

Return after Recording to:
Legett Cooke and Burch
P.O. Drawer 100
Windsor NC 27983

AMENDMENT TO PERMIT NO. 08-03
PART 1: PERMIT TO CONSTRUCT
DATE ISSUED 08-06-93

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

P.O. BOX 27687 RALEIGH, NC 27611

SOLID WASTE PERMIT

East Carolina Environmental, Inc.

is hereby issued a Permit to Construct a

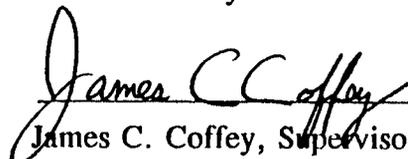
MUNICIPAL SOLID WASTE LANDFILL FACILITY

accessed

via NCSR 1225 (Republican Road), north of Windsor, 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 facility is located and described by the legal description of the site on the attached boundary survey*, sheets 1 and 2, for the Bertie County Landfill, Document No. 3a, prepared by Bennett B. White, Registered Land Surveyor, NC #L-880, 5/14/93, excluding 36.27 acres north of 30 foot right-of-way from SR 1225 to a tract recorded as formerly T.A. and E.E. Cherry.

* Boundary Survey recorded in Plat Cabinet A page 1094 and 1095


James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section
Division of Solid Waste Management

CERTIFIED COPY OF SOLID WASTE PERMIT

I do hereby certify that the attached PERMIT is an exact and true copy of Permit No. 08-03.

James C Coffey
James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section
Division of Solid Waste Management

North Carolina

Johnston County

I, Sue Hodge, a Notary Public for said County and State, do hereby certify that James C. Coffey, Solid Waste Section, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 6th day of August,

1993.

OFFICIAL SEAL

Sue S Hodge
NOTARY PUBLIC

My commission expires October 21, 1995.

NORTH CAROLINA, BERTIE COUNTY

The foregoing certificate(s) of Sue S. Hodge, Notary Public,
is (are) certified to be correct. This instrument was presented for registration and recorded in the office of Register of
Deeds, Bertie County, N.C., in Book 704, Page 407.
This 11 day of August, 1993, at 4:07 o'clock P. M.

Belinda S. White Register of Deeds
By: Margaret R. Bond Ass't Deputy

PERMIT NO. 08-03

DATE ISSUED August 6, 1993

SOLID WASTE PERMIT**Part 1: Permit to Construct****CONDITIONS OF PERMIT:****GENERAL (G)****1. Recordation Procedures.**

- a. This permit shall not be effective unless the certified copy is filed in the Register of Deeds Office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located. After recordation, the certified copy shall be returned to the Solid Waste Section and shall have indicated on it the page and book number, date of recordation, and Register's seal.
- b. When this property is sold, leased, conveyed or transferred, 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.

2. Division Approved Plan.

- a. This permit approves the facility plan for the East Carolina Landfill Facility, as shown on the Facility Master Plan (Doc.#'s 2 & 20), and the initial development of a MSWLF unit, Phase 1, which will be constructed in four segments, (Cells 3, 4, 5, and 6). The permit also approves the on-site environmental management facilities described in the approved plan.
- b. The approved plan is described by Attachment 1, "List of Documents for Approved Plan". Where discrepancies may exist, the most recent submittal and the Conditions of Permit shall govern. Some components of the approved plan are reiterated in the Conditions of Permit. Approved plan documents may be referenced in the permit conditions as "Doc.#".

3. **Permit Renewal.** East Carolina Environmental, Inc., the owner and operator, shall schedule Permit Renewal as set forth in 15A NCAC 13B .1604 (b)(2)(P) on or before October 9, 1993.

