



North Carolina Department of Environment and Natural Resources
Division of Waste Management

Pat McCrory
Governor

Linda M. Culpepper
Director

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Secretary

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

SOLID WASTE MANAGEMENT FACILITY
Permit No. 41-12

CITY OF GREENSBORO
(LANDOWNER and OPERATOR)

is hereby issued a

PERMIT TO CONSTRUCT
Not Applicable

PERMIT TO OPERATE
4112-MSWLF-1997 City of Greensboro – Phases III, Cells 1, 2, and 3

PERMIT FOR CLOSURE
Not Applicable

located at 2503 White Street, Greensboro, 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 legal description of the site is identified on the deed recorded for this property listed in Attachment 1 of this permit.

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

ATTACHMENT 1
GENERAL PERMIT CONDITIONS INFORMATION

Part I General Facility

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A North Carolina Administrative Code (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 construct must be implemented in accordance with Attachment 2 of this permit. 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. The permit to operate for the City of Greensboro (White Street Landfill) Phase III Municipal Solid Waste Landfill (MSWLF) issued June 15, 2011, was recorded in the Guilford County Register of Deeds on July 22, 2011, in Deed Book R 7257, Pages 1919-1932.
4. When this property is sold, leased, conveyed, or transferred in any manner, the deed or other instrument of transfer must contain in the deed 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 solid waste management facility and a reference by book and page to the recordation of the permit.
5. By receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.
6. Operation of this solid waste management facility shall be in accordance with the North Carolina 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. Failure to comply may result in compliance action or permit revocation.
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 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.

PERMIT TO OPERATE

Permit	Status	Issuance	Review	Expiration
4112-MSWLF-1997	Active	June 11, 2015	Non Applicable	April 14, 2020

PROPERTIES APPROVED FOR THE SOLID WASTE MANAGEMENT FACILITIES

Guilford County, NC Register of Deeds				
Book	Page	Grantor	Grantee	Acres
3525	1800	First Union National Bank	City of Greensboro	102.17
2416	0764	Ophelia Gladys K. Jackson	City of Greensboro	14.69
3963	0850	James C. Sproull IV and wife Cynthia S. Sproull, et. al.	City of Greensboro	58.20
4620	1479	Duke Energy Corporation	City of Greensboro	1.16
Total Acres				176.22

The area permitted for municipal solid waste disposal is approximately 52 acres as described in the documents for the approved plan.

Part II Municipal Solid Waste Landfill Unit(s)

Permitting History

Permit Type	Date Issued	DIN
Permit to Construct (PTC) – Cell 1	March 17, 1997	
Permit to Operate (PTO) – Cell 1	December 9, 1997	
PTO Amendment	May 15, 1998	
PTC Amendment – Alternate liner, additional property, and Cells 2 and 3	October 6, 2000	
PTO Amendment – Cells 1 and 2	June 14, 2001	
PTO Amendment – Cells 1, 2, and 3	April 14, 2005	
PTO Amendment – Cells 1, 2, and 3	June 15, 2011	13407
PTO Amendment – Cells 1,2, and 3	June 11, 2015	24424

(DIN = Document ID Number)

List of Documents for the Approved Plan

1. *The Expansion of the White Street Sanitary Landfill, Greensboro, North Carolina, Site Study*, prepared by HDR Engineering.
2. *The Phase III Expansion of the White Street Sanitary Landfill, Greensboro, North Carolina, Construction Permit Application*, dated November 1995, as revised, prepared by HDR Engineering, Inc.
3. Drawings entitled *Construction Permit Application Plans for Phase III Expansion, White Street Landfill*, as revised, prepared by HDR Engineering, Inc.
4. *The Phase III Expansion of the White Street Sanitary Landfill, Greensboro, North Carolina, Construction Permit Application*, dated November 1995, as revised, prepared by HDR Engineering, Inc.
5. Drawings entitled *Construction Permit Application Plans for Phase III Expansion, White Street Landfill*, as revised, prepared by HDR Engineering, Inc.
6. *Certification Report for the White Street Landfill, Phase III Cell 1 Expansion*, dated November 1977, as revised, prepared by HDR Engineering, Inc.
7. *Certification Report for the White Street Landfill, Phase III Cell 1 Expansion*, dated February 1998, as revised, prepared by HDR Engineering, Inc.
8. *Permit Modification for Phase III of the White Street Municipal Solid Waste Landfill*, dated February 2000, as revised, prepared by HDR Engineering, Inc.
9. Certification Report, *White Street Landfill, Phase III Cell 2 Expansion*, dated February 2001, prepared by HDR Engineering, Inc.

