



Facility Permit No.: 41-17  
Part 2 - Permit to Operate  
A-1 Sandrock C&D Landfill  
April 17, 2009  
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**NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**

Division of Waste Management

Beverly Eaves Perdue  
Governor

Dexter R. Matthews  
Director

Dee Freeman  
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. 41-17**

A-1 SANDROCK, INC.  
is hereby issued a

**PERMIT TO OPERATE**

**A-1 SANDROCK CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL  
PHASE 1, Cell A**

located at 2091 Bishop Road (State Road 1116) between the intersections of Bishop Road with Groomtown Road and Viewmont Road, south of the City of Greensboro, in the Sumner Township, Guilford 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.

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

1646 Mail Service Center, Raleigh, North Carolina 27699-1646  
Phone 919-508-8400 \ FAX 919-733-4810 \ Internet <http://wastenotnc.org>  
An Equal Opportunity / Affirmative Action Employer – Printed on Dual Purpose Paper

## ATTACHMENT 1

### PART I: PERMITTING HISTORY

Permit Type	Date Issued
Original Permit to Construct (PTC) – Phases 1	February 7, 2004
PTC Modification - Phases 1	June 1, 2006
Permit to Operate (PTO) – Phase 1, Cell A	April 17, 2009

### PART II: LIST OF DOCUMENTS FOR APPROVED PLAN

1. *Site Application Report - Part 1 of 2, Hydrogeologic Investigation and Conceptual Plan, Construction and Demolition Debris Landfill (South Side)*. Prepared for: A-1 Sandrock, Inc. Prepared by: David Garrett, P.G., P.E. June 2002. Revised 20 August, 25 November 2002, and 6 November 2003 (Including a Drawing set Sheets 1-10).
2. *Site Application Report - Part 2 of 2, Facility Plan, Engineering and Design Hydrogeologic Report, A-1 Sandrock CDLF (South Facility), Guilford County, North Carolina*. Prepared for: A-1 Sandrock, Inc. Prepared by: David Garrett, P.G., P.E. September 2002. Revised 22 January, 12 February, and 30 March 2003 (Including a Drawing set Sheets 1-21).
3. Franchise Agreement between A-1 Sandrock, Inc. and Guilford County, North Carolina. November 6, 2003. Amended March 17, 2009. Including Articles of Incorporation, disposal fee limits, property description, and Articles of Amendments. DIN 7155.
4. Letter dated March 20, 2003 approval of the revised Sediment and Erosion Control Plan dated 22 January 2003 from the Division of Land Resources, Land Quality Section. DIN 7272.
5. Letter and drawing set describing the delay in construction and a revision to the phasing and progression of construction for the C&D landfill. Prepared for: A-1 Sandrock, Inc. by David Garrett, P.G., P.E. January 24, 2006.
6. *Permit to Operate Application, A-1 Sandrock C&D Landfill Phase 1, A-1 Sandrock CDLF (South Mine Facility), Guilford County, North Carolina*. Prepared for: A-1 Sandrock, Inc. Prepared by: David Garrett, P.G., P.E. March 2007. Resubmitted March 2009. DIN 7076.
7. *Facility and Operations Plan Update, A-1 Sandrock CDLF (Phase 1) and Processing Facility, Guilford County, North Carolina*. Prepared for: A-1 Sandrock, Inc. Prepared by: David Garrett, P.G., P.E. February 2009 (Including a Drawing set Sheets 1-10). DIN 7039. Revised on April 2, 2009. DIN 7223.

**PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY**

<b>Guilford County, N.C. Register of Deeds</b>					
Book	Page	Grantee	Grantor	Acres	Parcel No.
4378	198	Ronald E. Petty and Wife Betty B. Petty	Greensboro Cerebral Palsy Association, Inc.	69.833	12-03-0185-0- 0739-W-007 and 12-03-0185-0- 0754-00-003
Plat 149	93	Survey plat			
Total Site Acreage: 69.833 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 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 Operate shall expire November 6, 2013. The Permit to Operate must 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. This permit shall not be effective until the certified copy of this permit which references legal descriptions for all land within the solid waste management facility boundary is recorded in the Register of Deeds office and indexed in the grantor index under the name of the owner of the land in the county or counties in which the land is located. The certified copy of the permit affixed with the Register's seal and the date, book, and page number of recording must be returned to the Section within 30 calendar days of issuance of this permit. If the Section does not receive the certified copy of the recorded permit within 30 calendar days of issuance of the permit, then and in that event, the permit is suspended and of no effect until the date the Section receives the certified copy of the recorded permit.
4. When this property is sold, leased, conveyed, or transferred in any manner, 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 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.
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, "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 shall 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 a General or Individual National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit. 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**

1. Modification to the Permit to Construct, issued June 1, 2006, will be required prior to construction of Phase 1, Cell B and Cell C. The application will be subject to the statutes and rules in effect on that date and will be subject to a permitting fee.

