



Facility Permit No: 50-02  
Jackson County  
PERMIT FOR CLOSURE  
April 11, 2006  
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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**

**MUNICIPAL SOLID WASTE FACILITY  
PERMIT NO. 50-02**

Jackson County  
is hereby issued

**A  
PERMIT FOR CLOSURE**

For the following MSWLF unit

Located on Old Dillsboro road, Jackson 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.

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

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**ATTACHMENT 1  
LIST OF APPROVED DOCUMENTS**

**Part A: Closure Plan(s)**

*Transition Plan for the Jackson County MSWLF.* Prepared by Mc Gill Associates, PA. Prepared for Jackson County. April 1995

*Site and Construction Transition Plan Modification Application for Jackson County Landfill.* Prepared by McGill Associates, Asheville. Prepared for Jackson County October 1997 with additional information December 1997

*Partial Closure CQA Report.* Prepared by McGill Associates, Asheville. Prepared for Jackson County . April 3, 1998

*Closure of Construction and Demolition Debris Disposal Area Jackson County MSWLF.* Prepared by Altamont Environmental, Inc, Asheville. Prepared for Jackson County. February 10, 2003

**Part B: Post-Closure Use Plan(s)**

**Part C: Methane Gas Remediation Plan(s)**

*Landfill Gas Extraction Workplan Phase I.* Prepared by Altamont Environmental; Inc, Asheville, NC. Prepared for Jackson County. January 23, 2004

*Landfill Gas Extraction Workplan Phase II.* Prepared by Altamont Environmental; Inc, Asheville, NC. Prepared for Jackson County. December 30, 2004

**Part D: Ground Water Corrective Action Plan(s)**

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**POST-CLOSURE CONDITIONS  
MUNICIPAL SOLID WASTE LANDFILL (MSWLF)**

**GENERAL CONDITIONS:**

- (1) The owner or operator shall conduct post-closure care for 30 years following the closure certification date of December, 2002, in accordance with the Section .1600 rules, except as provided under Rule .1627(d)(2).
- (2) The owner or operator shall maintain the integrity and effectiveness of any cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the cap system.
- (3) The owner or operator shall maintain and operate the leachate collection system in accordance with the requirements in Rules .1624 and .1626. The Division may allow the owner or operator to stop managing leachate if the owner or operator demonstrates that leachate no longer poses a threat to human health and the environment.
- (4) The owner or operator shall ensure that the MSWLF units do not violate any applicable requirements developed under a State Implementation Plan (SIP) approved or promulgated by the U.S. EPA Administrator pursuant to Section 110 of the Clean Air Act, as amended.

**RECORDATION**

- (5) Rule .1627(c)(8) requires that, following closure of the MSWLF unit, the owner or operator record a notation on the deed to the landfill facility property, or some other instrument that is normally examined during title search, and notify the Division that the notation has been recorded and a copy has been placed in the operating record. The notation on the deed shall in perpetuity notify any potential purchaser of the property that:
  - (a) The land has been used as a landfill facility; and
  - (b) Its use is restricted under the closure plan approved by the Division.

The attached certified copy of the Permit for Closure shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified copy affixed with the Register's seal and the date, book, and page number of the recording shall be returned to the Solid Waste Section.

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**FINANCIAL ASSURANCE:**

- (6) The owner or operator must provide continuous coverage for post-closure care in accordance with .1628(e) until released from financial assurance requirements for post-closure care by demonstrating compliance with Rule .1627(d)(3).
- (7) The owner or operator shall annually adjust the post-closure cost estimate for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s). For owners and operators using the local government financial test, the post-closure cost estimate shall be updated for inflation within 30 days after the close of the local government's fiscal year and before submission of updated information to the Division. The Division may allow additional time to submit this updated information.
  - (a) The owner or operator shall increase the post-closure care cost estimate and the amount of financial assurance provided under .1628(c)(2), if changes in the post-closure plan or MSWLF unit conditions increase the maximum costs of post-closure care.
  - (b) The owner or operator may reduce the post-closure cost estimate and the amount of financial assurance provided under 1628(c)(2), if the cost estimate exceeds the maximum costs of post-closure care remaining over the post-closure care period. Prior to any reduction of the post-closure cost estimate by the owner or operator, a written justification for the reduction shall be submitted to the Division. No reduction of the post-closure cost estimate shall be allowed without Division approval. The reduction justification and the Division approval shall be placed in the MSWLF's operating record.

**POST-CLOSURE USES:**

- (8) Post-closure use of the property shall not disturb the integrity of the cap system, base liner system, or any other components of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in Section .1600. The Division may approve any other disturbance if the owner or operator demonstrates that disturbance of the cap system, base liner system, or other component of the containment system, including any removal of waste, will not increase the potential threat to human health or the environment.
- (9) The owner/operator shall submit a description of the planned uses of the property during post-closure period. Post-closure uses approved by the Division, are described in the List of Approved Documents, Attachment 1, Part B. **b**

**COMPLETION OF THE POST-CLOSURE CARE PERIOD:**

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- (10) Following completion of the post-closure care period for each MSWLF unit, the owner or operator shall notify the Division that a certification, signed by a registered professional engineer, verifying that post-closure care has been completed in accordance with the post-closure plan, has been placed in the operating record.

