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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

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

CONSTRUCTION AND DEMOLITION LANDFILL FACILITY PERMIT No. 28-03

COUNTY OF DARE
is hereby issued a

PERMIT TO OPERATE

DARE COUNTY C&D LANDFILL
(CELL 3 EXPANSION)

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.

Edward F. Mussler III
CN = Edward F. Mussler III, C = US, O = Division of Waste Management, OU = Solid Waste Section
I have reviewed this document and I am approving this document
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Edward F. Mussler, III, P.E.,
Permitting Branch Supervisor
Permitting Branch
Solid Waste Section

ATTACHMENT 3

PART I: PERMIT HISTORY

Issuance	**Date**
Original Issue (PTC & PTO)	November 15, 1995
Version 1: Modification (PTO) Cell 2a	December 28, 1998
Version 2: Amendment (PTO) Cell 1 and 2	March 14, 2000
Version 3: Amendment (PTC) Cell 1	October 30, 2001
Version 4: Modification (PTC) Cells 1 and 2	June 24, 2002
Version 5: Modification (PTO) 180' of Cell 2	December 20, 2002
Version 6: Modification (PTO) Cells 1 and 2	June 27, 2003
Version 7: Amendment (PTO) Cells 1 and 2	May 5, 2005
Version 8: Amendment (PTC) Cell 3a	July 22, 2005
Version 9: Modification (PTO) Cell 3 (a & b)	March 17, 2006

PART II: LIST OF DOCUMENTS FOR THE APPROVED PLAN

1. – 24. See *Facility Permit No. 28-03, Part 2- Permit to Operate.* May 5, 2005. Amendment to Permit (Cells 1 and 2).

25. *Certification Letter, Cell No. 3a.* Prepared by: W. Michael Brinchek, P.E., Camp Dresser & McKee. Raleigh, NC. March 14, 2006.

26. Drawing: *Asbuilt Survey of a Portion of Cell #3 of County of Dare Landfill.* Prepared by: McKim & Creed, Virginia Beach, VA. Prepared for: Camp Dresser & McKee. Raleigh, NC. Project No. 03160-0010. Sheet 1 of 1. March 14, 2006. The surveyor of record is Timothy J. Cawood, P.L.S., NC Registration No. L-3358.

27. *Certification Letter, Cell No. 3 Expansion.* Prepared by: W. Michael Brinchek, P.E., Camp Dresser & McKee. Raleigh, NC. July 10, 2006.

28. Drawing: *Asbuilt Survey of Cell #3 of County of Dare Landfill.* Prepared by: McKim & Creed, Virginia Beach, VA. Prepared for: Camp Dresser & McKee. Raleigh, NC. Project No. 03160-0010. Sheets 1 and 2. April 28, 2006. The surveyor of record is Timothy J. Cawood, P.L.S., NC Registration No. L-3358.

- End of Section -

ATTACHMENT 4

Conditions of Permit to Operate

Site Specific Conditions

1. This permit approves the operation of the County of Dare Construction and Demolition Debris Landfill Cell 3 for five (5) years from the issuance date of this Permit to Operate, and is subject to review on or before November 30, 2011, as required under 15A NCAC 13B .0201(e).

    a. Modifications to the facility and engineering plans may be required in accordance with the rules in effect at the time of the review.

    b. The owner or operator shall submit a permit amendment or modification by July 30, 2011, prepared in accordance with the rules applicable to Construction and Demolition Debris landfills effective at the time of submittal.

2. The service area for this facility is Dare County per the resolution passed by the Dare County Commissioners on August 2, 2004.

3. The total design gross capacity for the construction of Cell 3 shall be consistent with the final grades as shown on Sheet Nos. 1 and 2 submitted with the letter of certification dated July 10, 2006. Gross capacity is defined as bottom of waste through the top of final cover.

    a. This permit approves the operation of Cell 3 that has a capacity of 315,000 cubic yards of airspace with a projected life of 5.3 years at 85 tons per day assuming an in-place density of 1,000 lbs/cy and 310 operating days.

    b. The total facility capacity, existing cells plus capacity of Cell 3, is 918,000 cubic yards.