*- End of Section -*

### ATTACHMENT 3 CONDITIONS OF OPERATING PERMIT

#### **PART I: OPERATING CONDITIONS**

1. The Permit to Operate shall expire November 6, 2013 in accordance with the franchise agreement for this facility issued by Guilford County, dated November 6, 2003 and amended March 17, 2009 (Attachment 1, Part II, Document No. 3, DIN 7155). Pursuant to 15A NCAC 13B .0201(e), no later than May 6, 2013, the owner or operator 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 and franchise agreement.
2. This permit approves the operation of Phase 1- Cell A (2.54 acres), as well as the onsite environmental management protection facilities as described in the approved plans. 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. The C&D landfill units are permitted to receive the following waste types:
  - a. "Construction or demolition debris" as defined in G.S. 130A-290 (a)(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.
  - b. "Inert debris" as defined in G.S. 130A-290 (a)(14) means solid waste that consists solely of material such as concrete, brick, concrete block, uncontaminated soil, rock, and gravel.
  - c. "Land-clearing debris" as defined in G.S. 130A-290 (a)(15) means solid waste that is generated solely from land-clearing activities, such as stumps and tree trunks.
  - d. "Asphalt" in accordance with G.S. 130-294(m).
4. Regulated-asbestos containing material as defined in 40 CFR 61 must be managed in accordance with 40 CFR 61. Disposal of asbestos waste must be in accordance with 15 NCAC 13B .0542 (c).
5. Those wastes listed in 15A NCAC 13B .0542 (e) must not be accepted for disposal including, but not limited to, hazardous waste, municipal solid waste, liquid waste, commercial or industrial wastes, and yard trash.
6. Wastewater treatment sludge is not approved for disposal. Wastewater treatment sludge may be accepted, with the approval of the Division, for utilization as a soil conditioner

and incorporated into or applied onto the vegetative growth layer. The wastewater treatment sludge will neither be applied at greater than agronomic rates nor to a depth greater than six inches.

7. This facility is permitted to receive solid waste generated by counties within a fifty (50) mile radius of the site as described in the Guilford County franchise agreement. Counties in the 50-mile radius include Alamance, Cabarrus, Caswell, Chatham, Davidson, Davie, Durham, Forsyth, Guilford, Lee, Montgomery, Moore, Orange, Person, Randolph, Rockingham, Rowan, Stanly, Stokes, Surry, and Yadkin.
8. The permittee must not knowingly dispose of C&D waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of C&D waste from disposing of that type or form of C&D waste.
  - b. Requires generators or collectors of C&D waste to recycle that type or form of C&D waste.
9. The permittee must actively employ a training and screening program at the facility prepared in accordance with Section .0544(e) for detecting and preventing the disposal of excluded or unauthorized wastes. At a minimum, the program must include:
  - a. Random inspections of incoming loads or other comparable procedures;
  - b. Records of any inspections;
  - c. Training of personnel to recognize hazardous, liquid, and other excluded waste types.
  - d. Development of a contingency plan to properly manage any identified hazardous, liquid, MSW, or other excluded or unauthorized wastes. The plan must address identification, removal, storage, and final disposition of these wastes.
10. The facility operator must complete an approved operator training course in compliance with NCGS 130A-309.25.
  - a. A responsible individual certified in landfill operations must be on-site during all operating hours of the facility at all times while open for public use to ensure compliance with operational requirements.
  - b. All pertinent landfill-operating personnel must 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.
11. The following table lists the dimensions and details for the C&D landfill units, both existing and planned. Total gross capacity is defined as the volume measured from the bottom of waste through the top of final cover. The estimated service life of the landfill,

Phases 1-4, is approximately 20 years, as stated in Attachment 1, Part II, Document No. 2.

