

Permit No.	Date	Document ID No.
06-03	October 24, 2008	6095



RICHARDSON SMITH GARDNER & ASSOCIATES

Engineering and Geological Services

October 23, 2008

Mr. Allen Gaither
Environmental Engineer
NC DENR - Division of Waste Management
2090 U.S. Highway 70
Swannanoa, NC 28778

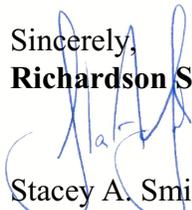
**Re: Transition Application
Avery County Landfill
(Solid Waste Permit No. 06-03)
Ingalls, North Carolina**

Dear Mr. Gaither:

On behalf of the Avery County, Richardson Smith Gardner & Associates (RSGA) would like to submit a revised **Figure 2 (Final Grading Plan)** included in the Transition Application previously submitted on June 26, 2008. The revised figure includes a vertical expansion to include an additional 22,000 cubic yards of capacity in comparison to the original plan prepared by Municipal Engineering¹. All final grades are proposed at 3H:1V slopes and are consistent with the transition plan. The Avery County C&D Landfill has been inactive since December 2007 and the Permit to Operate (**copy attached**) is due for renewal. In light of the ongoing response to the waste boundary exceedance², we are requesting review as soon as practical by the Division.

We appreciate your attention in this matter and should you have any questions or require clarification, please contact me at (919) 828-0577 ext. 127 or by email below.

Sincerely,
Richardson Smith Gardner & Associates, Inc.

