NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
Division of Waste Management

Pat McCrory
Governor

Donald R. van der Vaart
Secretary

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

CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL
Permit No. 2803-CDLF-1995

DARE COUNTY.
is hereby issued a

PERMIT TO CONSTRUCT
DARE COUNTY CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL
PHASE V

PERMIT TO OPERATE
CONTINUE OPERATION OF PHASES I, II, III, & IV/CELLS 1, 2, 3, & 4

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 identified on the deeds recorded for this property listed in Attachment 1 of this permit.

Digitally signed by Edward F. Mussler III P.E.
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ATTACHMENT 1

PART I: PERMITTING HISTORY

Permit Type	Date Issued	Document Identification Number (DIN)
Original Issue Permit to Construct (PTC) and Permit to Operate (PTO) – Cells & 2	September 7, 1994	24528
Permit Amendment (PTC) & (PTO) - Cell 1 (revised) & Cell 2	March 14, 1995	24529
Permit Amendment (PTO) – Cell 1	November 15, 1995	24530
Permit Modification (PTO) – Cell2a	December 28, 1998	24531
Permit Amendment (PTO) – Cells 1 and 2	March 14, 2000	24532
Permit Amendment (PTC) – Cell 1	October 30, 2001	24533
Permit Modification (PTC) – Cells 1 and 2	June 24, 2002	24534
Permit Modification (PTO) – Cell 2	December 20, 2002	24535
Permit Modification (PTO) – Cells 1 and 2	June 27, 2003	24536
Permit Amendment (PTO) – Cells 1 and 2	May 5, 2005	24537
Permit Amendment (PTC) – Cell 3a	July 22, 2005	24538
Permit Modification (PTO) – Cell 3a	March 17, 2006	24539
Permit Modification (PTO) – Cell 3 Expansion	December 30, 2006	628
Permit Amendment (PTC) – Cell 4	March 10, 2010	9251
Permit Modification (PTO) – Cell 4	April 13, 2011	13484
Permit Substantial Amendment by Increasing Gross Capacity and Revising Facility Plan (PTC) – Phase V	August 28,2015	24897

1. Dare County (the County) was approved to construct and operate the Dare County Construction and Demotion Debris Landfill (C&DLF) on September 7, 1994 under the Solid Waste Permit Number 2803-CDLF-1995. The C&DLF is incrementally developed according to the approved Facility Plan by five (5) Cells/Phases with a gross capacity of 1,571,800 cubic yards (CY). Each of the five cells/phases that are standalone and divided by a drainage lateral encompasses an 11.3-acre waste footprint. The total of the waste footprint is 56.5 acres.

2. On August 02, 2004 Dare County Board of Commissioners approved the expansion of the C&DLF by adopting a resolution (DIN 24526), which approved the increase of the C&DLF's gross capacity to 3,044,300 CY by allowing for an additional ten (10)-feet vertical expansion of each of the 5 Cells, up to 40 feet above mean sea level with the maximum 3 (horizontal) to 1 (vertical) side slopes. The approved vertical expansions would allow disposal of permitted wastes into the spaces (lateral drainages) located between the original approved five (5) landfill cells and increasing the waste boundary to approximately 64.9 acres.

3. In compliance with Rule 15A NCAC 13B .0537(c)(11) effective January 2007, the County conducted the public meeting on July 21, 2008 to officially adopt the Resolution.

4. The County submitted a permit application for a substantial amendment in March 2015 and requested from the NC Solid Waste Section an approval of the revised Facility Plan for the C&DLF consisting of nine (9)-phased developments encompassing the 64.9-acre waste footprint with new gross capacity of 3,044,300 CY.

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 (Doc ID 628).

29. *Dare County Construction and Demolition Debris Landfill, Permit Modification.* Prepared by: Camp Dresser & McKee (CDM). Raleigh, NC. June 2008; revised through April, 2009 (DIN 7326). This submittal is in compliance with Rule 15A NCAC 13B .0547(2).

30. *Dare County Construction and Demolition Debris Landfill Cell No. 4 Permit To Construct Application.* Prepared by: CDM. Raleigh, NC. January 27, 2009; revised through December 21, 2009 (DIN 9831).

31. *Dare County Construction and Demolition Debris Landfill Phase No. 4 Expansion, Erosion and Sediment Control Permit Application.* Prepared by: CDM. Raleigh, NC. December, 2009. Approved by: Division of Land Resources, Land Quality Section. February 18, 2010 (DIN 9831).