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4. **Pre-Construction Meetings.**
 - a. The owner or operator shall notify the Division of Solid Waste Management (DSWM), Solid Waste Section (SWS) and conduct a pre-construction meeting on-site prior to initiating construction of cell 3. If initial construction does not commence within 18 months from the issuance date of this permit, then the permittee shall obtain written approval from the SWS prior to construction and comply with any conditions of said approval. For Cell 3 only, clearing and grubbing activities are permissible prior to the pre-construction meeting.
 - b. Prior to construction of cells 4, 5 and 6 of Phase I, East Carolina Environmental, Inc. will notify the Division 60 days prior to beginning construction. CQA, Construction and Engineering plans will be updated, if necessary, and submitted for approval by the Division prior to beginning construction. Construction of cells 4, 5, and 6 will be in accordance with the approved plans, and all terms and conditions of this permit and the Permit to Operate.

5. **Permit to Operate.** Prior to receiving waste at this facility, a Permit to Operate must be obtained. The requirements which must be met in order to obtain this part of the Solid Waste Permit are described in Section C.3 below. The Conditions of Permit issued herein shall also be incorporated in the Permit to Operate.

6. **Transferability.** This permit is not transferable.

7. **Buffer Zones.**
 - a. Buffer zones shall be established and maintained as delineated in the Facility Plan (Doc. # 20).
 - b. Division approval is required for use of buffer zones other than as defined in the approved plan.
 - c. A minimum 25 foot buffer shall be established between the landfill facility activities and the cemetery;
 - d. A minimum 50 foot buffer shall be established between landfill facility activities, including borrow areas and any surface waters or delineated wetlands.
 - e. A minimum 100 foot buffer shall be maintained between borrow areas and facility boundaries.

CONSTRUCTION (C)

1. **Landfill Systems.** This construction permit is for development of Phase I of the East Carolina Environmental, Inc. Regional Municipal Solid Waste Landfill and the on-site environmental management facilities, in accordance with the approved plan and as

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specified herein.

- a. The components of the engineered systems shall be specified and constructed to meet the performance requirements established by the facility design Doc. 18, 19, and 20.
 - b. Relative to the established performance requirements, design revisions and/or requests for variance, will be reviewed by the agency and accepted or rejected.
 - c. The main leachate removal lines and manholes shall be constructed and tested to be watertight.
 - d. The geotextile material placed below the drainage layer shall be specified to provide adequate protection to the geomembrane liner under maximum loading conditions.
2. **Sedimentation & Erosion Control.** All sedimentation/erosion control activities will be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4 and 40 CFR §258.26 (a).
3. **Pre-operative Requirements.** The following requirements shall be met to obtain a PERMIT TO OPERATE this facility:
- a. Site preparation shall be in accordance with the construction plan, and the conditions specified herein.
 - b. Site inspection shall be made by a representative of the Division of Solid Waste Management (DSWM).
 - c. The permit number and the words "NO HAZARDOUS, OR LIQUID WASTE ACCEPTED" shall be posted on an entrance sign.
 - d. The CQA report shall be submitted to the Division and, at a minimum, shall include the following:
 - (1) The documentation required by the CQA Plan (Doc. #19) and as set forth in this permit.
 - (2) Results of all construction quality assurance and construction quality control testing required in this condition including documentation of any failed test results, descriptions of procedures used to correct the improperly installed material and results of all retesting performed. The CQA report shall contain as-built drawings noting any deviation from the approved engineering plans and shall also contain a comprehensive narrative including but not limited to daily reports from the project engineer and a series of color photographs of major project features.
 - (3) The CQA report shall bear the seal of the project engineer and a certification that construction was completed in accordance with:
 - (i) the CQA plan;

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- (ii) the conditions of this permit to construct; and
 - (iii) acceptable engineering practices.
 - (4) The Division shall review the CQA report within 30 days of a complete submittal to ensure that the report meets the requirements of this condition.
 - e. All necessary Local, State, and Federal permits or approvals to manage leachate must be obtained. Location and operation of leachate management facilities at the landfill facility requires Division approval.
 - f. A final water quality monitoring plan shall be submitted to the Solid Waste Section and approved by the SWS Hydrogeologist.
 - g. Surface water locations and groundwater monitoring wells (see Monitoring and Reporting Requirements) shall be installed and a baseline sampling performed in accordance with the final water quality monitoring plan as approved by the Solid Waste Section and reported to the Division's Solid Waste Section.
4. **Closure.** Closure or partial closure of any MSWLF unit shall be in accordance with Closure Plan described in Doc.19, and 15 NCAC 13B.1629. The final closure plan shall be submitted at least 90 days prior to commencement of any closure activities and no later than April 9, 1993.