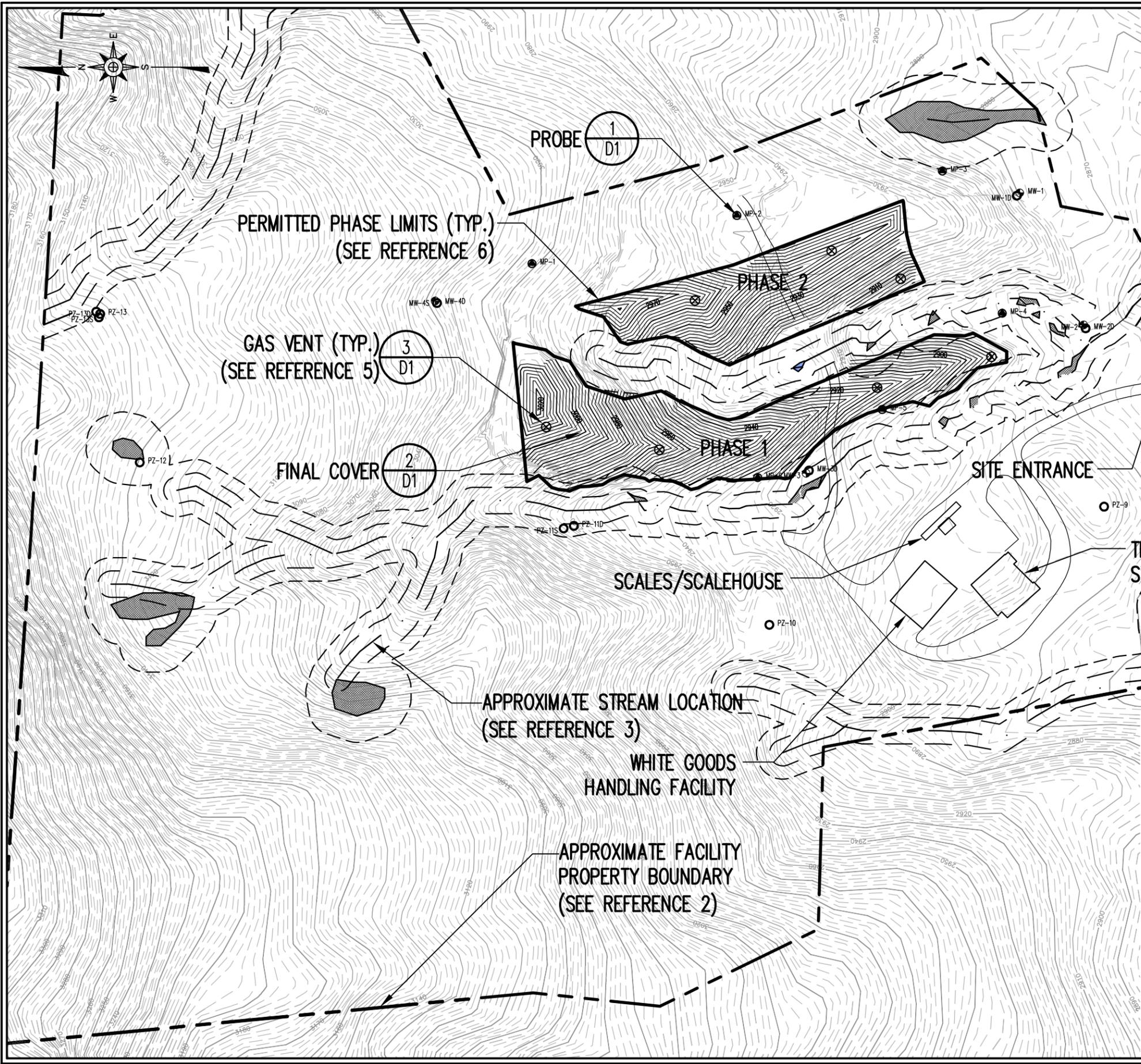

Stacey A. Smith, P.E.
Project Manager
stacey@rsgengineers.com

Att.

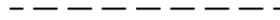
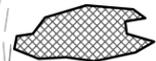
Cc: Buddy Norris, Avery County Solid Waste
Ed Mussler, NCDENR
Bill Wagner, NCDENR
File

H:\Projects\Avery County (NC)\C&D Transition\letter10-23-08.wpd

¹ Erosion Control Site Plan by Municipal Engineering Services Company, P.A. dated May 22, 1996.
² Notice of Waste Boundary Exceedance to NC DENR dated April 8, 2008 prepared by County of Avery.



LEGEND

-  EXISTING 10' CONTOUR (SEE REFERENCE 1)
-  EXISTING 2' CONTOUR
-  PROPERTY LINE (SEE REFERENCE 2)
-  APPROX. STREAM LOCATION (SEE REFERENCES 3, 4)
-  50-FOOT STREAM AND WETLAND BUFFER
-  25-FOOT TROUT STREAM BUFFER
-  WETLANDS (SEE REFERENCES 3, 4)
-  MONITORING WELL
-  PIEZOMETER
-  METHANE GAS MONITORING PROBE
-  GAS VENT

REFERENCES

1. OVERALL SITE TOPOGRAPHY FROM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, DATA GENERATED FROM LIDAR DATED MARCH 2005, TOPO IN AREAS IN AND SURROUNDING PHASES 1 AND 2 FROM FIELD SURVEY DATED 9/07, BY SURVEYING SOLUTIONS, P.C.
2. SITE PROPERTY LINE AND MONITORING WELLS FROM FIELD SURVEYS DATED 9/07 AND 1/14/08, BY SURVEYING SOLUTIONS, P.C.
3. STREAM AND WETLAND LOCATIONS IN NORTHERN SECTOR OF SITE OBTAINED FROM GPS FIELD SURVEY DATED 4/07, BY CAROLINA ECOSYSTEMS, INC.
4. STREAMS AND WETLANDS NEAR PHASE 1 AND 2 FROM FIELD SURVEY DATED 2/18/08 BY SURVEYING SOLUTIONS, P.C.
5. METHANE GAS MONITORING PROBE LOCATIONS AND GAS VENT LOCATIONS FROM DRAWING "PROPOSED METHANE PLAN" BY MUNICIPAL ENGINEERING SERVICES CO., PA, DATED JULY 12, 1996.