32. *Dare County C&D Landfill Substantial Amendment and Phase V Permit To Construction Application.* Prepared by: CDM Smith. Raleigh, NC. March 13, 2015 and revised through May 19, 2015 (DIN 24526). The Design Hydrogeological Report for Phase V, site-wide water quality monitoring plan and landfill gas plan were approved on May 21, 2015 (DIN 24494, 24492, & 24493, respectively).

PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Dare County, N.C. Register of Deeds				
Book	Page	Grantee	Grantor	Acres
530	733 - 735	Dare County, North Carolina	The Prudential Insurance Company of America	
Plat Cabinet C	Slide 32 B	Survey		836.2
				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 (the Division), Solid Waste Section (Section).

In accordance with North Carolina Solid Waste Management Rule (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 (PTC) for C&DLF - Phase V must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate for C&DLF - Phases I-IV/Cells 1-4 shall expire **November 28, 2016** and 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. The certified copy of Permit to Construct and Operate, Solid Waste Permit No. 28-03 issued September 07, 1994 (DIN 24528) was presented and recorded on October 21, 1994 in Deed Book 959, Pages 0214 through 0222 by the Register of Deeds of Dare County.

4. When this property is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer shall contain in the deed 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. Failure to comply may result in compliance action or permit revocation.

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, Part II, "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 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

PART I: GENERAL FACILITY CONSTRUCTION CONDITIONS

1. This permit approves the new Facility Plan for the C&DLF and the Site Plan drawing Sheet Nos. SD-2 & LO-7 (DIN 24526) that defines the comprehensive development of the C&DLF facility by nine (9) phases, the solid waste stream to be received, the areas served by the facility, all onsite solid waste management facilities, and related facility infrastructure in accordance with the Rule 15A NCAC 13B .0537 and the resolution passed by the Dare County Commissioners on August 2, 2004 (DIN 24526).

2. The following table lists the dimensions and details for each of the nine (9) phases of the C&DLF, both existing and planned. The approved gross capacity of 3,044,300 cubic yards (CY) is defined as the volume measured from the bottom of C&D waste (the top of the base pad) through the top of final cover of the C&DLF as shown on drawing Sheet Nos. LO-6 & LO-7 (DIN 24526). The estimated service life of the facility is approximate 19 years.

C&DLF	Acres	Gross Capacity (cubic yards)	Estimate Service Life	Status
Phase I / Cell 1	11.3	249,800	-	Filled
Phase II / Cell 2	11.3	249,800	-	Filled
Phase III/ Cell 3	11.3	249,800	-	Filled
Phase IV/ Cell 4	11.3	118,436	-	Filled
		131,364	1.5[3]	Active
Phase V	2.1	478,900	3.8	To be constructed
Phase VI	2.1	418,750	3.5	To be developed
Phase VII	2.1	418,750	3.5	To be developed
Phase VIII	11.3	249,800	2.3	To be developed
Phase IX	2.1	478,900	4.4	To be developed
Total	64.9	3,044,300	19.0	

Notes:

1) The C&DLF Phases I, II, III, IV, & VIII are standalone units and separated by lateral drainages.
2) The C&DLF Phases V, VI, VII & IX are infilled between the Phases I, II, III, IV, & VIII.
3) As of May 29, 2014, Cell 4 (Phase IV) had approximately 131,364 CY of capacity remaining. At the current disposal rate of 22,005 tons per year and assumed density of 0.5 tons/CY, the remaining expected life of Cell 4 (Phase IV) is approximately 1.5 years.

3. The landfill is permitted to accept for disposal of solid waste as defined in NCGS 130A-290(a)(35) and Rule NCAC 13B .0532(8), which is generated in Dare County, as approved by the Dare County Board of Commissioners on August 2, 2004, except as otherwise prohibited by North Carolina General Statutes Article 9 of Chapter 130A and rules adopted by the Commission for Health Services.

4. This facility shall conform to the specific conditions set forth in this permit and the provisions of the Rule 15A NCAC 13B .0534(b)(2).

5. The permittee shall submit an amendment to this permit pursuant to Rule 15A NCAC 13B .0533(a)(2) for any subsequent cell or phase of development described in the approved Facility Plan (DIN 24526). The permit amendment application shall be subject to a permit fee according to NCGS 130A-295.8.

6. A copy of this permit, the approved plans, and all pertinent records and reports shall be maintained on-site at the facility and made available to the Division upon request according to Rule 15A NCAC 13B .0542(n).

