



Facility Permit No.: 28-03  
Part 2 - Permit to Operate  
Dare County C&D Landfill  
April 13, 2011  
Doc. ID: 13484  
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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

**MUNICIPAL SOLID WASTE MANAGEMENT FACILITY**  
**Permit No. 28-03**

Dare County  
is hereby issued a

**PERMIT TO OPERATE**

**DARE COUNTY CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL**  
**CELL 4 , and Continued Operation of Cells 1, 2 and 3**

located west of US Highway 264 approximately 2.4 miles south of the intersection of US Highway 64/264 in Dare 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 facility is located and described by the legal description of the site or the property map contained within the approved application document.

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

1646 Mail Service Center, Raleigh, North Carolina 27699-1646  
Phone: 919-508-8400 \ FAX: 919-733-4810 \ Internet: [www.wastenotnc.org/swhome](http://www.wastenotnc.org/swhome)

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## ATTACHMENT 1

### PART I: PERMIT HISTORY

Permit Type	Date Issued
Original Issue Permit to Construct (PTC) and Permit to Operate (PTO)	November 15, 1995
Permit Modification (PTO) – Cell 2a	December 28, 1998
Permit Amendment (PTO) – Cells 1 and 2	March 14, 2000
Permit Amendment (PTC) – Cell 1	October 30, 2001
Permit Modification (PTC) – Cells 1 and 2	June 24, 2002
Permit Modification (PTO) – Cell 2	December 20, 2002
Permit Modification (PTO) – Cells 1 and 2	June 27, 2003
Permit Amendment (PTO) – Cells 1 and 2	May 5, 2005
Permit Amendment (PTC) – Cell 3a	July 22, 2005
Permit Modification (PTO) – Cell 3a	March 17, 2006
Permit Modification (PTO) – Cell 3 Expansion	December 18, 2006
Permit Amendment (PTC) – Cell 4	March 10, 2010
Permit Amendment (PTO) – Cell 4	April 13, 2011

### PART II: LIST OF DOCUMENTS FOR APPROVED PLAN

1. - 28. See *Facility Permit No 28-03, Part 2 – Permit to Operate*. December 18, 2006. Permit Modification: Cell 3 Expansion (DIN 628).
29. *Dare County Construction and Demolition Debris Landfill Cell No. 4 Permit To Construct Application*. Prepared by Camp Dresser & McKee. Raleigh, NC. January 27, 2009; revised through March, 2010 (Doc ID 13476), which included the revised Operations Plan dated March 2011 (Doc ID 13454).
30. *Dare County Construction and Demolition Debris Landfill Phase No. 4 Expansion, Erosion and Sediment Control Permit Application*. Prepared by: Camp Dresser & McKee. Raleigh, NC. December, 2009. Approved by: Division of Land Resources, Land Quality Section. February 18, 2010 (Doc ID 9831).
31. *Dare County Construction and Demolition Debris Landfill Phase No. 4 Expansion Well Abandonment Records*. Submitted by: Camp Dresser & McKee. Raleigh, NC and prepared by Froehling & Robertson, Inc. April 2010 (Doc ID 10403).

32. *Dare County Construction and Demolition Debris Landfill Phase No. 4 Expansion Groundwater and Landfill Gas monitoring Well Installation and Initial Sampling Report.* Prepared by: Camp Dresser & McKee. Raleigh, NC. August 30, 2010 (Doc ID 12978).
33. *Dare County Construction and Demolition Debris Landfill Cell No. 4 Construction Quality Assurance Report.* Prepared by: Camp Dresser & McKee. Raleigh, NC. February 2011 and revised through March 2011 (Doc ID 13481).

**PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY**

<b>Dare County, N.C. Register of Deeds</b>				
Book	Page	Grantee	Grantor	Acres
530	733 - 735	Granville County, North Carolina	The Prudential Insurance Company of America	836.2
Plat Cabinet C	Slide 32 B	Survey		
				Total Site Acreage: 836.2 acres

**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 Operate for Cell 4 shall expire November 28, 2016 .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. 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 sanitary landfill and a reference by book and page to the recordation of the permit.
5. By beginning 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 shall 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 sedimentation and erosion control, and a General or Individual National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit, if applicable. 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**

1. Construct of any C&D landfill future phases or cells requires written approval of the Section. Application for Permit to Construct must be prepared in accordance with applicable statutes and rules in effect on that date and will be subject to a permitting fee.