C&D Unit	Acres	Gross Capacity (cubic yards)	Status
Phase 1, Cell A	2.54	62,370	Cell construction completed
Phase 1, Cell B	3.18	192,470	Temporarily used for processing facility
Phase 1, Cell C	2.46	223,664	Cell under construction
Phase 2	7.82	608,193	Not developed
Phase 3	5.89	647,787	Not developed
Phase 4 (vertical expansion)	NA	505,536	Not developed
Total	21.9	2,240,000	

12. The facility is approved to accept up to 300 tons per day or 84,000 tons per year based on 5.5 working days per week and 52 weeks per year (280 working days per year) in accordance with the approved franchise granted by Guilford County dated March 17, 2009. Maximum variance shall be in accordance with G.S. 130A-294(b1)(1). A recycling process to reclaim at least ten percent (10%) of the amount of wastes received must be implemented at the facility, in accordance with the approved franchise.
13. The use of alternative daily cover requires approval, prior to implementation, by the Section. Requests for alternative daily cover approval must include a comprehensive use and demonstration for the effectiveness plan developed according to Section guidelines and consistent with the approved plan. Plans that are approved by the Section will be incorporated into, and made a part of, the approved documents found in Attachment 1.
14. Financial assurance must be continuously maintained for the duration of the facility in accordance with the Rule 15A NCAC 13B .0546 and 15A NCAC 13B .0547 (2). During the active life of the C&DLF, the owner and operator must annually adjust the cost estimates including closure and post-closure activities for inflation within 60 days prior to the anniversary date of the establishment of the financial instrument(s).
15. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4.

**PART II: MONITORING AND REPORTING REQUIREMENTS**

16. Monitoring and reporting requirements at A-1 Sandrock C&D Landfill must be in compliance with Rule 15A NCAC 13B .0544 and the approved monitoring plan (Attachment 1, Part II, Document No. 7). Groundwater, surface water, and landfill gas monitoring locations must be established as identified in the approved plans – Facility Monitoring Plans and Water Quality Monitoring Plan Amendment- Sampling and Analysis Plan and Sheet No. 10 - MP-1 (Attachment 1, Part II, Document No. 7).
17. The four independent samples which comprise the initial baseline sampling event must be collected from each groundwater monitoring well and the report must be submitted to the Section within six months after issuance of the Permit to Operate.
18. A field log book which details all development, sampling, repair, and all other pertinent activities associated with each monitoring well and all sampling activities associated with each surface water sampling location shall be kept as part of the permanent facility record.
19. A total of five (5) ground water wells (MW-1 [background well], MW-2, MW-3, MW-4, and MW-5), four (4) surface water locations (SW-1, SW-2, SW-3, and SW-4), and seven (7) gas probes (LG-1 through LG-7) comprise the approved Facility Monitoring Plan Amendment (Attachment 1, Part II, Document No. 7). Installation of permanent gas monitoring wells may be required in the future to demonstrate compliance.
20. The permittee must sample the monitoring wells and surface water semi-annually and sample methane gas quarterly or as otherwise directed in writing by the Section Hydrogeologist.
21. A readily accessible and unobstructed path must be maintained so that monitoring locations (wells and probes) may be accessed using four-wheel drive vehicles.
22. A licensed geologist must be present to supervise the installation of groundwater monitoring wells and gas probes. The exact locations, screened intervals, and nesting of the wells must be established after consultation with the Section Hydrogeologist at the time of well installation.
23. All well and gas probe construction records and soil boring logs for new wells and probes must be submitted to the Section Hydrogeologist for a review within 30 days of completion. Each monitoring well and gas probe must be surveyed. For monitoring on-site groundwater quality, hydraulic conductivity and effective porosity values must be established for each screened interval at each monitoring well in order to develop groundwater flow characteristics. The permittee must provide a plan sheet-sized, scaled topographical map, showing the location and identification of new, existing, and abandoned wells and piezometers after installation of groundwater monitoring wells.

24. The permittee must obtain approval from the Section for the design, installation, and development and decommission of any monitoring well or piezometers. Any modification to an approved plan must be reviewed and approved by the Section. Documentation must be placed in the operating record and provided to the Section.
25. Within thirty (30) days of the completed permanent abandonment of any ground-water monitoring well, the well abandonment record (GW-30 form) and any additional information included in the abandonment record) must be submitted to the Section. The well abandonment records must be submitted to the Section in accordance with 15A NCAC 2C .0114(b) and be certified by a Licensed Geologist.
26. The permittee must maintain a record of all monitoring events and analytical data in accordance with the Facility Monitoring Plans (Attachment 1, Part II, Document No. 7) and Rule .0503 (2)(d) of 15A NCAC 13B. Reports of the analytical data for each surface, and groundwater quality monitoring sampling event must be submitted to the Division within 120 days of the respective sampling event. Analytical data must be submitted in a manner prescribed by the Section.
27. On or before August 1 annually, the permittee must submit an annual facility report to the Section, on forms prescribed by the Section.
  - a. The reporting period shall be for the previous year beginning July 1 and ending June 30.
  - b. The annual report must 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 measurement of volume utilized in the C&D cells must be performed during the second quarter of the calendar year. The date and volumes, in cubic yards, must be included in the report.
  - d. The amount of C&D waste, in tons from scale records, disposed in landfill cells since April 17, 2009, through the date of the annual volume survey must be included in the report.
  - e. The tons of C&D waste recycled, recovered or diverted from disposal including a description of how and where the material was ultimately managed, as applicable, must be included in the report.