10. Certification Report, White Street Landfill, Phase III Cell 3 Expansion, dated December 2004 as revised through April 15, 2005, prepared by HDR Engineering, Inc.
11. Letter dated April 1, 2005 from the City of Greensboro, North Carolina Finance Director, Richard Lusk, demonstrating Financial Assurance for the Cell 3 Expansion of the MSW Phase III.
12. Letter dated April 1, 2005 from Greg Dingman, Solid Waste Director for the City of Greensboro including boring logs and Phase III detection monitoring results for the Phase III groundwater monitoring wells.
13. Letter dated April 7, 2005 from HDR Engineering, Inc. including original draft of the response to comments letter dated 24 March 2005, response letter from Landsaver Environmental dated 24 March 2005, response to additional comments from HDR dated 7 April 2005, response from Brady Surveying dated 6 April 2005 (two drawings), additional response from Landsaver Environmental dated 7 April 2005, and information regarding Cell 3 subgrade rock issue prepared by HDR (included in Appendix A of Certification Report, White Street Landfill, Phase III Cell 3 Expansion).
14. Letter dated April 13, 2005 from HDR Engineering, Inc. including final response to comments and results of field investigations done by Landsaver Environmental performed 12 April 2005 (included in Appendix A of *Certification Report, White Street Landfill, Phase III Cell 3 Expansion*).
15. *White Street Sanitary Landfill, Phase III, Permit 41-12, Permit Amendment*. Prepared by City of Greensboro. Submitted January 14, 2010. Revised by HDR Engineering, Inc. of the Carolinas, Charlotte, NC. February 28, 2011. Revised through March 31, 2011. DIN 13531.
16. Letter dated April 5, 2011 from Dale Wyrick, PE, Director of Field Operations, City of Greensboro. Acknowledgement and approval of current operation as stated in the last revision of application for permit amendment. DIN 13406.
17. Letter dated October 1, 2013 to Gail Hay, PE, Technical and Planning Support Manager, City of Greensboro. Addresses removal of material from pre-regulatory landfill and screening for disposal at White Street Phase III MSW Landfill. DIN 19874.
18. *Permit Amendment, White Street Sanitary Landfill – Phase III*. Prepared by HDR Engineering, Inc. of the Carolinas. October 10, 2014. DIN 21984.
18. Letter dated February 2, 2015, from Dale Wyrick, PE, Director of Field Operations, City of Greensboro. Addresses modifications to permit amendment application in response to review of permit amendment application. DIN 23638.
19. Letter dated March 27, 2015, from Tom Carruthers, City Attorney, City of Greensboro. Lists local government approved conditions of use and acceptable materials for disposal at the White Street Landfill, Phase III for permit amendment. DIN 24421.