*- End of Section -*

### ATTACHMENT 3 CONDITIONS OF OPERATING PERMIT

#### **PART I: OPERATING CONDITIONS**

1. The Permit to Operate shall expire November 28, 2016. Pursuant to 15A NCAC 13B .0201(g), no later than June 1, 2016, 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 in accordance with 15A NCAC 13B .0535.
2. The C&D landfill units are permitted to receive and dispose of the following waste types:
  - a. “Construction or demolition debris” as defined in G.S. 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 G.S. 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 G.S. 130A-290 (a)(15) means solid waste that is generated solely from land-clearing activities, such as stumps and tree trunks.
  - d. “Asphalt” in accordance with G.S. 130-294(m).
3. 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).
4. 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.
5. 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 neither be applied at greater than agronomic rates nor to a depth greater than six inches.
6. This facility is permitted to receive solid waste generated within Dare County consistent with the resolution passed by the Dare County Commissioners on August 2, 2004.

7. 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.
  
8. The permittee must actively employ a training and screening program at the facility prepared in accordance with 15 NCAC 13B .0544(e) and the approved Waste Acceptability Plan (Attachment 1, Part II, Document 29) 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.
  
9. This permit approves the operation of Cell 4 and the continued operation of Cells 1, 2, and 3 as well as the onsite environmental management protection facilities as described in the approved plans. Operation of any C&D landfill future phases or cells requires written approval of the Section after documentation has been submitted that the area has been constructed in accordance with applicable statutes and rules.
  
10. The following table lists the dimensions and details for the C&D landfill units, both existing and planned. Total gross capacity is defined as the volume measured from the bottom of waste through the top of final cover. The maximum approved fill elevation for Cell 4 as shown on drawing Sheet OP-3 is up to the elevation of 34 feet above mean sea level. The estimated service life of the Cell 4 is approximately 3.5 years from January 2009, as stated in Attachment 1, Part II, Document No. 29.

C&D Unit	Acres	Gross Capacity (cubic yards)	Status
Cell 1	11.3	301,500	Inactive
Cell 2	11.3	301,500	Inactive
Cell 3	11.3	315,000	Active
Cell 4	11.3	326,900	Cell developed
Cell 5	11.3	326,900	Not developed
Total	56.5	1,571,800	

11. The facility is approved to accept up to 98 tons per day or 30,500 tons per year based on 130 working days per year. Maximum variance shall be in accordance with N.C.G.S. 130A-294(b1)(1).
12. The use of alternative daily cover requires approval, prior to implementation, by the Section. Requests for alternative daily cover approval must include a plan detailing the comprehensive use and demonstration for the effectiveness of the alternative cover. The plan must be developed according to Section guidelines. Plans that are approved by the Section will be incorporated into, and made a part of, the approved documents found in Attachment 1.
13. The permittee must maintain permanent markers that accurately identify the edge of the approved waste disposal boundary.
14. The facility must maintain records for all solid waste materials accepted as alternative cover material and used as alternate periodic 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 Section upon request.
15. Financial assurance must be continuously maintained for the duration of the facility in accordance with the Rule 15A NCAC 13B .0546, 15A NCAC 13B .0547 (2), and N.C.G.S. 130A-295.2(h). During the active life of the C&DLF, the owner and operator must annually adjust the cost estimates including closure and post-closure activities for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s).
16. 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.
17. The facility operator must complete an approved operator training course in compliance with NCGS 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 C&D landfill unit in accordance with G.S. 130A-309.25 and addressed by memorandum dated November 29, 2000.

## **PART II: MONITORING AND REPORTING REQUIREMENTS**

18. Monitoring and reporting requirements at Dare C&D Landfill must be in compliance with Rule 15A NCAC 13B .0544 and the approved monitoring plan (Attachment 1, Part II, Document No. 29). Groundwater, surface water, and landfill gas monitoring locations must be established as identified in the approved plans – Water Quality Management Plans and Gas Control Plan and drawing Sheet No. 1 (Attachment 1, Part II, Document No. 29).
19. A total of thirteen (13) ground water wells (GW-1 [background well], GW-2, GW-3, and GW-8 through GW-17), three (3) surface water locations (SW-1, SW-2, and SW-3), and twelve (12) gas probes (M-1 through M-12) comprise the approved facility monitoring network (Attachment 1, Part II, Document Nos. 29 & 32).
20. The permittee must sample the monitoring wells and surface water semi-annually and sample methane gas quarterly or as otherwise directed in writing by the Section Hydrogeologist. Water samples must be analyzed for constituents specified in the approved Water Quality Management Plan (Attachment 1, Part II, Document No. 29).
21. All well and gas probe construction records and soil boring logs for newly installed wells and probes must be submitted to the Section Hydrogeologist for a review within 30 days of completion. Each monitoring well and gas probe must be surveyed. For monitoring on-site groundwater quality, hydraulic conductivity and effective porosity values must be established for each screened interval at each monitoring well in order to develop groundwater flow characteristics. 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.
22. The permittee must obtain approval from the Section for the design, installation, and development and decommission of any monitoring well or piezometers. Any modification to an approved plan must be reviewed and approved by the Section. Documentation must be placed in the operating record and provided to the Section.
23. 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.
24. A licensed geologist must be present to supervise the installation of groundwater monitoring wells and gas probes. The exact locations, screened intervals, and nesting of the wells must be established after consultation with the Section Hydrogeologist at the time of well installation.