FACILITY CONSTRUCTION CONDITIONS

7. This Permit to Construct is issued for the Dare County C&DLF facility under the criteria set forth in accordance with Rule 15A NCAC 13B .0533(a)(3) for lateral and vertical expansions of the Phase V as shown on the drawing Sheet Nos. EP-2, EP-3, & EP-4 in the approved Engineering Plan (DIN 24526). Construction of C&DLF-Phase V shall only be in accordance with the approved plans (DIN 24526) and the requirements stipulated in Rules 15A NCAC 13B .0531 - .0547. The construction of the Phase V is permitted for approximately:
   a. Lateral expansion to fill in the approximately 2.1-acre area between the existing Phases/Cells I & II up to the elevation of 30 feet above mean sea level (amsl).

   b. Vertical expansion over the top of the existing Phases/Cells I, II, and proposed Phase V areas from the elevation of 30 feet up to 40 feet amsl.

c. Up to 478,900 cubic yards of total gross volume (from the top of the base pad to the top of final cover).

8. The initial, substantial, construction authorized by this Permit to Construct must commence within 18 months from the issuance date of this permit as per Rule 15A NCAC 13B .0534(b)(2)(H). This Permit to Construct will expire on **February 28, 2017** if substantial construction does not begin within 18 months from the issuance date of this permit; then the permittee must obtain a permit modification from the Section prior to construction, comply with the conditions of the approval and submit a permit modification fee. Substantial construction includes, but is not limited to, issuance of construction contracts, mobilization of equipment on site, and construction activities including installation of sedimentation and erosion control structures.

9. A modification to the Permit to Construct for the facility, modifications or revisions of the approved documents, or changes during construction of any landfill phase/cell require approval by the Section, may constitute a permit modification in accordance with Rule 15A NCAC 13B .0533(a)(4), and be subject to a permitting fee in accordance with NCGS 130A-295.8(b).

10. The permittee shall conduct a preconstruction meeting, on site, prior to initiating construction of Phase V at the site and conduct periodic construction progress meetings, as needed in accordance with the Rules 15A NCAC 13B .0541. The permittee shall notify the Section 10 days prior to these required meetings.

11. The permittee shall implement the approved construction quality assurance (CQA) in accordance with the Rules 15A NCAC 13B .0540 & .0541 and the approved CQA plan (DIN 24526) to ensure that the base grades of the landfill cells are consistent with those shown on drawing Sheet Nos. EP-2 and D-1 (DIN 24526).

EROSION AND SEDIMENTATION CONTROL REQUIREMENTS

12. Prior to construction of Phase V, all sedimentation and erosion control activities shall conform and be constructed in accordance to the requirements shown on drawing Sheet Nos. EP-2 & D-1 (DIN 24526), approved erosion and sediment control plan, the Sedimentation Pollution Control Law (15A NCAC 04), and any required NPDES permits. During the course of construction of the approved expansion area, the permittee must implement, but not be limited to, the following sedimentation and erosion control activities:
    a. All sedimentation and erosion control activities shall be conducted by installing and maintaining adequate structures and measures to manage the run-on and run-off generated by the 24-hour, 25-year storm event, to prevent silt from leaving the site, and to prevent excessive on-site erosion.

b. Provisions for a vegetative ground cover sufficient to restrain erosion must be established within 30 working days or 120 calendar days upon completion of any phase or cell of C&DLF development.

13. Modifications of sedimentation and erosion control activities must be approved by the NC Land Quality Section. Upon receiving the approval letter, the permittee shall notify the Section of any sedimentation and erosion control modifications.

GEOLOGIC, GROUND WATER AND MONITORING REQUIREMENTS

14. Prior to construction of the C&DLF - Phase V, all piezometers, borings, and groundwater and landfill gas monitoring wells within the proposed cell footprint shall be properly abandoned by over-drilling first (exception of non-cased borings) and sealed with grout in accordance with 15A NCAC 2C .0113, entitled "Abandonment of Wells".

15. In areas where soil is to be undercut, abandoned piezometers, groundwater and landfill gas monitoring wells and borings must not be grouted to pregrade land surface, but to the proposed base grade surface to prevent having to cut excess grout and possible damage the wells.

16. A Licensed Geologist must report any pertinent geological feature(s) exposed during phase or cell excavation. Pursuant to Rule 15A NCAC 13B .0540(5) the geologist must submit to the Section hydrogeologist a written report that includes an accurate description of the exposed geological feature(s) and effect of the geological feature(s) on the design, construction, and operation of the cell, phase, or unit.

