999, Lake Norman Landfill

16. The issuance date for this Permit to Construct is March 2, 2015. The initial, substantial, construction authorized by this Permit to Construct must commence within 18 months from the issuance date of this permit. If substantial construction does not begin within 18 months from the issuance date of this permit, then the permit to construct shall expire. Substantial construction includes, but is not limited to, issuance of construction contracts, mobilization of equipment on site, and construction activities including installation of sedimentation and erosion control structures. The permittee may reapply for the permit to construct prior to the expiration date. The re-application will be subject to the statutes and rules in effect on that date and may be subject to additional fees.
17. Construction of all solid waste management units within this facility must be in accordance with the pertinent approved plans and only for those cells of development approved for construction as described in Attachment I, List of Documents for the Approved Plan.
18. The following conditions must be met prior to operation;
  - a. The Permittee must obtain a Permit to Operate for Cells 3A, 3B, 4A and 4B from the Section in accordance with 15A NCAC 13B .0201(d).
  - b. Construction Quality Assurance (CQA) documentation as well as a certification by the project engineer that the landfill was built in accordance with approved plans and the conditions of the permit must be submitted to the Section for review and approval.
  - c. The Permittee must contact the appropriate regional environmental specialist and permitting engineer to determine whether the Section chooses to hold a pre-operative meeting with key landfill personnel and representatives of the Section.
  - d. The edge of the waste footprint must be identified with permanent physical markers.

PART IV: INDUSTRIAL LANDFILL UNIT(S)

*Not Applicable*

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

*Not Applicable*

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

*Not Applicable*

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

*Not Applicable*

*- End of Section -*

### ATTACHMENT 3

#### CONDITIONS OF PERMIT TO OPERATE

##### PART I: GENERAL FACILITY

1. 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.
2. The edge of the waste footprint for all disposal units must be identified with permanent physical markers.
3. The permittee must not knowingly dispose of, or accept for transfer for subsequent disposal, municipal solid waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of municipal solid waste from disposing of that type or form of municipal solid waste.
  - b. Requires generators or collectors of municipal solid waste to recycle that type or form of municipal solid waste.
4. Copies of this permit, the approved plans and all records required to be maintained by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
5. Financial assurance as required by state rules and statutes must be continuously maintained for the duration of the facility in accordance with applicable rules and statutes. Closure and Post-Closure cost estimates and financial instruments must be updated annually.
6. Closure or partial closure of any unit must be in accordance with the Closure Plans described in the approved plans and applicable rules and statutes. Revised Closure Plans must be submitted to the Division at least 90 days prior to implementation.

##### Operational Requirements

7. 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 at all times while open for public use 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.
8. Alternative daily cover materials and methods must be used in accordance with the approved plans and Solid Waste Section guidelines. Any alternative daily cover materials or methods not previously approved by the Section require review and approval before use. In these cases, a request for use 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.

9. The permittee must actively employ a training and screening program at the facility prepared in accordance with Section .0544(e) for detecting and preventing the disposal of excluded or unauthorized wastes. At a minimum, the program must include:
  - a. Random inspections of incoming loads or other comparable procedures;
  - b. Records of any inspections;
  - c. Training of personnel to recognize hazardous, liquid, and other excluded waste types;
  - d. Development of a contingency plan to properly manage any identified hazardous, liquid, MSW, or other excluded or unauthorized wastes. The plan must address identification, removal, storage, and final disposition of these wastes.
10. 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

11. Groundwater, surface water, and landfill gas monitoring locations must be established and monitored as identified in the approved plans.
12. 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.
13. Ground water monitoring wells and surface water sampling locations must be sampled for Appendix I constituents at least semi-annually according to the specifications outlined in the approved water quality monitoring plan and the current policies and guidelines of the Section in effect at the time of sampling.
14. Landfill gas monitoring wells must be sampled for explosive gases at least quarterly and according to specifications outlined in the approved landfill gas monitoring plan and current policies and guidelines of the Section in effect at the time of sampling.
15. 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.
16. Untreated leachate must be sampled and analyzed at least semi-annually concurrently with the groundwater water and surface water sampling, one sample per event. The leachate must be analyzed for the same constituents as the groundwater monitoring wells and surface water monitoring locations as specified in the approved monitoring plan. 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.
17. A readily accessible unobstructed path must be cleared and maintained so that four-wheel vehicles may access monitoring well locations at all times.
18. 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.

19. 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.
20. 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.

**PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)**

*Not Applicable*

**PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)**

**General Conditions**

21. The C&DLF is permitted to receive the following waste types:
  - a. "Construction or demolition debris" as defined in NCGS 130A-290 (a)(4) means solid waste resulting solely from construction, remodeling, repair or demolition operations on pavement, buildings, or other structures, but does not include inert debris, land-clearing debris or yard debris.
  - b. "Inert debris" as defined in NCGS 130A-290 (a)(14) means solid waste that consists solely of material such as concrete, brick, concrete block, uncontaminated soil, rock, and gravel.
  - c. "Land-clearing debris" as defined in NCGS 130A-290 (a)(15) means solid waste that is generated solely from land-clearing activities, limited to stumps, trees, limbs, brush, grass, and other vegetative material.
  - d. "Asphalt" in accordance with NCGS 130-294(m).
22. Regulated asbestos-containing material as defined in 40 CFR 61 must be managed in accordance with 40 CFR 61. Disposal of asbestos waste must be in accordance with 15 NCAC 13B .0542 (c).
23. Those wastes listed in 15A NCAC 13B .0542 (e) must not be accepted for disposal, including, but not limited to, hazardous waste, municipal solid waste, liquid waste, commercial or industrial wastes, and yard trash.
24. Wastewater treatment sludge is not approved for disposal. Wastewater treatment sludge may be accepted, with the approval of the Section, for utilization as a soil conditioner and incorporated into or applied onto the vegetative growth layer. The wastewater treatment sludge must not be applied at greater than agronomic rates nor to a depth greater than six inches.
25. The permittee must not knowingly dispose of C&D waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of C&D waste from disposing of that type or form of C&D waste.
  - b. Requires generators or collectors of C&D waste to recycle that type or form of C&D waste.

26. Must maintain records of :
- The amount of all accepted solid waste materials as (i) C&D wastes, (ii) alternative cover material used as alternate periodic cover, and (iii) recyclable material.
  - Daily records of waste received, and origins of the loads.
  - Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.
27. This facility is permitted to receive non-hazardous solid waste generated within Burke County consistent with the local government waste management plan and with local government approval and as defined in G.S. 130-290 (a)(18a) and (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.

5504-CDLF-1999, Lake Norman Landfill  
 Specific Conditions

28. The Permit to Operate shall expire **March 2, 2020**. Pursuant to 15A NCAC 13B .0201(g), no later than **August 2, 2019**, the permittee must submit to the Section:
- A permit amendment application prepared in accordance with 15A NCAC 13B .0535 (b), and;
  - A Corrective Action Evaluation Report to demonstrate the effectiveness of the implemented corrective action program in accordance with 15A NCAC 13B .0547(4)(c) and approved Corrective Action Plan.
29. This permit approves the continued operation of the C&DLF Cells 1A, 1B, 2A and 2B as well as the onsite environmental management protection facilities as described in the approved plans. Operation of any C&DLF future phases or cells requires written approval of the Section and must be constructed in accordance with applicable statutes and rules in effect at the time of review.
30. The following table lists the details for the landfill unit. Gross capacity is defined as the volume of the landfill calculated from the elevation of the initial waste placement through the top of the final cover, including any periodic cover.

C&D Cell	Acres	Gross Capacity (cubic yards)	Status
1A	10.17	985,975	Constructed
1B	5.40	638,269	Constructed
2A	2.95	305,548	Constructed
2B	2.63	198,219	Constructed
3A	2.67	304,551	Proposed
3B	2.64	294,780	Proposed
4A	2.61	318,862	Proposed
4B	2.70	225,578	Proposed
Total	31.77	3,271,782	

31. The facility is approved to accept average 200,000 tons per year. Maximum variance shall be in accordance with NCGS 130A-294(b1)(1).

32. This facility is permitted to receive waste generated within 100 miles of the landfill. This service area is consistent with the local government solid waste management plan(s) and local government approval.
33. On or before August 1 annually, the permittee must submit an annual facility report to the 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 report must list the amount of waste received and landfilled in tons and be compiled:
    - i. On a monthly basis.
    - ii. By county, city or transfer station of origin.
    - iii. By specific waste type.
    - iv. By disposal location within the facility.
    - v. By diversion to alternative management facilities.
  - c. A measurement of volume utilized in the C&D 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 C&D waste, in tons from scale records, disposed in landfill cells since March 25, 1999 through the date of the annual volume survey must be included in the report.
  - e. The tons of C&D waste recycled, recovered or diverted from disposal including a description of how and where the material was ultimately managed, as applicable, must be included in the report.
  - f. The completed report must be forwarded to the Regional Environmental Senior Specialist for the facility by the date due on the prescribed annual facility report form.
  - g. 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 Environmental Specialist by the date due on the prescribed annual facility report form.

PART IV: INDUSTRIAL LANDFILL UNIT(S)

*Not Applicable*

PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)

*Not Applicable*

PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

*Not Applicable*

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

*Not Applicable*

- End of Section -

**ATTACHMENT 4**  
**CONDITIONS OF PERMIT FOR CLOSURE**

**PART I: GENERAL FACILITY**

*Not Applicable*

**PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)**

*Not Applicable*

**PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)**

*Not Applicable*

**PART IV: INDUSTRIAL LANDFILL UNIT(S)**

*Not Applicable*

**PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)**

*Not Applicable*

**PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)**

*Not Applicable*

**PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT**

*Not Applicable*

*- End of Conditions -*