25. 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 sampling location shall be kept as part of the permanent facility record.
26. Within thirty (30) days of the completed permanent abandonment of any 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 Section in accordance with 15A NCAC 2C .0114(b) and be certified by a Licensed Geologist.
27. The permittee must maintain a record of all monitoring events and analytical data in accordance with the approved Water Quality Management Plan and Gas Control Plan (Attachment 1, Part II, Document No. 29) and Rules .0503 (2)(d) & .0544 of 15A NCAC 13B. Reports of the analytical data for each surface, and groundwater quality monitoring sampling event must be submitted to the Division within 120 days of the respective sampling event. Analytical data must be submitted in a manner prescribed by the Section.
28. A readily accessible and unobstructed path must be maintained so that monitoring locations (wells and probes) may be accessed using four-wheel drive vehicles.
29. 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 15 November 1995 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 Waste Management Specialist by the date due on the prescribed annual facility report form.
30. Copies of this permit, the approved plans (Attachment 1, Part II), and all records required to be maintained in the operating record by the permittee must be maintained at the facility and made available to the Section upon request during normal business hours.
31. The permittee must maintain records of
- a. The amount of all accepted solid waste materials as (i) C&D wastes, (ii) alternative cover material and used as alternate daily cover, and (iii) the recyclable material,
  - b. Daily records of waste received, and
  - c. 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.

### **PART III: CLOSURE AND POST-CLOSURE**

32. Closure and post-closure activities must be conducted in accordance with the approved Closure and Post-Closure Plans (Attachment 1, Part II, Document No. 29) and Rule 15A NCAC 13B .0543.
33. The modification of the approved closure plan to construct an alternative cap system is allowed by Rule .0543 of 15A NCAC 13B; but the modified closure plan must be submitted for approval at least ninety (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 C&D unit in accordance with all rules in effect at that time. At a minimum, the plan must address the following:

- a. Design of a final cover system in accordance with 15 NCAC 13B .0543(c), or the solid waste management rules in effect at the time of closure;
- b. Construction and maintenance/operation of the final cover system and erosion control structures; and
- c. Surface water, ground water, and explosive gas monitoring.

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

### **GENERAL CONDITIONS**

34. Wastes received and product stored shall be maintained in reasonably sized piles with adequate fire breaks and lanes in accordance with the approved operational plans and the pertinent rules.
35. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste is deemed to be leachate and shall be contained on-site or properly treated prior to discharge.
36. These areas shall be operated and maintained with sufficient dust control measures to minimize airborne emissions and to prevent dust from becoming a nuisance or safety hazard.
37. These areas shall be operated and maintained in a manner so as to minimize odors, prevent the creation of a nuisance, potential health hazard, or a potential fire hazard.
38. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, and vermin.

### **OPERATIONAL CONDITIONS – SCRAP TIRES**

39. This unit shall be operated and managed in accordance with all applicable statutes and rules of the State of North Carolina, the requirements of 15A NCAC 13B .1107, and the Operations Plan included in Attachment 1, Part II, Document No. 29. Any revisions to the approved plan shall be approved by the Section, prior to implementation.
40. The unit is permitted to receive tires and scrap tires as defined in NCGS Article 9, Chapter 130A-309.53(6) & (7) and must temporary store the used tires inside the transfer trailers and hauled by the Dare County Public Works Recycling Department to Emanuel Tire in Waverly Virginia for processing and recycling.

OPERATIONAL CONDITIONS – WHITE GOODS AND SCRAP METAL

41. The unit is permitted to receive white goods as defined in NCGS Article 9, Chapter 130A-290(44) and must manage white goods according to all applicable statutes and rules of the State of North Carolina.
42. The unit must temporary store the white goods in the designated area as shown on Sheet No. SD-1. The permittee must manage white goods according to the Operations Plan included in Attachment 1, Part II, Document No. 29. Any revisions to the approved plan shall be approved by the Section, prior to implementation.
43. White goods collection areas shall provide for the proper removal of chlorofluorocarbon refrigerants.

*- End of Permit Conditions -*