4. Operation of future cells shall require written approval of the Section and shall be in accordance with the terms and conditions of the Permit to Construct issued July 22, 2005.

General Conditions

5. The documents submitted in support of the application for permitting the facility are identified in Attachment 1 and 3, "List of Documents for Approved Plan" and constitute the approved plan for the construction, operation and closure of the facility. Where discrepancies 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.

6. This permit is not transferable.

7. All sedimentation/erosion control activities shall be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4. Native vegetation shall be established on the completed C&D landfill unit in accordance with 15A NCAC 13B .0505 (3)(b)(c).

Operations

8. Operation of the C&D landfill shall be in accordance with Section .0505 and .0542 of the Solid Waste Management Rules, 15A NCAC 13B, the requirements contained in this permit, and shall conform to the operating procedures described in the approved plan. Should the approved plan and the rules be in conflict, the Solid Waste Management Rules shall take precedence unless specifically addressed by permit condition.

9. The facility operator shall have completed an approved operator training course in compliance with G.S. 130A-309.25.

    a. A responsible individual certified in landfill operations shall be on-site at all times during operating hours of the facility and while open for public use to ensure compliance with operational requirements.

    b. All pertinent landfill-operating personnel shall 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.

10. The C&D landfill units are permitted to receive the following waste types:

    a. Unless otherwise specifically approved by permit condition, only “construction” or “demolition” types of solid wastes as defined in G.S. 130A-290 (a)(4) are permitted for acceptance and disposal in the C&D landfill units.

    b. “Construction or demolition debris” as defined in G.S. 130A-290 (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.

    c. “Inert debris” as defined in G.S. 130A-290 (14) means solid waste that consists solely of material that is virtually inert, such as brick, concrete, rock and clean soil.

    d. “Land-clearing debris” as defined in G.S. 130A-290 (15) means solid waste that is generated solely from land-clearing activities such as stumps and tree trunks.

    e. “Asphalt” in accordance with G.S. 130-294(m).

    f. “Scrap tires” in accordance with G.S. 130A-309.53(6).

11. The C&D landfill units shall not receive the following waste types:

    a. "Yard trash" as defined in G.S. 130A-290 (45) shall not be disposed in the landfill area.

    b. Municipal solid wastes, hazardous wastes, or liquid wastes are not permitted for acceptance or disposal in the C&D landfill units.

12. The Permittee shall actively employ a screening program for the C&D unit that detects and prevents the disposal of MSW, hazardous, liquid or non-permitted wastes. At a minimum, the program shall include:

    a. Random inspections of incoming loads or other comparable procedures.

    b. Records of any inspections.

    c. Training of personnel to recognize hazardous and liquid wastes.

    d. Development of a contingency plan to properly manage any identified hazardous, liquid or MSW wastes.

    e. The plan must address identification, removal, storage, and final disposition of waste.

Cover Material Requirements

13. Solid waste shall be covered with a minimum of 6 inches of soil or an approved material of equivalent performance and thickness at least once per week or when the active area reaches 1/2 acre in size, or more often when necessary to prevent the site from becoming a visual nuisance or to mitigate conditions associated with fire, windblown materials, vectors, or excessive water infiltration.

14. Areas that will not receive additional waste 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 in accordance with Rule .0505(3)(b), and stabilized with vegetative cover.

15. After final termination of disposal operations at the C&D unit or major part thereof, or upon revocation of a permit, the fill areas shall be covered with at least two feet of suitable compacted earth in accordance with Rule .0505(3)(c), or other protective barrier as specified by the rules or the permit in effect at the time of closure.

Access and Safety

16. The C&D unit shall be adequately secured by means of gates, chains, berms, fences, or other security measures approved by the DWM to prevent unauthorized entry.

17. The access road to the C&D unit shall be of all-weather construction and maintained in good condition.

18. Signs shall be posted at the entrance of landfill in accordance with the Access and Safety Requirements under Operation Condition .0505(8).

    a. Signs shall provide information on dumping procedures, the hours of operation, the permit number, and other pertinent information shall be posted at the entrance to the landfill.

    b. Signs shall be posted stating that NO MSW, hazardous waste or liquid waste can be received in the C&D unit.

    c. Traffic signs or markers shall be provided as necessary to promote orderly traffic patterns to and from the discharge area and to maintain safe operating conditions.

