



## 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

July 20, 2005

Mr. Robert E. Jones, Applicant  
175 High School Road  
Vanceboro, North Carolina 28586

Ref: R.J. Bushhogging, Inc. Land Clearing & Inert Debris Landfill Permit Application dated 20 June 2005 and received 12 July 2005 in the Raleigh Central Office.

Mr. Jones:

The Solid Waste Section has conducted a preliminary review of the Land Clearing & Inert Debris(LCID) Landfill Permit Application, submitted by Michael L. Rice, P.E. with Robert M. Chiles on your behalf. In accordance with the North Carolina Solid Waste Management Rules, the following items and comments must be addressed to continue the review process. Please have your consultant address the following items. The rules for LCID landfills are provided reference and the information required is in italics:

### **.0564 SITING CRITERIA FOR LAND CLEARING AND INERT DEBRIS (LCID) LANDFILLS:**

(1) Facilities or practices, shall not be located in the 100-year floodplain.

*Please provide a clear copy of the FEMA FIRM map for the area of Craven County that the site is located indicating the 100 yr floodplain and provide the elevation of the 100 yr floodplain if one exists on the site drawings.*

(2) Facilities or practices shall not cause or contribute to the taking of any endangered or threatened species of plants, fish, or wildlife.

*Although the Natural Heritage Program responded to your consultants request concerning rare/endangered species at the proposed site; was a survey conducted prior to timbering the property and does timber exist today in areas proposed for landfill development?*

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(3) Facilities or practices shall not result in the destruction or adverse modification of the critical habitat of endangered or threatened species as identified in 50 CFR Part 17 which is hereby incorporated by reference including any subsequent amendments and editions. This material is available for inspection at the Department of Environment, Health, and Natural Resources, Division of Solid Waste Management, 401 Oberlin Road, Raleigh, North Carolina 27605 where copies can be obtained at no cost.

*See comment for .0564(2).*

(4) Facilities or practices shall not damage or destroy an archaeological or historical site.

*Provide a response letter from the State Historic Preservation Office in response to the letter submitted by your consultant dated 28 April 2005.*

(5) Facilities or practices shall not cause an adverse impact on a state park, recreation or scenic area, or any other lands included in the state nature and historic preserve.

*See comment for .0564(4).*

(6) Facilities shall not be located in any wetland as defined in the Clean Water Act, Section 404(b).

*Do wetlands or wetland features exist at the site. Determination by a certified wetlands consultant may be necessary and/or a letter of determination from the Corps of Engineers that addresses wetlands at the site or lack thereof.*

(7) It must be shown that adequate suitable soils are available for cover, either from on or off site.

*No indication is made about cover soils available at the site. Will cover soil be obtained from borrow areas at the site? If cover soil is to come from off-site, indicate the sources and quantities needed to operate and close the proposed site. See .0565(3)(k).*

(8) Land Clearing and Inert Debris landfills shall meet the following surface and ground water requirements:

(a) Facilities or practices shall not cause a discharge of pollutants into waters of the state that is in violation of the requirements of the National Pollutant Discharge Elimination System (NPDES), under Section 402 of the Clean Water Act, as amended.

*Consistent with .0565(3)(l) and (m), a erosion and sedimentation control approval letter is required from the Div. Of Land Resources, Land Quality Section (LQS). Contact the LQS in the Wilmington Regional Office for information necessary to receive a LQS E&S approval. Also, the Division of Water Quality may need to be contacted concerning sites that disturb more than five acres to comply with NPDES general permits.*

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(b) Facilities or practices shall not cause a discharge of dredged materials or fill material into waters of the state that is in violation of the requirements under Section 404 of the Clean Water Act, as amended.

*This needs to be addressed.*

(c) Facilities or practices shall not cause non-point source pollution of waters of the state that violates assigned water quality standards.

*This needs to be addressed.*

(d) Waste in landfills with a disposal area greater than two acres shall be placed a minimum of four feet above the seasonal high water table, except where an alternative separation is approved by the Division.