OPERATION (O)

1. **Waste Disposal.**
- a. This landfill facility is permitted to receive solid waste generated by and in the counties of North Carolina, at an average daily rate of 1000 tons per day, facility total, as set forth in Doc. #19, and consistent with the local government approval and contract, and as defined in 15A NCAC 13B .0101(36), except as prohibited by N.C.G.S. Article 9 of Chapter 130A and Rules adopted by the Commission for Health Services.
 - b. Acceptance of specific wastes subject to the "Procedure and Criteria for Waste Determination" shall require Division approval in accordance with 15A NCAC 13B .0103 (d).
2. The landfill unit shall conform to all operating procedures described in the approved plan, Rule .1626 of 15A NCAC 13B upon its effective date (October 9, 1993), and as specified herein.
- a. All pertinent landfill operating personnel will receive training and supervision necessary to properly operate this landfill. Specifically, training must be provided in operational procedures that will prevent damage to the liner and leachate

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- collection and removal systems.
- b. Leachate management, including the monitoring, sampling, storage, transportation, treatment, and ultimate disposal will be conducted in accordance with the approved plan, the conditions specified herein, and all pertinent Federal and State rules and regulations.
 - c. The use of synthetic or other alternative daily cover which has been previously approved for use in North Carolina is approved for a 90 trial period but will require prior notification of the Division's Solid Waste Section Regional Waste Management Specialist. Following a 90 day trial period, the continued use of the alternative material shall require written approval from the DSWM. By this reference, any conditions of said approval shall be incorporated in this permit.
 - d. East Carolina Environmental, Inc. will develop a plan to monitor the waste disposal rate versus the height of the landfill cell, to determine the inplace density of the waste, to ensure that the actual inplace density of the waste does not exceed the allowable design limits of the geomembrane system. At a minimum cells 3 and 4 shall be monitored annually, cells 5 and 6 shall be monitored semiannually, until the cell is closed in accordance with the procedures referenced in C(4) of this document.

MONITORING AND REPORTING REQUIREMENTS(M&R)

1. **Ground water monitoring wells and monitoring requirements.**
 - a. Monitoring wells shall be located and designed as follows:
 - (1) A final water quality monitoring plan shall be submitted to the Solid Waste Section and approved by the Section hydrogeologist.
 - (2) A total of 10 downgradient monitoring wells (MW3-MW12) shall be established in accordance with the final approved monitoring plan to monitor Cells 3-6 of the MSWLF Facility.
 - (3) Two upgradient monitoring wells (MW1-MW2) shall be established in accordance with the final approved monitoring plan to monitor Phases 1 and 2 of the MSWLF Facility.
 - b. Monitoring well design and construction shall conform to the specifications outlined in the applicable N.C. Well Construction Standards, 15 NCAC 2C .0100 and as approved by the Division.
 - c. 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 Solid Waste Section Hydrogeologist at the time of well installation.
 - d. For each monitoring well constructed, a well completion record and boring log shall be submitted to DSWM within 30 days upon completion.