RICHARDSON SMITH GARDNER & ASSOCIATES
www.rsgengineers.com
14 N. Boylan Ave. Raleigh, N.C. 27603
ph: 919-826-0577 fax: 919-826-3899

FIGURE NO.	2	FILE NAME	AVERY-B0040A
SCALE:	AS SHOWN	PROJECT NO.	AVERY 07-1
CHECKED BY:		DATE:	Oct. 2008
DRAWN BY:	J.A.L.		

TITLE:
**AVERY COUNTY
 SOLID WASTE DEPARTMENT
 AVERY COUNTY C&D LANDFILL
 FINAL GRADING PLAN**

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director

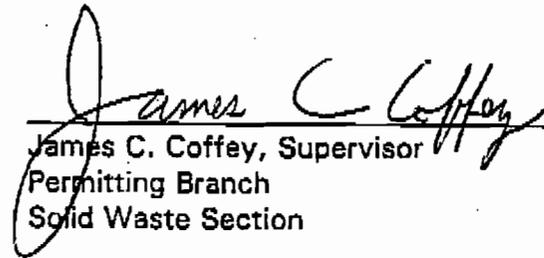


SOLID WASTE PERMIT

Avery County

is hereby issued Permit Number 06-03 to construct and operate a
Construction and Demolition Landfill
and
Land Clearing and Inert Debris Landfill

located on Brushy Mountain Road, Avery County, 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.


James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Waste Management

James B. Hunt, Jr., Governor
Jonathan B. Howes, Secretary
William L. Meyer, Director



BK | PG
2880360

CERTIFIED COPY OF SOLID WASTE PERMIT

I do hereby certify that the attached PERMIT is an exact and true copy of
Permit Number 06-03.

FILED # _____
96 NOV -8 AM 9:46

TAMELA T. BAKER
REGISTER OF DEEDS
AVERY COUNTY, N.C.

AVERY CO. N. C. } OFFICE OF REGISTER OF DEEDS

Filed for registration at 9:46 o'clock 9 M.
on the 8th day of Nov. 1996
and registered in this office in book 288
at page 360, this the 8th
day of November 1996
Reg. of Deeds Tamela T. Baker
by Rhonda Hallifield Assistant

James C Coffey
James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

North Carolina
Wake County

I, Sue S. Hodge, a Notary Public for said County and State, do hereby certify that James C. Coffey, Supervisor, Permitting Branch, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 25 day of October, 1996.



Sue S. Hodge
Notary Public

My commission expires October 21, 2000.

P.O. Box 27687,
Raleigh, North Carolina 27611-7687
Voice 919-733-4996



FAX 919-715-3605
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State of North Carolina
Department of Environment,
Health and Natural Resources
Division of Waste Management

2880361



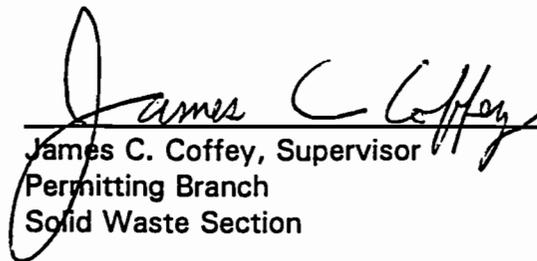
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James C. Coffey, Supervisor
Permitting Branch
Solid Waste Section

ATTACHMENT 1

APPROVED DOCUMENTS

1. Construction/Demolition Landfill & Land Clearing and Inert Debris Landfill, Permit Application, dated October, 1995.
2. Water Quality Monitoring Plan for Avery County Construction and Demolition Landfill, Ingalls, North Carolina, dated July, 1996.

ATTACHMENT 2**CONDITIONS OF PERMIT:****GENERAL CONDITIONS**

1. This permit shall not be effective unless the certified copy is filed in the Register of Deeds Office, in the grantor index under the name of the owner of the land in the county or counties in which the land is located. After recordation, the certified copy shall be returned to the Solid Waste Section and shall have indicated on it the page and book number, date of recordation, and the Register's seal.
2. When this property is sold, leased, conveyed or transferred, 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.
3. This permit will be subject to review every five years as per 15A NCAC 13B .0201(c), according to the issuance date of this permit. Modifications to the facility may be required in accordance with rules in effect at the time of review.
4. The approved plan is described by Attachment 1, "Approved Documents". Where discrepancies may 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.
5. This permit is not transferable.

