

Permit No.	Scan Date	DIN
5504	March 14, 2011	13226

**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES**

DIVISION OF WASTE MANAGEMENT

March 25, 1999

Mr. David K. Conrad, Vice-President
Lake Norman Landfill, Inc
5105 Morehead Road
Harrisburg, NC 28075

Re: Lake Norman C&D Landfill
Solid Waste Permit No. 55-04

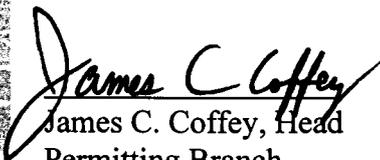
Dear Mr. Conrad:

Enclosed please find a 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. This permit is for a five year period and is subject to review on or before March 25, 2004 or until the approved capacity of the certified area is exhausted.

In accordance with G.S. 130A-294(b1)(4), General Condition # 8 has been attached to the Permit To Operate requiring the applicant, prior to operation of the landfill, to comply with all applicable lawfully adopted local ordinances. This condition was necessary since Lincoln County did not issue a franchise for this facility, but did make a determination that all applicable local ordinances have been met and that these approvals are "in essence a franchise agreement".

If you have any questions or comments about the enclosed permit, please feel free to contact me at (919) 733-0692, ext. 255 or the Solid Waste Specialist for your area, Anthony Foster, at (704) 663-1699.

Sincerely,


James C. Coffey, Head

Permitting Branch
Solid Waste Section

cc: Tim Jewett, SWS
Julian Foscue, SWS
Anthony Foster, SWS

Raleigh Central Files: Lake Norman C&D Landfill, Lincoln County


NCDENR

JAMES B. HUNT JR.
GOVERNOR

WAYNE McDEVITT
SECRETARY

WILLIAM L. MEYER
DIRECTOR

-Booklet-

RECEIVED
N.C. Dept. of ENR
MAR 01 1999

Winston-Salem
Regional Office

6-20-99
11:00 AM
600 11th St
Winston-Salem, NC 27101
703-785-1000

APPLICATION FOR PERMIT TO OPERATE
CONSTRUCTION AND DEMOLITION (C&D) LANDFILL
LAKE NORMAN LANDFILL, INC.
LINCOLN COUNTY, NORTH CAROLINA
S&ME PROJECT NO. 1356-97-394-A

Prepared For:

North Carolina Department
Of Environment and Natural Resources
Division of Waste Management
Solid Waste Section

Prepared By:

S&ME, Inc.
Charlotte, North Carolina

APPROVED
DIVISION OF SOLID WASTE MANAGEMENT

DATE 3/25/99 BY JAD

Permit #55-04
CENTRAL FILE COPY

February 25, 1999



Celebrating 25 Years of Excellence

February 25, 1999

North Carolina Department of Environment and Natural Resources
Division of Waste Management
Solid Waste Section
585 Waughtown Street
Winston-Salem, North Carolina 27107-2241

Attention: Mr. Tim Jewett
Western Area Engineer

Reference: **APPLICATION FOR PERMIT TO OPERATE**
Construction and Demolition Landfill
Lake Norman Landfill, Inc.
Lincoln County, North Carolina
S&ME Project No. 1356-97-394-A

Dear Mr. Jewett:

On behalf of Lake Norman Landfill, Inc., S&ME, Inc. is submitting an Application for Permit to Operate the above referenced landfill. This application provides documentation to the division that the site preparation was in accordance with the construction plan and the conditions of the Solid Waste Permit No. 55-04.

In addition, a comprehensive operations plan is not required, as per our conversation on February 1, 1999. The Application for Permit to Construct provides the necessary information in accordance with 15A NCAC 13B.0505.

Application for Permit to Operate
C&D Landfill, Lake Norman Landfill, Inc.

S&ME Project No. 1356-97-394-A
February 25, 1999

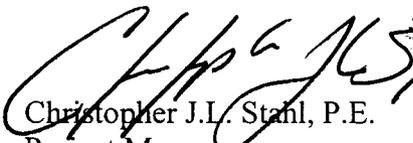
Please contact us if you have any questions or need additional information concerning this application.

