



Facility Permit No: 5504  
Permit to Operate - Amendment  
Lake Norman C&D Landfill Facility  
April 1, 2011  
DIN: 13233  
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North Carolina Department of Environment and Natural Resources  
Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
Secretary

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

**CONSTRUCTION AND DEMOLITION SOLID WASTE LANDFILL  
FACILITY  
Permit No. 55-04**

BFI – LAKE NORMAN LANDFILL, INC.  
is hereby issued a

**PERMIT TO OPERATE**

LAKE NORMAN CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL – CELLS 1A, 1B,  
2A AND 2B

Located at 7099 Quarry Lane off of North Carolina Highway 16, in 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 No. 1 of this permit.

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Edward F. Mussler, III, P.E.,  
Permitting Branch Supervisor  
Solid Waste Section

## ATTACHMENT 1

### PART I: PERMITTING HISTORY

1. Issuance of the original permit to construct Cells 1A, 1B and 1C. August 1998.
2. Issuance of original permit to operate Cell 1A. March 1999.
3. Issuance of permit to operate modification for size of Cell 1A. November 2000.
4. Issuance of permit to operate modification for Cell 1B. April 2002.
5. Issuance of permit to operate modification for Cell 1B. May 2002.
6. Issuance of permit to operate modification for continued operation of Cells 1A and 1B. March 2005.
7. Issuance of permit to construct amendment Cells 2A and 4B. August 2005.
8. Issuance of permit to operate modification for Cell 2A. October 12, 2005.
9. Issuance of permit to operate modification for Cell 2B. June 2007.
10. **Issuance of permit to operate amendment five (5) year renewal. April 2011.**

<b>Permit Type</b>	<b>Date Issued</b>	<b>DIN</b>
Original Permit to Construct	August 21, 1998	13224
Original Permit to Operate	March 25, 1999	13226
Permit to Operate – Modification	November 21, 2000	13227
Permit to Operate – Modification	April 23, 2002	13228
Permit to Operate – Modification	May 31, 2002	13229
Permit to Operate – Modification	March 31, 2005	13230
Permit to Construct – Amendment	August 30, 2005	13231
Permit to Operate – Modification	October 12, 2005	13232
Permit to Operate – Modification	June 28, 2007	2593
<b>Permit to Operate – Amendment</b>	<b>April 1, 2011</b>	<b>13233</b>

PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN

NO.	DOCUMENT DESCRIPTION	DIN
1.	<i>Construction Plan Application, Construction and Demolition Landfill, Lake Norman Landfill, Inc., Lincoln County, North Carolina, S&amp;ME Project No. 1356-97-394.</i> Prepared for BFI-Lake Norman Landfill, Inc. Prepared by S&ME. July 24, 1998. Note: contains the Water Quality Monitoring Plan-Section 6.0 (page 26 of 255).	13296
2.	Official Zoning Documentation and Lincoln County Permitting Status. Prepared by S&ME. July 14, 1998.	
3.	Response to Hydrogeologic Technical review Letter. Prepared by S&ME. August 4, 1998.	
4.	Revised Grading Plan and Cross Sections depicting Phase 1A, 1B and 1C of the landfill. Prepared by S&ME. August 10, 1998.	
5.	Legal Description of the Facility.	
6.	Application for a Permit to Operate, certifying an initial 5 acre portion of Subcell 1C. Prepared by S&ME. February 25, 1999.	
7.	Revised Construction Plan, Operations Plan, and Property Deed, certifying an initial 3 acre portion of Subcell 1A. Prepared by S&ME. March 9, 1999.	
8.	Addendum to the Application for a Permit to Operate, certifying an additional one acre portion of Subcell 1A to be included with the previously certified 3 acres. Prepared for Lake Norman Landfill. Prepared by S&ME. March 31, 1999.	
9.	Letter indicating revised base grades in the certified areas of Subcell 1A due to rock encountered during construction. Base grades were raised four feet to provide separation to rock. Prepared for Lake Norman Landfill. Prepared by S&ME. April 30, 1999.	
10.	<i>Methane Migration Monitoring - Permit # 55-04.</i> Prepared by BFI. June 14, 1999. Note: LFG Monitoring Plan.	13295
11.	Construction Quality Assurance Submittal, certifying the remaining 5.8 acres of Subcell 1A as being constructed according to the approved plans. Two small areas of the subgrade along the eastern toe of slope were adjusted due to rock encountered during excavation. Prepared for Lake Norman Landfill. Prepared by ESP Associates. October 24, 2000.	
12.	Minor Permit Modification, adjusting the waste limit boundary along the northern edge of Subcell 1A due to a surveying error during construction. Since neither the required 200 foot property line buffer, floodplain restriction, or vertical separation of seasonal high groundwater is affected, the request to modify the waste boundary is approved. Prepared for Lake Norman Landfill. Prepared by ESP Associates. January 17, 2002.	