*On-site verification of seasonal high ground water is required. The information provided is acceptable to address regional ground water conditions and can be used to substantiated conclusions drawn from on-site investigation. If excavation of soils within the footprint of the proposed landfill is contemplated, then the investigation will need to show that the waste disposed of will be at least four feet above the seasonal high water table. Also, the area occupied by the existing landfill needs to be addressed with respect to ground elevation and separation to seasonal high groundwater and the land surface elevation that waste has been placed upon shall be verified. See comment number five in the letter dated 1 July 2004 addressing the LCID 2 acre notification.*

*Verification can be accomplished by use of test pits and/or hand augers to determine site specific ground water conditions/elevation or have a soil scientist evaluate soil chroma to determine past seasonal high ground water elevations and to estimate present seasonal elevations. Locate auger holes or test pit locations on plan sheet 1 of 4.*

(e) Waste in landfills with a disposal area less than two acres shall be placed above the seasonal high water table.

*Not applicable to sites larger than 2 acres.*

(9) The facility shall meet the following minimum buffer requirements:

(a) 50 feet from the waste boundary to all surface waters of the state as defined in G.S. 143-212.

*Appears to be addressed as long as no wetlands exist within the footprint of the proposed landfill.*

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(b) 100 feet from the disposal area to property lines, residential dwellings, commercial or public buildings, and wells.

*This condition is not being met due to waste being within 100' of the property line on the east and west sides of the existing 2 ac. landfill per sheet 1 of 4 of the plans submitted. Waste will need to be moved to establish the 100' buffer or additional property will need to be added to the deed tract of property to provide the necessary buffer. If this condition is not satisfied, compliance action by the Solid Waste Section Compliance Branch may be required.*

(c) Buffer requirements may be adjusted as necessary to insure adequate protection of public health and the environment.

*Buffers shall be 100'. If necessary, buffers can increased as necessary to insure public health and safety.*

(10) The facility shall meet all requirements of any applicable zoning ordinance.

*This rules has been addressed by the letter from Craven County dated 2 May 2005.*

History Note: Statutory Authority G.S. 130A-294; Eff. January 4, 1993.

#### **.0565 APPLICATION REQUIREMENTS FOR LAND CLEARING/INERT DEBRIS (LCID) LANDFILLS**

Five sets of plans, maps, and reports shall be required with each application. The seal of a professional engineer is required when submitting plans for a Land Clearing and Inert Debris (LCID) landfill.

(1) The following information is required in order to review and approve the siting of a Land Clearing and Inert Debris (LCID) landfill:

(a) An approval letter from the unit of local government having zoning authority over the area where the facility is to be located stating that the site meets all of the requirements of the local zoning ordinance, or that the site is not zoned.

*Addressed consistent with .0564(10) on this page.*

(b) Location on a county road map.

*Addressed consistent with plan sheet 2 of 4.*

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(c) Information showing that the bottom elevation of the waste shall be four feet above the seasonal high water table. Seasonal high water table elevations shall be obtained from on site test borings, test pits, or from other geological or water table investigations, studies, or reports from the immediate area of the proposed facility.

*See .0564(8)(d) on page 3.*

(d) A written report indicating that the facility shall comply with all the requirements set forth under Rule .0564 of this Section.

*Revise as necessary, consistent with the responses provided for this review letter.*

(e) A copy of the deed or other legal description of the site that would be sufficient as a description in an instrument of conveyance, showing property owner's name.

*Provided in the permit documents in Section II - Location Information "A".*

(f) Any other information pertinent to the suitability of the proposed facility.

*Revise as necessary, consistent with the responses provided for this review letter.*

(2) The following shall be provided on a map or aerial photograph with a scale of at least one inch equals four hundred feet showing the area within one-fourth mile of the site:

(a) Entire property or portion thereof owned or leased by the person providing the disposal site.

*Addressed consistent with plan sheet 4 of 4. Revise as necessary, consistent with the responses provided for this review letter.*

(b) Location of all homes, buildings, public or private utilities, roads, wells, watercourses, water or other impoundments, and any other applicable features or details.

*Addressed consistent with plan sheet 4 of 4. Revise as necessary, consistent with the responses provided for this review letter.*

(c) 100-year flood plain boundaries, if any.

*See .0564(1) on page 1.*

(d) Wetland boundaries, if any.