CONSTRUCTION AND OPERATION

6. This permit is for development of the Avery County Construction and Demolition and Land Clearing and Inert Debris Landfill in accordance with the approved plan.
7. The LCID solid waste management facility is permitted to receive the following waste types:
 1. Land-clearing debris as defined in G.S. 130A-290, specifically, solid waste which is generated solely from land-clearing activities, such as stumps, trees, etc.;
 2. Inert debris defined as solid waste which consists solely of material that is virtually inert, such as brick, concrete, rock and clean soil; and
 3. Asphalt in accordance with G.S. 130-294(m).
 4. Yard trash as defined in G.S. 130A-290.
8. The C&D solid waste management facility is permitted to receive the following

waste types:

1. Construction and demolition debris defined as solid waste resulting solely from construction, remodeling, repair or demolition operations on pavement, buildings, or other structures.
 2. Yard trash as defined in G.S. 130A-290, shall not be disposed in the C&D landfill area. However, yard trash, along with land-clearing debris, may be accepted for processing.
9. All sedimentation/erosion control activities will be conducted in accordance with the Sedimentation Control Act codified at 15 NCAC 4. Native vegetation shall be established on the completed landfill.
10. The following requirements shall be met prior to operation of this facility:
1. Site preparation shall be in accordance with the construction plan, and the conditions specified herein.
 2. Site inspection shall be made by a representative of the Division of Waste Management (DWM).
 3. Signs shall be posted at the facility in accordance with the Access and Safety Requirements under Operation Condition No. 15 listed below.
 4. Groundwater monitoring wells (see Monitoring and Reporting Requirements) shall be installed. A baseline sampling for water quality shall be performed. Well construction records and sample analysis results shall be submitted to the Section Hydrogeologist for review and approval prior to operation of the facility as a C&D landfill.
 5. Recordation procedures for the permit shall be implemented as described above in General Conditions Numbers 1 and 2.
11. Operation of the LCID landfill units shall conform to the operating procedures described in the approved plan, in accordance with Section .0564 of the Solid Waste Management Rules.
12. Operation of the C&D landfill units shall conform to the operating procedures described in the approved plan, in accordance with Section .0505 of the Solid Waste Management Rules, and in accordance with the following requirements:
13. Waste Acceptance and Disposal
1. The facility shall accept only those solid wastes which it is permitted to receive.
 2. No municipal solid waste, hazardous waste, or liquid waste shall be accepted for disposal.
 3. The permittee shall implement a program at the facility for detecting and preventing the disposal of MSW, hazardous or liquid wastes. The program

shall include, at a minimum:

1. Random inspections of incoming loads or other comparable procedures;
2. Records of any inspections;
3. Training of personnel to recognize hazardous and liquid wastes;
4. Development of a contingency plan to properly manage any identified hazardous, liquid or MSW wastes; The plan must address identification, removal, storage, and final disposition of waste.

14. C&D Cover Material Requirements

1. Operational soil cover of at least six inches shall be placed at least once per week.
2. Areas which will not have additional waste placed on them 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.
3. After final termination of disposal operations at the site 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.

15. Access and Safety

1. The facility shall be adequately secured by means of gates, chains, berms, fences, or other security measures approved by the DSWM to prevent unauthorized entry.
2. An attendant shall be on duty at the site at all times while it is open for public use to ensure compliance with operational requirements.
3. The access road to the site shall be of all-weather construction and maintained in good condition.
4. Dust control measures shall be implemented when necessary.
5. Signs providing information on dumping procedures, the hours of operation, the permit number, and other pertinent information shall be posted at the site entrance.
6. Signs shall be posted stating that no MSW, hazardous waste or liquid waste can be received.
7. Traffic signs or markers shall be provided as necessary to promote an orderly traffic pattern to and from the discharge area and to maintain efficient operating conditions.
8. 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.
9. Barrels and drums shall not be disposed of unless they are empty and perforated sufficiently to ensure that no liquid or hazardous waste is contained therein, except fiber drums containing asbestos.
10. Open burning of solid waste is prohibited.

