



NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Dexter R. Matthews, Director

Division of Waste Management

Michael F. Easley, Governor  
William G. Ross Jr., Secretary

November 1, 2005

Mr. Mike Gurley, Regional Engineer  
Lake Norman Landfill, Inc.  
5105 Morehead Road  
Harrisburg, North Carolina 28075

**Re:** Lake Norman C&D Landfill – Cell 2A (2.68 Acres)  
Solid Waste Permit No. 55-04

Dear Mr. Gurley:

Enclosed please find a modified solid waste Permit to Operate and the accompanying conditions for the subject facility, issued in accordance with N.C.G.S. 130A-294 and the NC Solid Waste Management Rules. The modified permit approves waste placement in the area identified as cell 2A, of the approved plan in addition to the previously approved cells 1A & 1B. Included in this modification is approval of the adjusted waste limits boundary along the northern edge of Sub cell 1A as identified in the letter submitted by ESP Associates, P.A. dated 17 January 2002. This permit is for a five-year period from the renewal date and is subject to review on or before 1 November 2010 or until the approved capacity of the certified area is exhausted.

Please review the conditions of permit carefully. If you have any questions or comments about the enclosed permit, please feel free to contact me at (704) 235-2163 or the Solid Waste Specialist for your area, Teresa Bradford, at (704) 235-2160.

Sincerely,

John E. Murray, P.E.  
Regional Permitting Engineer  
Solid Waste Section

cc: Brent Rockett, SWS  
Teresa Bradford, SWS  
Dave Wasiela, ESP Associates, P.A.  
Raleigh Central Files: Lake Norman C&D Landfill, Lincoln County - Permit No. 55-04

1646 Mail Service Center, Raleigh, North Carolina 27699-1646  
Phone 919-508-8400 \ FAX 919-733-4810 \ Internet <http://wastenotnc.org>

PERMIT NO. 55-04  
ISSUED 25 MARCH 1999  
23 April 2002 (PTO Sub cell 1B, Phase 1B)  
MODIFIED 31 March 2005 FOR 1A & 1B FOR CONTINUED OPERATIONS  
DATE MODIFIED 31 AUGUST 2005 (PTC / Cells 2A – 4B)  
DATE MODIFIED 12 OCTOBER 2005 (PTO / Cell 2A)  
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STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WASTE MANAGEMENT  
1646 MAIL SERVICE CENTER RALEIGH, NC 27699-1646

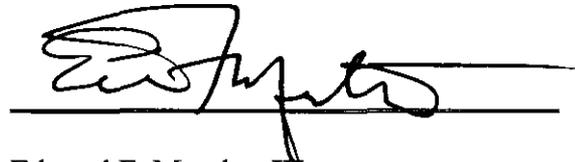
**SOLID WASTE PERMIT No. 55-04**

LAKE NORMAN LANDFILL, INC.

is hereby issued a PERMIT TO OPERATE a

CONSTRUCTION AND DEMOLITION LANDFILL  
CELL's 1A, 1B, & 2A

located on Quarry Lane off NC HWY 16 in Lincoln County, North Carolina based on the site plan submitted to the Section dated February 1998 and referenced as item #1 in the approved documents; in accordance with Article 9, Chapter 130A, of the General Statutes of North Carolina and all rules promulgated hereunder and subject to the conditions set forth in this permit. The facility is located and described by the legal description of the site on the attached sheet.



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

PERMIT NO. 55-04  
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## ATTACHMENT 1

### List of Documents for the Approved Plan

The following documents are incorporated into the approved plan for Permit No. 55-04:

1. Combination Site Plan and Construction Plan Application; Submitted by S&ME, Inc. on 20 February 1998.
2. Official Zoning Documentation and Lincoln County Permitting Status submitted 14 July 1998 by S&ME, Inc.
3. Response to Hydrogeologic Technical review letter, submitted 4 August 1998 by S&ME, Inc.
4. Revised Grading Plan and Cross Sections depicting Phase 1A, 1B, and 1C of the landfill; Submitted 10 August 1998 by S&ME, Inc.
5. Legal Description of the Facility.
6. Application for a Permit to Operate dated 25 February 1999 from S&ME, Inc. certifying an initial 5-acre portion of Sub cell 1C.
7. Revised Construction Plan, Operation Plan, and Property Deed submitted 9 March 1999 by S&ME, Inc. renaming the sub cells, altering the order of operations, and certifying a revised 3-acre portion of Sub cell 1A.
8. Addendum to the Application for a Permit to Operate dated 31 March 1999 and submitted by S&ME, Inc. on behalf of Lake Norman Landfill certifying an additional one acre portion of Sub cell 1A to be included with the previously certified 3 acres.
9. Letter submitted by S&ME, Inc. on behalf of Lake Norman Landfill dated 30 April 1999 indicating revised base grades in the certified areas of Sub cell 1A due to rock encountered

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during construction. Base grades were raised four feet to provide separation to rock.

10. Construction Quality Assurance Submittal dated 24 October 2000 and submitted by ESP Associates, P.A. on behalf of Lake Norman Landfill certifying the remaining 5.8 acres of Sub cell 1A as being constructed according to the approved plans. Two small areas of subgrade along the eastern toe of slope were adjusted due to rock encountered during excavation .
11. Minor Permit Modification request dated 17 January 2002 and submitted by ESP Associates, P.A. on behalf of Lake Norman C&D Landfill adjusting the waste limit boundary along the northern edge of Sub cell 1A due to a surveying error during construction. Since neither the required 200-foot property line buffer, floodplain restriction, or vertical separation to seasonal high groundwater is affected; the request to modify the waste boundary is approved.
12. Construction Quality Assurance Submittal dated 11 April 2002 and submitted by ESP Associates, P.A. on behalf of Lake Norman Landfill certifying approximately 1.4 acres of Sub cell 1B (designated as Sub cell 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 Sub cell 1B and to provide separation to a small area of rock encountered along the boundary between 1A and 1B during excavation.
13. Document from the ESP Associates, P.A. of Charlotte, North Carolina dated 28 March 2005 giving remaining airspace and life in 1A and 1B of Lake Norman C&D Landfill Permit 55-04.
14. *Application for Permit to Construct Renewal. Lake Norman C&D Landfill. Solid Waste Permit No. 55-04. Lake Norman Landfill, Inc. Lincoln County, North Carolina. Prepared for: Lake Norman Landfill, Inc. Prepared by: ESP Associates, P.A., Charlotte, North Carolina. 10 March 2005.*
15. *Application for Permit to Operate a Construction & Demolition (C&D) Landfill, Construction Quality Assurance (CQA) Certification – Lake Norman C&D Landfill Cell 2A. Prepared by: ESP Associates, P.A. Charlotte, NC. October 5, 2005.*

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**SOLID WASTE PERMIT  
CONSTRUCTION AND DEMOLITION LANDFILL**

**CONDITIONS OF PERMIT:**

**General:**

1. This condition is excluded.
2. When this property is sold, leased, transferred or conveyed, 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 sanitary landfill.
3. This permit is for a period of five years and is subject to review on or before 1 November 2010, as per 15A NCAC 13B .0201(c). Within 120 days of this date the permittee will submit a new permit modification or the closure plan. Modifications to the facility may be required in accordance with the rules in effect at the time of review.
4. The approved plan for this facility is described in Attachment 1, "List of Documents for Approved Plan". Where discrepancies exist, the most recent submittal and these Conditions shall govern. Some components of the approved plan are reiterated in these Conditions.
5. This permit is not transferable.
6. This facility may receive solid waste that is generated within a service area that is approximately 100 miles around the landfill. The volume of waste accepted will be up to approximately 200,000 tons of waste annually. The above information was taken from the Franchise Agreement between Lincoln County and Lake Norman Landfill, Inc. dated the 5<sup>th</sup> day of January 2004. Cells 2A, 2B, and 3A will provide 1,230,800 cubic yards of gross airspace which will provide five years of life at the site. Cell 2A provides 451,000 gross cubic yards of airspace and is 2.68 acres in size. Gross airspace is the volume calculated from the top of subgrade through the top of the final cover.
7. The owner/operator is responsible for obtaining any and 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.
8. Prior to operation of the facility the owner or operator shall comply with all applicable lawfully adopted local ordinances.