13.	Construction Quality Assurance Submittal, certifying approximately 1.4 acres of Subcell 1B (designated as Subcell 1B, Phase 1) as being constructed according to the approved plans. Constructed base grades were slightly higher in some areas of this phase to improve stormwater drainage out of Subcell 1B and to provide separation to a small area of rock encountered along the boundary between 1A and 1B during excavation. Prepared for Lake Norman Landfill. Prepared by ESP Associates. April 11, 2002.	
14.	Construction Quality Assurance Submittal, certifying the remaining approximately 5.9 acres of Subcell 1B (designated as Subcell 1B, Phase 2) as being constructed according to the approved plans. Constructed base grades were slightly higher in some areas of this phase to improve stormwater drainage out of Subcell 1B and to provide separation to an area of rock encountered along the northwestern boundary near Subcell 1A and 1B interface. Prepared for Lake Norman Landfill. Prepared by ESP Associates. May 21, 2002.	
15.	Application for Permit to Construct Renewal. This application contains the plan Sheets 1-15 and the submittal including the franchise from Lincoln County, dated January 5, 2004, "Waste Flow Rates and Capacities" for years 2005-2010 (630,000 tons) and the Closure Plan. The development of these cells will contain approximately 2.2 million cubic yards of Gross Airspace. Prepared for Lake Norman Landfill. Prepared by ESP Associates. March 10, 2005.	
16.	<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 2A.</i> Prepared for Lake Norman Landfill. Prepared by ESP Associates. October 5, 2005.	
17.	<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.</i> Prepared for Lake Norman, Inc., Lincoln County, North Carolina. Prepared by Atlantic Coast Consulting, Inc., Roswell, Georgia, June 19, 2007.	2596
18.	<i>Operation Plan for the Lake Norman Construction and Demolition Debris Landfill, Facility Permit No. 55-05.</i> Prepared for BFI-Lake Norman Landfill. Prepared by SCS Engineers. October 2008, revised January 6, 2009, revised October 11, 2010. March 9, 2011.	13198

PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

<b>Lincoln County, N.C. Register of Deeds</b>				
Book	Page	Acreage	Owner	Parcel No.
1078	766	117.085±	BFI – Lake Norman Landfill, Inc.	4602-00-2267
Total Site Acreage: 117.085±				

Notes: Deed book references are from the Lincoln County GIS website (<http://www.lincolncounty.org/index.aspx?nid=289>) accessed March 2011.

**PART IV: GENERAL PERMIT 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. (Intentionally blank)
4. (Intentionally blank)
5. By initiating construction or receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.
6. Construction and operation of this solid waste management facility must 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.
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.

*- End of Section -*

## **ATTACHMENT 2**

### **CONDITIONS OF PERMIT TO CONSTRUCT**

#### **PART I: GENERAL FACILITY CONDITIONS**

*Not Applicable*

#### **PART II: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT SPECIFIC CONDITIONS**

*Not Applicable*

#### **PART V: MISCELLANEOUS SOLID WASTE MANAGEMENT SPECIFIC CONDITIONS**

*Not Applicable*

*- End of Section -*

## **ATTACHMENT 3**

### **CONDITIONS OF PERMIT TO OPERATE**

#### **PART I: GENERAL FACILITY CONDITIONS**

1. The Permit to Operate shall expire April 1, 2016. Pursuant to 15A NCAC 13B .0201(e), no later than October 1, 2015 (6 months prior to expiration date), the owner or operator must submit a request to the Section for permit review and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.
2. 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.
3. The edge of the waste footprint for all disposal units must be identified with permanent physical markers.
4. 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.
5. 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.
  6. 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, post-closure cost estimates and financial instruments must be updated for inflation annually within 60 days prior to the anniversary date of the establishment of the financial instrument(s).
  7. Closure or partial closure of any unit must be in accordance with the Closure Plans described in the approved plans. Revised Closure Plans must be submitted to the Division at least 90 days prior to implementation.

#### Operational Requirements

8. This facility is permitted to receive solid waste generated within a service area consistent with the franchise, the local government waste management plan and with local government approval and as defined in G.S. 130-290 (a)(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.
9. 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.
10. The use of different alternative daily cover requires approval, prior to implementation, by the Solid Waste Section. Requests for alternative daily cover approval 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.
11. 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

12. Groundwater, surface water, and landfill gas monitoring locations must be established and monitored as identified in the approved plans.
13. 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.
14. 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.
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, leachate and landfill gas analytical data must be kept as part of the permanent facility record.
16. The four independent samples which comprise the initial baseline sampling event must be collected from each groundwater monitoring well and the report must be submitted to the Section within six months after issuance of the Permit to Operate.
17. 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 all Appendix I constituents, pH, specific conductance, BOD, COD, nitrates, sulfates, and phosphates. 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.
18. A readily accessible unobstructed path must be cleared and maintained so that four-wheel vehicles may access monitoring well locations at all times.
19. 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.
20. 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.

21. 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.
22. On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste 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 facility 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 landfill 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 waste, in tons from scale records, disposed in landfill cells from October 8, 1993 through the date of the annual volume survey must be included in the report.
  - e. The completed report must be forwarded to the Regional Waste Management Specialist for the facility by the date due on the prescribed annual facility report form.
  - f. 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 Waste Management Specialist by the date due on the prescribed annual facility report form.

**PART II: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT SPECIFIC CONDITIONS**

23. This permit approves the continued operation of Cells 1A, 1B, 2A and 2B of the construction and demolition debris landfill, as well as the onsite environmental management and protection facilities as described in the approved plans.
24. The following table lists the dimensions and details for the construction and demolition debris landfill. The following waste volumes include waste, daily cover, and intermediate cover, but do not include final cover.

Unit	Acres	Gross capacity	Status
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		(cubic yards)	
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	

25. The facility is approved to accept approximately 200,000 tons per year, approximately 640 tons per day ( based on 312 days per year), with a maximum variance in accordance with GS 130A-294(b1)(1) as listed in Attachment 1, Part II., and shall be consistent with the franchise.
26. The following, at a minimum, must not be accepted for disposal at the facility: hazardous waste, yard trash, liquid wastes, regulated medical waste, sharps not properly packaged, PCB waste as defined in 40 CFR 761, and wastes banned from disposal in North Carolina by G.S. 130A-309.10(f).

- End of Permit Conditions -