*See .0564(6) on page 2.*

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(e) Historical or archaeological sites, if any.

*See .0564(4) on page 2.*

(f) Park, scenic, or recreation area boundaries, if any.

*See .0564(5) on page 2.*

(3) Development and design plans and details, at a scale of at least one inch equals one hundred feet with one inch equals forty feet preferred, and specifications containing the following information shall be submitted with the application for a proposed Land Clearing and Inert Debris (LCID) landfill:

(a) Property or site boundary, fully dimensioned with bearings and distances, tied to North Carolina grid coordinates where reasonably feasible.

*Plan sheet 1 of 4 should be revised to incorporate metes and bounds from the deed for the property.*

(b) Easements and right-of-ways.

*Revise plan sheets as necessary if either exist at the site.*

(c) Existing pertinent on site and adjacent structures such as houses, buildings, wells, roads and bridges, water and sewer utilities, septic fields, and storm drainage features.

*Addressed consistent with plan sheet 4 of 4. Revise as necessary, consistent with the responses provided for this review letter.*

(d) Proposed and existing roads, points of ingress and egress along with access control such as gates, fences, or berms.

*Plan sheet 1 of 4 should be revised to incorporate gates to limit uncontrolled access to the property.*

(e) Buffer and set back lines along with the buffered boundary or feature.

*Addressed consistent with plan sheet 1 of 4, 2 of 4 and 3 of 4. Revise as necessary, consistent with the responses provided for this review letter.*

(f) Springs, streams, creeks, rivers, ponds, and other waters and impoundments.

*Revise plan sheets as necessary if any exist at the site.*

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(g) Wetlands, if any.

*See .0564(6) on page 2.*

(h) Boundary of the proposed waste area.

*Addressed consistent with plan sheet 2 of 4 and 3 of 4. Revise as necessary, consistent with the responses provided for this review letter.*

(i) Existing topography with contours at a minimum of five foot intervals. Where necessary, a smaller interval shall be utilized to clarify existing topographic conditions.

*Contour lines aren't indicated and/or don't appear over the proposed 3.6 acre expansion area of the site (sheet 1 of 4). Where contour elevations shown on sheet 1 of 4, in the current disposal area, verified before disposal of LCID waste materials or are the contours assumed. See comment related to .0564(8)(d) on page 3.*

(j) Proposed excavation, grading, and final contours at a minimum of five foot intervals. Where necessary, a smaller interval shall be utilized to clarify proposed grading. Excavation, grading, and fill material side slopes shall not exceed three to one (3:1).

*Addressed consistent with plan sheet 2 of 4, "TYPICAL SLOPE DETAIL". Revise as necessary, consistent with the responses provided for this review letter.*

(k) Where on site borrow for operational and final cover is proposed, indicate the borrow excavation and grading plan with contours at a minimum of five foot intervals. Where necessary, a smaller interval shall be utilized to clarify proposed grading.

*See .0564(7) on page 2.*

(l) Proposed surface water control features and devices such as slope drains, storm water pipes, inlets, culverts, and channels.

*Address and revise as necessary, consistent with the responses provided for this review letter.*

(m) Information showing that the project meets the requirements of 15A NCAC 4, Sedimentation Control Rules.

*Provide a copy of the Erosion and Sedimentation Control approval letter from the Land Quality Section with the responses to this letter.*

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(n) Location of test borings or test pits, if used to determine the seasonal high water table elevation, shall be shown on the plans.

*See .0564(8)(d) on page 3.*

(o) A minimum of two cross-sections, one each along each major axis, per operational area showing:

- (i) Original elevations.
- (ii) Proposed excavation.
- (iii) Proposed final elevations.

*Addressed consistent with plan sheet 2 of 4 and 3 of 4 and assuming no excavation within the footprint of the landfill consistent with the "TYPICAL SLOPE DETAIL" on plan sheet 2 of 4. Revise as necessary, consistent with the responses provided for this review letter. The estimated life of the proposed expansion is two years. If this estimate is inaccurate and the site will have capacity beyond five years, then the site plans will need to be revised when the permit is renewed consistent with .0201(e).*

(4) An operational plan addressing the requirements under Rule .0566 of this Section and containing the following information shall be submitted with the application for a proposed Land Clearing and Inert Debris (LCID) landfill:

- (a) Name, address, and phone number of individual responsible for operation and maintenance of the facility.
- (b) Projected use of the land after completion.
- (c) Description of systematic usage of disposal area, operation, orderly development and closure of the landfill.
- (d) Type, source, and quantity of waste to be accepted.
- (e) An emergency contingency plan, including fire fighting procedures.