11. The concentration of explosive gases generated at the facility shall not exceed:
 1. twenty-five percent of the limit for gases in site structures (excluding gas control or recovery system components; and
 2. the lower explosive limit for gases at the facility boundary.

16. **Erosion and Sedimentation Control**
 1. Adequate sedimentation and erosion control measures shall be practiced to prevent silt from leaving the site.
 2. Adequate sedimentation and erosion control measures shall be practiced to prevent excessive on-site erosion.
 3. 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 development.

17. **Drainage Control and Water Protection Requirements**
 1. Surface water shall be diverted from the operational area.
 2. Surface water shall not be impounded over or in waste.
 3. A separation distance of at least four feet shall be maintained between waste and the ground-water table.
 4. Solid waste shall not be disposed of in water.
 5. 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.

18. All pertinent landfill operating personnel will receive training and supervision necessary to properly operate this landfill.

19. Ground water quality at this facility is subject to the classification and remedial action provisions referenced in Rule .0503 (2)(d) of 15A NCAC 13B.

20. 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 facility in accordance with all rules in effect at that time. At a minimum, the plan shall address the following:
 1. Design of a final cover system;
 2. Construction and maintenance/operation of the final cover system and erosion control structures;
 3. Surface water, ground water, and explosive gas monitoring.

MONITORING AND REPORTING REQUIREMENTS

21. Ground-water monitoring wells and monitoring requirements for the C&D landfill units:
1. Monitoring well design and construction shall conform to the specifications outlined in Appendix A of the approved documents, "North Carolina Water Quality Monitoring Guidance Document for Solid Waste Facilities".
 2. Five locations as illustrated in the approved plan (MW-1, MW-2, and MW-3, and two surface water monitoring locations) shall be established to monitor the facility. Before acceptance of waste in Phase Two, a fourth monitoring well (MW-4) shall be installed and added to the detection monitoring system.
 3. A geologist shall be in the field to supervise well installation. 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.
 4. Prior to acceptance of any waste at the facility, boring logs and monitoring well completion records shall be submitted to the DWM.
 5. Prior to the acceptance of any waste at the facility, initial well samples shall be submitted to a laboratory for analysis.
 6. Sampling equipment, procedures, and parameters shall conform to specifications outlined in the above-referenced guidance document or the current guidelines established by DWM at the time of sampling.
 7. In order to determine ground-water flow directions and rates, each monitoring well shall be surveyed, and hydraulic conductivity values and effective porosity values shall be established for the screened intervals for each monitoring well.
 8. The permittee shall sample the monitoring wells semi-annually or as directed by the SWS Hydrogeologist.
 9. A readily accessible unobstructed path shall be initially cleared and maintained so that four-wheel drive vehicles may access the monitoring wells at all times.
22. The permittee 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 DSWM in a timely manner.
23. The permittee shall maintain a record of the amount of solid waste received at the facility, compiled on a monthly basis. Scales shall be used to weigh the amount of waste received.
24. On or before 01 August 97, and each year thereafter, the permittee shall report the amount of waste received (in tons) at this facility and disposed of in the landfill to the Solid Waste Section and to all counties from which waste was accepted, on forms prescribed by the Section. This report shall include the following information:

1. The reporting period shall be for the previous year, beginning 01 July and ending on 30 June;
 2. The amount of waste received and landfilled in tons, compiled on a monthly basis, according to Condition 23 described above; and
 3. Documentation that a copy of the report has been forwarded to all counties from which waste was accepted.
25. All records shall be maintained on-site and made available to the SWS upon request.