- f. The completed report must be forwarded to the Regional Environmental Senior Specialist for the facility by the date due on the prescribed annual facility report form.
  - g. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Waste Management Specialist by the date due on the prescribed annual facility report form.
28. Copies of this permit, the approved plans (Attachment 1, Part II, Document No. 7), and all records required to be maintained in the operating record by the permittee must be maintained at the facility and made available to the Section upon request during normal business hours.
29. The permittee must maintain records of
- a. The amount of all accepted solid waste materials as (i) C&D wastes, (ii) alternative cover material and used as alternate daily cover, and (iii) the recyclable material,
  - b. Daily records of waste received, and
  - c. Origins of the loads.

Scales must be used to weigh the amount of waste received. The daily records are to be summarized into a monthly report for use in the required annual reports.

### **PART III: CLOSURE AND POST-CLOSURE**

30. Closure and post-closure activities must be conducted in accordance with the approved plans and 15A NCAC 13B .0543. A closure and post-closure plan must be submitted for approval at least ninety (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 must address the following:
- a. Design of a final cover system in accordance with 15 NCAC 13B .0543(c), or 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; and
  - c. Surface water, ground water, and explosive gas monitoring.

31. The modification of the approved closure plan to construct an alternative cap system is allowed by Rule .0543 of 15A NCAC 13B, but the modified closure plan must be submitted for approval at least 90 days prior to closure or partial closure of any landfill unit.

**PART IV: MISCELLANEOUS TREATMENT AND PROCESSING UNIT SPECIFIC CONDITIONS**

**CONSTRUCTION AND LAND-CLEARING DEBRIS SORTING AND RECYCLING OPERATION DEMONSTRATION PROJECT**

32. Operation of the Construction Debris and Land-Clean Debris (LCID) Sorting and Recycling Demonstration Project within the footprints of future Phase 1, Cell B is approved for six (6) months, and must be in accordance with the approved proposal, General Facility Operation Plan & Processing Facility Operation Plan (Attachment 1, Part II, Document No. 7).
33. Only the acceptable wastes including construction debris, selected cleaning and unpainted demolition debris (including concrete, brick, rock, and asphalt) and LCID listed in the Processing Facility Operation Plan (Attachment 1, Part II, Document No. 7) are approved for recycling.

34. The maximum processed material storage volume that can be allowed at the processing area at any time are listed below:

Processed Material	Maximum Volume (cubic Yard)
Aggregate (beneficial fill)	2,000
Boiler Fuel	4,000
Mulch	4,000

However, the maximum volume of combustible materials (raw and processed) to be stockpiled at the processing area shall be limited to 6,000 cubic yards. A minimum of 25-foot distance between the stockpiles must be established and maintained at any time for access. Stockpiles of finished material must be (i) removed from the landfill property quarterly, or (ii) be wetted and turned quarterly or when dictated by the temperature which shall not exceed 120 degrees Fahrenheit.

35. All recyclables must be sorted and stored in covered containers or covered stockpiles by the end of each operating day. All non-recyclables in the sorting area must be properly moved and disposed in the C&DLF unit by the end of each operating day.
36. A minimum 50-foot buffer must be maintained between the waste sorting/processing area and the working face of the C&DLF disposal unit.

37. Commingling interim stage processed material from the construction debris and LCID waste stream is prohibited. However, the selected LCID wastes may be allowed to combine with similar C&D wastes in the post-processing stage into boiler fuel, mulch, or aggregate.
38. No grinding of wastes shall be take place in the rain.
39. Control measures must be utilized to minimize and eliminate visible dust emissions and blowing litter. Fugitive dust emissions are prohibited. Windblown materials must be collected by the end of each operating day, and no windblown material may be allowed to leave the facility boundary.
40. At the end of six (6) months, the permittee must submit a report on the operation of the demonstration, to include suggested or necessary changes. The Section will extend the demonstration, approve the operation, or terminate approval. If the demonstration is approved, the Section will issue an authorization letter, and the amended operations plan for the project will be fully enforceable and considered a part of the approved plans.
41. Documentation of delivery of all recycled and recovered material to valid end-users, processors, or recyclers must be maintained in the facility operating record.

*- End of Permit Conditions -*