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**Construction and Operation:**

9. This permit is for the development of the Lake Norman Construction and Demolition Landfill, Cells 2A within the approved facility description, in accordance with the approved plan. Initial development began with Cell 1A.
10. This solid waste management facility is permitted to receive the following waste types:
  - a. Land-clearing debris as defined in G.S. 130A-290, specifically, solid waste that is generated solely from land-clearing activities, such as stumps, trees, etc.;
  - b. Inert debris defined as solid waste, which consists solely of material that is virtually inert, such as brick, concrete, rock and uncontaminated soil;
  - c. Asphalt in accordance with G.S. 130A-294(m);
  - d. Construction and demolition debris defined as solid waste resulting solely from construction, remodeling, repair or demolition operations on pavement, buildings, or other structures;

Note: Yard trash defined as solid waste consisting solely of vegetative matter resulting from landscaping maintenance (see G.S. 130A-290) is banned from disposal in this facility as per NC General Statutes.

11. All sedimentation and erosion control measures will be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4. Native vegetation shall be established on the completed landfill.
12. Operation of the facility shall occur in accordance with the NC Solid Waste Management Rules 15A NCAC 13B .0505, "Operational Requirements for Sanitary Landfills", the approved Operations Plan, and the following specific conditions:

**Waste Acceptance and Disposal**

- a. The facility shall accept only those solid wastes, which it is permitted to receive.
- b. No municipal solid waste, hazardous waste, or liquid waste shall be accepted for disposal.
- c. Waste shall be restricted to the smallest area feasible and compacted as densely as practical into cells.
- d. The permittee shall implement a program at the facility for detecting and preventing the disposal of unacceptable wastes. The program shall include, at a minimum:

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- i. Random inspections of incoming loads or other comparable procedures;
- ii. Record keeping, that documents these inspections;
- iii. Training of personnel to recognize hazardous, liquid, and other unauthorized waste types;
- iv. Development of a contingency plan to properly manage any identified hazardous or problem wastes; the plan must address identification, removal, storage, and final disposition of these wastes.

#### Cover Material Requirements

- e. Operational soil cover of at least six inches shall be placed at least once per week or when the active area reaches 1/2 acre in size or more often as necessitated by the nature of the waste so as to prevent the site from becoming a visual nuisance and to prevent fire, windblown materials, vectors or water infiltration.
- f. Areas that will not have additional waste placed on them for 12 months or more, but where final termination of operations has not occurred, shall be covered with a minimum of one foot of soil cover.
- g. After final termination of disposal operations at the site, or major part thereof, or upon revocation of a permit, the final cover system shall be installed in accordance with the approved plans for the site.

#### Access and Safety

- h. The facility shall be adequately secured by means of gates, chains, berms, fences, or other security measures approved by the Division to prevent unauthorized entry.
- i. An attendant shall be on duty at the site at all times while it is open for public use to ensure compliance with operational requirements.
- j. The access road to the site shall be of all-weather construction and maintained in good condition.
- k. Dust control measures shall be implemented when necessary.
- l. Signs providing information on dumping procedures, the hours of operation, the permit number, the emergency contact, and other pertinent information shall be posted at the site entrance.
- m. Signs shall be posted stating that no MSW, hazardous waste or liquid waste can be received.
- n. Traffic signs or markers shall be provided as necessary to promote an orderly traffic pattern to and from the discharge area and to maintain efficient operating conditions.
- o. The removal of solid waste from the facility is prohibited unless the owner/operator approves and the removal is not performed on the working face.

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- p. Barrels and drums shall not be disposed of unless they are empty and perforated sufficiently to ensure that no liquid or hazardous waste is contained therein, except fiber drums containing asbestos.
- q. Open burning of solid waste is prohibited.
- r. The concentration of explosive gases generated at the facility shall not exceed:
  - i. twenty-five percent of the limit for gases in site structures (excluding gas control or recovery system components); and
  - ii. the lower explosive limit for gases at the facility boundary.