**ONGOING SOLID WASTE MANAGEMENT ACTIVITIES:**

- (11) Continuing solid waste management activities within the MSWLF facility shall be conducted in accordance with all pertinent requirements and permit conditions and shall not violate any post-closure conditions. Any new solid waste activities must be approved by the Solid Waste Section and included as part of the comprehensive Facility Plan.

**METHANE GAS MONITORING AND REMEDIATION CONDITIONS:**

- (12) The owner or operator shall maintain and operate the gas monitoring system to ensure that:
  - (a) The concentration of methane gas generated by the facility does not exceed 25 percent of the lower explosive limit for methane in facility structures (excluding gas control or recovery system components); and
  - (b) The concentration of methane gas does not exceed the lower explosive limit for methane at the facility property boundary.
- (13) If methane gas levels exceeding these limits are detected, the owner or operator must take all steps required in Rule .1626(4)(c). Methane gas remediation plans approved by the Division are described in the List of Approved Documents, Attachment 1, Part C.

**GROUND WATER MONITORING AND CORRECTIVE ACTION CONDITIONS:**

- (14) In accordance with .1630(c), once established at a MSWLF unit, ground-water monitoring shall be conducted throughout the post-closure care period for the MSWLF unit in accordance with the requirements of Rules .1631 through .1637. Monitoring of the surface water shall be in accordance with the requirements of Rule .0602.
- (15) Detection monitoring is required at MSWLF units at all ground-water monitoring wells that are part of the detection monitoring system as established in the approved monitoring plan. At a minimum, the detection monitoring program shall include monitoring for the constituents listed in Appendix I of 40 CFR Part 258.
- (16) The monitoring frequency for all Appendix I detection monitoring constituents shall be at least semiannual during the post-closure period. At least one sample from each well (background and down gradient) shall be collected and analyzed during semiannual sampling events.

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- (17) If the owner or operator determines that there is a statistically significant increase over background for one or more of the constituents listed in Appendix I or whenever a violation of the North Carolina ground-water quality standards (15A NCAC 2L, .0202) has occurred at any monitoring well, the owner or operator:
- (a) Shall within 14 days of this finding, report to the Division and place a notice in the operating record indicating which constituents have shown statistically significant changes from background levels.
  - (b) Shall within 90 days of this finding, establish an assessment monitoring program in accordance with Rule .1634 except as provided for in Rule .1633(c)(3).
  - (c) Shall within 90 days of finding that any of the constituents listed in Appendix II have been detected at a statistically significant level exceeding the ground-water protection standards, initiate an assessment of corrective action measures in accordance with Rule .1635.
  - (d) Shall select based on the results of the corrective measures assessment, a remedy that, at a minimum, meets the standards listed in Rule.1636(b). Within 14 days of selecting a remedy, the permittee shall submit an application to modify the permit describing the selected remedy to the Division for evaluation and approval. The application shall be subject to the processing requirements set forth in Rule .1604 (c) of this Section. The application shall include the demonstrations necessary to comply with the financial assurance requirements set forth in Paragraph (d) of Rule .1628. Ground water corrective action plans approved by the Division are described in the List of Approved Documents, Attachment 1, Part D
  - (e) Shall, based on the approved schedule for initiation and completion of remedial activities, establish and implement a corrective action ground-water monitoring program, implement the approved corrective action remedy; and take any interim measures necessary to ensure the protection of human health and the environment in accordance with Rule .1637.
- (18) The ground-water monitoring program shall include consistent sampling and analysis procedures in accordance with Rule .1632 that are designed to ensure monitoring results that provide an accurate representation of ground-water quality at the background and down gradient wells.

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**CERTIFIED COPY OF THE PERMIT FOR CLOSURE**

I do hereby certify that the attached PERMIT FOR CLOSURE is an exact and true copy of the Permit for Closure for the Jackson County Municipal Solid Waste Landfill, Permit No 50-02

\_\_\_\_\_  
James C. Coffey, Regional Engineer  
Asheville Regional Office  
Solid Waste Section

\_\_\_\_\_ County, North Carolina

I, \_\_\_\_\_, Notary Public for said County and State, do hereby certify that \_\_\_\_\_, of the 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 \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

OFFICIAL SEAL

\_\_\_\_\_  
NOTARY PUBLIC

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My commission expires \_\_\_\_\_, 20\_\_

**Note to Register of Deeds:** The certified copy of the Permit for Closure shall be recorded by the Register of Deeds and indexed in the grantor index under the name of the land owner. The certified copy affixed with the Register's seal and the date, book, and page number of the recording shall be returned to Edward F. Mussler, Division of Waste Management, Solid Waste Section, 1646 Mail Service Center, Raleigh, NC 27699