19. Dust control measures shall be implemented when necessary.

20. Barrels and drums shall not be disposed unless they are empty and perforated sufficiently to ensure that no liquid or hazardous waste is contained therein.

21. Asbestos waste shall be managed in accordance with 40 CFR 61.

22. Open burning of solid waste is prohibited. Fires shall be reported to the Solid Waste Section by phone within 24 hours of an incident and written notification shall be submitted within 14 working days addressing the events at the site and future actions to be taken in the future to avoid and or mitigate potential fire hazards.

23. The concentration of explosive gases generated by the C&D unit shall not exceed:

    a. 25% of the lower explosive limit for gases in site structures excluding gas control or recovery system components if necessary; and
    b. 100% of the lower explosive limit for gases at the property boundary. Installation of permanent gas monitoring wells may be required in the future to demonstrate compliance.

24. 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. If C&D recycling is to take place in the future, an amendment to the operations plan shall be submitted to the Solid Waste Section for review and approval.

Erosion and Sedimentation Control

25. Adequate sedimentation and erosion control measures shall be practiced to prevent silt from leaving the site of the C&D unit.

26. Adequate sedimentation and erosion control measures shall be practiced to prevent excessive on-site erosion.

27. 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 unit development or as addressed in the approved Sedimentation and Erosion Control permit.

Drainage Control and Water Protection Requirements

28. Surface water shall be diverted from the operational area.

29. Surface water shall not be impounded over or in waste.

30. A separation distance of at least four feet shall be maintained between the C&D waste and the groundwater table as addressed in the site suitability application, hydrologic assessment section.

31. Solid waste (C&D) shall not be disposed in standing water.

32. 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 and or for land disturbing activities greater than one acre.

33. Ground water quality for the C&D landfill unit is subject to the classification and remedial action provisions referenced in Rule .0503 (2)(d) of 15A NCAC 13B.

34. 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 C&D unit 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 as required by 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;

    c. Surface water, ground water, and explosive gas monitoring.

Monitoring and Reporting Requirements

35. The following are requirements relating to groundwater monitoring for the C&D landfill facility:

    a. Groundwater and surface water monitoring locations shall conform to the specifications outlined in "North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities" and in the North Carolina Well Construction Standards, 15A NCAC 2C .0108.

    b. A total of eight locations as illustrated in the approved plan shall be established to monitor this facility.

    c. A licensed geologist shall be present to supervise the installation of groundwater monitoring wells. The exact locations, screened intervals, and nesting of the wells shall be established after consultation with the SWS Hydrogeologist at the time of well installation.

    d. All well construction records and soil boring logs for new wells shall be submitted to the Solid Waste Section Hydrogeologist for review within 30 days of completion.

    e. Prior to the acceptance of any waste at the facility, a baseline sampling event shall be completed.

    f. The owner or operator shall sample the monitoring wells semi-annually or as otherwise directed in writing by the SWS Hydrogeologist.

    g. A readily accessible, unobstructed, path shall be maintained so that monitoring wells may be accessed using four-wheel drive vehicles.

    h. Each monitoring well shall be surveyed and hydraulic conductivity and effective porosity values shall be established for each screened interval in order to develop groundwater flow characteristics.

    i. 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 shall be submitted to DWM in a timely manner.

36. The owner or operator shall maintain a record of the amount of solid waste received at the C&D unit, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.

37. On or before August 1 annually, the Permittee shall report the tons of waste received and disposed in the C&D landfill unit to the Solid Waste Section and to all counties from which waste was accepted on forms prescribed by the Section. The following is information regarding the annual reports:

    a. The reporting period shall be for the previous year beginning July 1 and ending June 30.

    b. The annual report shall 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 copy of the completed report shall be forwarded to each county manager for each county from which waste was received at the facility.

    d. A copy of the report and documentation that a copy of the report has been forwarded to all counties from which waste was accepted must be sent to the regional Waste Management Specialist by the date due on the prescribed annual report form.

38. All records required to be maintained by the owner or operator by regulation or permit shall be maintained on-site and made available to the SWS upon request.

- End of Permit Conditions -