*Provided in the permit documents in Section IV - Operation Plan "A".*

History Note: Statutory Authority G.S. 130A-294; Eff. January 4, 1993.

**The following section is provided for reference.**

**.0566 OPERATIONAL REQ. FOR LAND CLEARING/INERT DEBRIS (LCID) LANDFILLS**

Land Clearing and Inert Debris (LCID) landfills shall meet the following operational requirements:

- (1) Operational plans shall be approved and followed as specified for the facility.
- (2) The facility shall only accept those solid wastes which it is permitted to receive.

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- (3) Solid waste shall be restricted to the smallest area feasible and compacted as densely as practical into cells.
  - (4) Adequate soil cover shall be applied monthly, or when the active area reaches one acre in size, whichever occurs first.
  - (5) 120 calendar days after completion of any phase of disposal operations, or upon revocation of a permit, the disposal area shall be covered with a minimum of one foot of suitable soil cover sloped to allow surface water runoff in a controlled manner. The Division may require further action in order to correct any condition which is or may become injurious to the public health, or a nuisance to the community.
  - (6) Adequate erosion control measures, structures, or devices shall be utilized to prevent silt from leaving the site and to prevent excessive on site erosion.
  - (7) Provisions for a ground cover sufficient to restrain erosion must be accomplished within 30 working days or 120 calendar days upon completion of any phase of landfill development.
  - (8) The facility shall be adequately secured by means of gates, chains, berms, fences, etc. to prevent unauthorized access except when an operator is on duty. An attendant shall be on duty at all times while the landfill is open for public use to assure compliance with operational requirements and to prevent acceptance of unauthorized wastes.
  - (9) Access roads shall be of all-weather construction and properly maintained.
  - (10) Surface water shall be diverted from the working face and shall not be impounded over waste.
  - (11) Solid waste shall not be disposed of in water.
  - (12) Open burning of solid waste is prohibited.
  - (13) The concentration of explosive gases generated by the facility shall not exceed:
    - (a) Twenty-five percent of the lower explosive limit for the gases in facility structures.
    - (b) The lower explosive limit for the gases at the property boundary.
- Note: If the existing, operational disposal area or future disposal areas are below grade, then methane monitoring wells will need to be proposed and installed to address this operational condition.***
- (14) Leachate shall be properly managed on site through the use of current best management practices.
  - (15) Should the Division deem it necessary, ground water or surface water monitoring, or both, may be required as provided for under Rules .0601 and .0602 of this Subchapter.
  - (16) A sign shall be posted at the facility entrance showing the contact name and number in case of an emergency and the permit number. The permit number requirement is not applicable for facilities not requiring an individual permit.

History Note: Statutory Authority G.S. 130A-294; Eff. January 4, 1993.

Four original application packages are being returned with this letter to your consultant so that the necessary changes can be incorporated into the documents and re-submitted to the Solid Waste Section. One copy of the original application will be retained for reference.

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The comments and items requested are intended to expedite the review of the application. The Solid Waste Section reserves the right to request any additional information during and following the technical review process. If you have any questions or require any assistance, please do not hesitate to contact me at (919) 508-8495. When re-submitting the revised applications, please address and send to the following address:

DIVISION OF WASTE MANAGEMENT  
SOLID WASTE SECTION  
1646 MAIL SERVICE CENTER  
RALEIGH, NORTH CAROLINA 27699-1646  
ATTN: ED MUSSLER, P.E.

Thank you



Jim Barber  
Permitting Branch Supervisor  
Solid Waste Section  
Division of Waste Management

copy: Ed Mussler  
Mark Poindexter  
John Crowder  
Ray Williams  
Raleigh Central File: Craven County, 25-XX  
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