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- e. Prior to the acceptance of any waste at the facility, a baseline sampling event of all monitoring wells and surface water sampling locations shall be completed, including four independent samples from each monitoring well. Sampling and analyses for all monitoring wells shall be consistent with 15A NCAC 13B .1633.
 - f. Sampling equipment and procedures shall conform to specifications outlined in the final approved water quality monitoring plan, consistent with 15 NCAC 13B.1630-1637, and the current policies and guidelines established by DSWM at the time of sampling.
 - g. The owner or operator shall sample the monitoring wells at least semi-annually or as directed by the Solid Waste Section Hydrogeologist.
 - h. A readily accessible unobstructed path shall be cleared and maintained so that four-wheel drive vehicles may access the monitoring wells at all times.
2. **Surface Water Monitoring.** The owner or operator shall establish 4 locations for surface water sampling as indicated in final approved water quality monitoring plan. The surface water monitoring locations shall be sampled and analyzed at least semi-annually according to the protocol and parameters required by the Division at the time of sampling.
3. **Analytical Data.** The owner or operator shall maintain a record of all monitoring events and analytical data. Reports of the analytical data for each water quality monitoring sampling event (M&R 1.g. and 2.) are to be submitted to DSWM in a timely manner.
4. **Disposal Rates.**
- a. The owner or operator shall maintain a record of the amount of solid waste received at the facility, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
 - b. The data shall be collected and categorized by geographic areas (ie. Cities and Counties); where the geographic area is defined by the local government Solid Waste Management Plan required by NCGS 130A-309.04(e) or (f).
5. **Facility Annual Report.** On or before 01 Aug 94, and each year thereafter, the permittee shall report the amount of waste received (in tons) at this facility and disposed of in the landfill to the Solid Waste Section, on forms prescribed by the Section. 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 4 described above; and
 - c. The report shall be signed by the Facility Operator and provide notification that

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a copy of the Report has been forwarded to those units of Local government referenced in M&R 4(b)

6. **Availability of Records.** All records shall be maintained on-site and made available to the Solid Waste Section upon request.

ATTACHMENT 1:

LIST OF DOCUMENTS FOR APPROVED PLAN

I. Approved Site Study Submittals:

1. Bertie Regional Landfill Permit Application (Site Plan), dated 11/23/92.
2. Facilities Master Plan, revised 6/14/93.
3. Property Boundary Survey Blueprint, dated 5/4/93.
- 3a. Property Boundary Summary - Albemarle Land Services, 5/14/93.
4. Completeness Review Letter, 4/15/93.
- 4a. Resolution for Local Government Approval, 6/7/93.
- 4b. Memo: DEM Comments, 7/6/93.

Memos - Law Environmental to Hodges, Harbin, Newberry and Tribble

5. 40 CFR Sections 258.13 through 258.15...Siting Restrictions, 4/26/92.

Memos and Responses - Hodges, Harbin, Newberry, & Tribble to Solid Waste Section

6. Memo: Slope Stabilities Calculations, 7/15/93.
7. Memo: Issue of Clay Seam Layer, 5/28/93.
8. Law Memo: Response to Sections Concerns, 5/24/93.
9. Memo and Misc Documents: Response to Completeness Review of Site Plan Application, 4/28/93.
10. Memo dated 6/16/93.
11. Response to DEM comments, 7/8/93.
12. Letter from Town of Windsor, memo, 6/21/93.
13. Revised Cross-sections, 7/15/93.
14. Addendum to Report of Geotechnical Exploration, dated 7/14/93.

15. Submittal in Response to Completeness Review, dated 4/28/93.
16. Data submittal of Additional Solid Test Borings and Piezometer Installation, dated 3/31/93.
17. Report of Geotechnical Exploration, Slope Stability and Settlement, dated 5/18/93.

II. Approved Construction Plan Submittals:

18. General Conditions and Site Specific-Design Requirements Letter, dated 7/26/93.
19. East Carolina Landfill, Part B Permit Application, Vol. 1 , revised 7/29/93, and Vol. 2, revised 7/28/93.
20. East Carolina Landfill Construction Plan Drawings, revised 7/27/93, 28 sheets.

Separate Cover Reports - Law Environmental:

21. Design Hydrogeological Report, dated 7/21/93.
22. Lateral Stability of Subsurface Soils, dated 7/26/93.
23. Addendum to Design Hydrogeological Report, dated 7/29/93.
24. Addendum to Report of Geotechnical Exploration, dated 7/21/93.
25. Water Monitoring Plan, Blueprint, dated 7/23/93.

Memos - Law Environmental to Hodges, Harbin, Newberry and Tribble:

26. Slope Stability of Landfill Cap, 7/29/93.
27. Selection of Compressibility and Shear Strength Parameters, 7/29/93.