Respectfully Submitted,

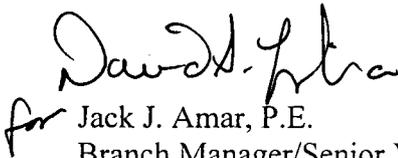
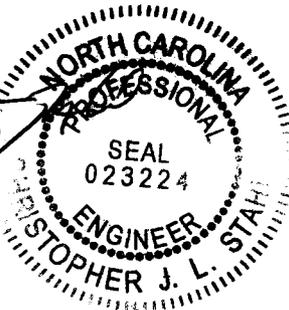
S&ME, Inc.



Scott R. Nordgren, E.I.T.
Staff Professional



Christopher J.L. Stahl, P.E.
Project Manager
N.C. Registration No. 023224



for Jack J. Amar, P.E.
Branch Manager/Senior Vice President
N.C. Registration No. 10861

SCR/CJLS/JJA/tc

cc: Dave Conrad, Lake Norman Landfill, Inc. (1)
Dave Goodwin (1)
Dave Craddock (1)

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APPENDIX

I Drawings

Subgrade Certification – Initial Phase 1C
Erosion & Sediment Control Plan
E&S Plan - Entrance

1.0 BACKGROUND INFORMATION

The Application for Permit to Construct the Lake Norman Construction & Demolition Landfill was approved by NCDENR on August 21, 1998. Construction of the Lake Norman Landfill Construction & Demolition Landfill began in December 1998. Lake Norman Landfill has constructed the initial phase of Cell 1C of the landfill. The cell encompasses approximately five acres. S&ME, Inc. provided engineering oversight during the construction of the initial 5-acre phase. Engineering oversight included site visits, engineering assistance, and inspection of Erosion and Sediment Control structures.

2.0 SITE PREPARATION

Erosion and sedimentation control devices were installed for the construction of the landfill and for the stockpile area on the south side of the site. Erosion and sedimentation control devices are installed down gradient of the disturbed areas of the initial Cell 1C as well as the southern stockpile area. The devices include one sediment basin, two sediment traps, silt fencing, and associated diversion channels. Two primary diversion channels were constructed along the perimeter of the initial landfill cell. These channels direct runoff to the sediment basin north of the cell. All devices were constructed in general accordance with the approved erosion and sediment control plan dated September 3, 1998.

3.0 STRUCTURAL FILL

Material excavated to achieve subgrade in Cell 1C of the landfill was stockpiled on the southern stockpile area. This material was used to build the access road and construct a sediment basin north of the landfill and sediment traps in the southern stockpile area.

The excess material was excavated using pans and track-hoes and then transported to the southern stockpile area. The material was spread with a dozer in the stockpile area. Grading performed in the stockpile area was done to ensure drainage of runoff to the sediment traps.

4.0 SURVEY OF SUBGRADE

F. Donald Lawrence and Associates, P.A. provided a survey of the subgrade of the initial phase of Cell 1C based on a 100-foot grid pattern. A topographic as-built drawing was generated by S&ME, Inc. using computer modeling. The construction grades of Cell 1C have been compared to the groundwater contours to ensure a minimum 4-foot separation between the estimated seasonal high groundwater table and the subgrade. The surveyed grid pattern drawing and the Topographic Survey drawing, Sheet 3, are included in Appendix I.

**NORTH CAROLINA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES**

DIVISION OF WASTE MANAGEMENT

PERMIT NO. 55-04
ISSUED MARCH 25, 1999



**JAMES B. HUNT JR.
GOVERNOR**

**WAYNE McDEVITT
SECRETARY**

**WILLIAM L. MEYER
DIRECTOR**

STATE OF NORTH CAROLINA

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

DIVISION OF WASTE MANAGEMENT

P.O. BOX 27687 RALEIGH, NC 27611

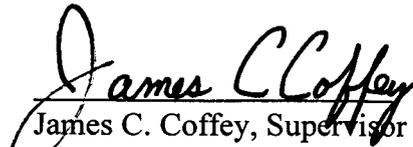
SOLID WASTE PERMIT

LAKE NORMAN LANDFILL, INC.

is hereby issued a PERMIT TO OPERATE a

CONSTRUCTION AND DEMOLITION LANDFILL
3 ACRE PORTION OF SUBCELL 1A

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 thereunder 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.