17. A Licensed Geologist must supervise installation of groundwater monitoring wells and landfill gas monitoring wells. Each groundwater monitoring well and landfill gas well must be surveyed for location and elevation. Each groundwater monitoring well and landfill gas monitoring well must have an identification plate permanently attached to the well in accordance with 15A NCAC 2C .0108(o).

18. Any modification to the approved water quality monitoring, sampling, landfill gas, and analysis plan must be submitted to the Section Hydrogeologist for review and approval.

19. Groundwater and landfill gas monitoring well construction and abandonment must meet the requirements of 15A NCAC 02C.

20. Within 30 days of completed construction of each new groundwater and landfill gas monitoring well, a well construction record, well schematic, boring log, field log and notes, and description of well development activities, certified by a Licensed Geologist, must be submitted to the Section. Form GW-1 must be used for both groundwater and landfill gas wells. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned wells and piezometers.

21. Within thirty (30) days of the abandonment of any groundwater monitoring well or landfill gas monitoring well, the well abandonment record and any additional information included in the abandonment record must be certified by a Licensed Geologist, and submitted to the Section. Form GW-30 must be used for both groundwater and landfill gas wells.

22. All forms, reports, maps, plans, and data submitted to the Section must include an electronic (pdf) copy.

PRE-OPERATIONAL CONDITIONS

23. Prior to receiving waste at any unit of this facility, a Permit to Operate must be obtained from the Section in accordance with the Rules 15A NCAC 13B .0201(b) & (d)(2).

24. The following conditions shall be met prior to operating the C&DLF - Phase V area approved to be constructed in this permit:
    a. Site preparation (grading and placement of fill to maintain minimum 4-feet post-settlement vertical separation between waste and the existing ground surface) has occurred in accordance with the approved plan (DIN 24526) and drawing Sheet No. D-1, Detail E and Rule 15A NCAC 13B. 0540(2)(a) & (b).

    b. A written CQA and certification report including as-built drawings in accordance with the Rules 15A NCAC 13B.0541(c) & (d) and the approved CQA Plan (DIN 24526) shall be submitted to the Section for review and approval.

    c. Prior to waste disposal in any new phase or cell, the permittee shall arrange for a site inspection and/or a pre-operative meeting by a NC Solid Waste Section representative(s) or regional environmental specialist of the Section for the purpose of demonstrating that the facility construction is consistent with approved plans and specifications.

    d. Ground water monitoring wells and landfill gas wells shall be installed and surface water sampling locations shall be established. A baseline sampling event for background water quality shall be completely performed in accordance with Rule 15A NCAC 13B. 0544(b)(1)(D). Well construction and abandonment records and sampling results shall be submitted to the Section Hydrogeologist for review and approval prior to issuing the Permit to Operate for the C&DLF.

    e. The edge of the waste footprint must be physically identified with permanent physical markers, for both existing units and the new unit.

    f. The permittee shall completely implement and install site access, security, signs, and safety requirements in accordance with Rule 15A NCAC 13B. 0542(j).

g. The permittee shall completely construct and install all required and approved measures, devices, and structures to prevent soil erosion, control sedimentation, manage surface water drainage, and to protect surface waterbody in accordance with Rule 15A NCAC 13B. 0542(k) & (l) and the approved plan (DIN 24526).

h. Documentation of financial assurance mechanisms must be submitted to the Section for a review and approval. The financial assurance amount must include:
   i. Costs for closure and post-closure activities including the new constructed area (48.2 Acres) in order to receive the PTO, in accordance with Rules 15A NCAC 13B .0546 & .0547(2) and NCGS 130A-295.2.(h1).
   ii. Costs for potential assessment and corrective action at the facility in accordance with NCGS 130A-295.2(h1).

- End of Section -

ATTACHMENT 3
CONDITIONS OF OPERATING PERMIT

PART I: OPERATING CONDITIONS

1. The Permit to Operate for continued operation of the existing C&DLF - Phases I, II, III, & IV/ Cells 1, 2, 3, & 4 that was issued on April 13, 2011 (DIN 13484) shall expire **November 28, 2016**. Pursuant to 15A NCAC 13B .0201(g), no later than **June 01, 2016**, the permittee 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. Operation of any C&D landfill future phases or cells requires written approval of the Section and must be constructed in accordance with applicable statutes and rules.

3. Modification or revision of the approved documents or changes in the facility operations requires approval by the Section prior to implementation, and may constitute a permit modification and be subjected to a permit fee according NCGS 130A-295.8.

4. At the time of issuance of this permit, no additional facility operation is approved.

- End of Permit Conditions -