#### Erosion and Sedimentation Control

- s. Adequate sedimentation and erosion control measures shall be practiced to prevent silt from leaving the site.
- t. Adequate sedimentation and erosion control measures shall be practiced to prevent excessive on-site erosion.
- u. Provisions for a vegetative ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of C&D landfill development.

#### Drainage Control and Water Protection Requirements

- v. Surface water shall be diverted from the operational area.
  - w. Surface water shall not be impounded over or in waste.
  - x. A separation distance of at least four feet shall be maintained between waste and the ground-water table.
  - y. Solid waste shall not be disposed of in water.
  - z. Leachate shall be contained on site or properly treated prior to discharge. An NPDES permit may be required prior to discharge of leachate to surface waters.
13. All pertinent landfill operating personnel will receive training and supervision necessary to carry out their duties and operate this landfill in a safe manner. A certified operator will be on site at all times the site is operating.
14. A closure and post-closure plan must be submitted for approval at least 90 days prior to closure or partial closure of any landfill unit. The plan must include all steps and measures necessary to close and maintain the facility in accordance with all rules in effect at that time. At a minimum, the plan shall address the following:
- a. Design of a final cover system;

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- b. Construction and maintenance/operation of the final cover system and erosion control structures;
- c. Surface water, ground water, and explosive gas monitoring.

**Monitoring and Reporting:**

- 15. Ground water quality at this facility is subject to the classification and remedial action provisions referenced in Rule .0503 (2)(d) of 15A NCAC 13B. Water quality monitoring for the C&D landfill shall occur according to the following conditions:
  - a. The permittee shall sample the monitoring wells semi-annually or as directed by the Division Hydrogeologist.
  - b. Monitoring well design and construction shall conform to the specifications outlined in "North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities."
  - c. Sampling equipment, procedures, and parameters shall conform to specifications outlined in the above-referenced guidance document, or the current guidelines established by the Division at the time of sampling.
  - d. A total of four monitoring well locations as illustrated in the approved plans shall be established to monitor the facility.
  - e. A geologist shall be in the field to supervise well installation. The exact locations, screened intervals, and nesting of the wells shall be established after consultation with the Division Hydrogeologist at the time of well installation.
  - f. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed. The results of this sampling event shall be submitted to the Division Hydrogeologist in a timely manner.
  - g. Well completion records and boring logs shall be submitted to The Division at the same time as the results of the initial sampling event or within 30 days upon completion of any new wells.
  - h. In order to determine ground-water flow directions and rates, each monitoring well shall be surveyed, and hydraulic conductivity values and effective porosity values shall be established for the screened intervals for each monitoring well.
  - i. A readily accessible unobstructed path shall be initially cleared and maintained so that four-wheel drive vehicles may access the monitoring wells at all times.
- 16. The permittee shall establish two locations for surface water sampling. Surface water shall be sampled and analyzed semi-annually according to the protocol and parameters required by the Division at the time of sampling.

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17. The permittee shall maintain a record of all monitoring events and analytical data. Reports of the analytical data for each water quality monitoring sampling event (15.a, 15.h. & 16.) shall be submitted to the Division in a timely manner.
18. Explosive gas monitoring shall be performed as needed to ensure compliance with the standards in Rule .0503 (2)(a).
19. The permittee shall maintain a record of the amount of solid waste received at the facility in tons, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
20. On or before 01 August of each year, the permittee shall report the tons of waste received at this facility and disposed of in the landfill to the Solid Waste Section, on forms prescribed by the Section. The reporting period shall be for the previous year, beginning 01 July and ending on 30 June. This report shall include the following information:
  - a. The tons of waste received and disposed of, compiled on a monthly basis by county, city, or transfer station of origin and by specific waste type if diverted to a specific unit within the permitted facility.
  - c. The completed report shall be forwarded to the Regional Waste Management Specialist for the facility. A copy of the report shall be forwarded to the County Manager of each county from which waste was received.
21. All pertinent records and reports shall be maintained on site and made available to the Division upon request.