James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

LAKE NORMAN LANDFILL
SOLID WASTE PERMIT
CONSTRUCTION AND DEMOLITION LANDFILL

CONDITIONS OF PERMIT:

General:

1. This permit shall not be effective unless the certified copy is filed in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit, affixed with the Register's seal and the date, book, and page number of recording shall be returned to the Division of Waste Management (the Division).
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 March 25, 2004, as per 15A NCAC 13B .0201(c), according to the issuance date of the permit. Modifications to the facility may be required in accordance with the rules in effect at the time of review. This facility may receive solid waste that is generated within a service area consisting of North Carolina and South Carolina.
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. A copy of this permit and the approved plan shall be maintained at the facility.
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. The applicant, prior to operation of the facility, shall comply with all applicable lawfully adopted local ordinances.

Construction and Operation:

1. This permit is for the development of the Lake Norman Construction and Demolition Landfill, Cells 1A, 1B, and 1C within the approved facility description, in accordance with the approved plan. Initial development shall begin with Cell 1A.
2. 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.

3. 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.
4. 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:
 - i. Random inspections of incoming loads or other comparable procedures;
 - ii. Record keeping which 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

- a. 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.
- b. Areas which 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.
- c. 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.

Access and Safety

- a. 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.
- b. 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.
- c. The access road to the site shall be of all-weather construction and maintained in good condition.
- d. Dust control measures shall be implemented when necessary.
- e. 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.
- f. Signs shall be posted stating that no MSW, hazardous waste or liquid waste can be received.
- g. 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.
- h. 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.
- i. 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.
- j. Open burning of solid waste is prohibited.
- k. 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

- a. Adequate sedimentation and erosion control measures shall be practiced to prevent silt from leaving the site.
- b. Adequate sedimentation and erosion control measures shall be practiced to prevent excessive on-site erosion.
- c. 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

- a. Surface water shall be diverted from the operational area.
 - b. Surface water shall not be impounded over or in waste.
 - c. A separation distance of at least four feet shall be maintained between waste and the ground-water table.
 - d. Solid waste shall not be disposed of in water.
 - e. 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.
5. All pertinent landfill operating personnel will receive training and supervision necessary to carry out their duties and operate this landfill in a safe manner.
 6. 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;
 - 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:

1. 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 Attachment 2, "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, (Attachment 2), 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 (see Construction and Operation Condition 4 (d)).
 - 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.
2. 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.
 3. 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 (1.h. & 2.) shall be submitted to the Division in a timely manner.
 4. Explosive gas monitoring shall be performed as needed to ensure compliance with the standards in Rule .0503 (2)(a).
 5. The permittee shall maintain a record of the amount of solid waste (in tons) received at the facility, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
 6. On or before 01 August (or an earlier date as requested by the Division) of each year, the permittee shall report the amount of waste received at this facility and disposed of in the landfill to the Division and to all counties from which waste was accepted, on forms prescribed by the Division. This report shall include the following information:
 - a. The reporting period shall be for the previous year, beginning 01 July and ending on 30 June;
 - b. The amount of waste received and landfilled in tons, compiled on a monthly basis, according to Condition 5 described above; and

- c. Documentation that a copy of the report has been forwarded to all counties from which waste was accepted.
- 7. All pertinent records and reports shall be maintained on site and made available to the Division upon request.

ATTACHMENT 1

List of Documents for the Approved Plan

The following documents are incorporated into the approved plan for Permit No. 57-04:

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 Subcell 1C.
7. Revised Construction Plan, Operations Plan, and Property Deed submitted 9 March 1999 by S&ME, Inc. certifying an initial 3 acre portion of Subcell 1A.