Part III Construction and Demolition Landfill Unit(s)

Not Applicable

Part IV Industrial Landfill Unit(s)

Not Applicable

Part V Land Clearing and Inert Debris Landfill Unit(s)

Not Applicable

Part VI Transfer Station/Treatment & Processing Unit(s)

Not Applicable

Part VII Miscellaneous Solid Waste Management

Not Applicable

- End of Section -

ATTACHMENT 2

CONDITIONS OF PERMIT TO CONSTRUCT

Not Applicable

-End of Section-

ATTACHMENT 3

CONDITIONS OF PERMIT TO OPERATE

Part I: General Facility

1. The facility must be adequately secured by means of gates, chains, berms, fences, or other security measures approved by the Section to prevent unauthorized entry.
2. Signs must be posted at the entrance to the facility that state that no hazardous waste or liquid waste can be received at the facility; and provide information on dumping procedures, the hours of operation, the permit number, contact name, telephone number, and other pertinent information. Traffic signs or markers must be provided as necessary to promote an orderly traffic pattern to and from the discharge area and to maintain efficient operating conditions.
3. Interior roadway must be of all-weather construction and maintained in good condition.
4. A responsible individual trained and certified in facility operations must be on-site at all times during all operating hours of the facility, in accordance with NCGS 130A-309.25. An attendant must be present to oversee the loading and unloading of waste.
5. Copies of this permit, the approved plans, and all records required to be maintained by the permittee must be maintained at the facility and made available to the Section upon request during normal business hours.
6. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act, NCGS 113A-50 et seq., and rules promulgated under 15A NCAC 4. The Section must be notified of any approved modifications to the sedimentation and erosion control plan.
7. Facility construction, operations or practices must not cause or result in a discharge of pollution, dredged material, and/or fill material into waters of the state in violation of the requirements under Sections 401 and 4040 or the Clean Water Act, as amended.
8. Fire lanes must be established and maintained at all times. The dimensions of the fire lanes must be coordinated with the Fire Marshall having jurisdiction over the site.
9. Open burning of solid waste is prohibited. Fires must be reported to the regional waste management specialist with 24 hours of the occurrence, followed by a written notification within 15 calendar days of the occurrence.
10. Financial assurance as required by state rules and statutes must be continuously maintained for the duration of the facility and updated and submitted annually to the Section by the anniversary date of the issuance of this permit.

Part II: Municipal Solid Waste Landfill Unit(s)

1. This permit to operate shall expire **April 14, 2020**. Pursuant to 15A NCAC 13B .0201(g), no later than **October 14, 2019**, the owner or operator must submit a request to the Section for permit review and must update pertinent facility in accordance with 15A NCAC 13B .1617(b).
2. This permit approves the operation of Cells 1, 2, and 3 of the landfill, as well as the onsite environmental management and protection facilities as described in the approved plans.
3. The edge of the waste footprint for all disposal units must be identified and maintained with permanent physical markers.
4. Fill operations must be contained within the approved elevation contours as shown on the approved application drawings.

Operating Conditions

5. The gross capacity of Phase III, Cells 1-5 is 5,352,000 cubic yards. Total gross capacity is defined as the volume measured from the bottom of waste through the top of the final cover. The total operating capacity for waste, daily, and intermediate cover is 5,058,000 cubic yards. The estimated remaining capacity as of May 3, 2014, was 1,624,100 cubic yards.
6. The facility is permitted to receive for disposal non-hazardous solid waste as defined in NCGS 130-290 (a)(35), except where prohibited by the NCGS Article 9 of Chapter 130A, and the rules adopted by the Commission for Health Services. The following, at a minimum, must not be accepted for disposal at the facility: hazardous waste, yard trash, liquid wastes, regulated medical waste, sharps not properly packaged, PCB waste as defined in 40 CFR 761, and wastes banned from disposal in North Carolina by NCGS 130A-309.10(f).
7. The facility is approved to receive solid waste generated within the City of Greensboro and Guilford County, consistent with the local government waste management plan and with local government approval:
 - a. The facility is approved to accept up to 100,000 tons per year of municipal solid waste (MSW).
 - b. The facility may receive ash from the City of Greensboro wastewater treatment plant. Historically this has averaged 3,000-4,000 tons per year.
 - c. The facility may receive MSW removed from a pre-regulatory landfill that is in the path of the Cone-Nealtown Connector if approved by the City of Greensboro City Council. (Attachment 1, Part II, Document 17 – DIN 19874). This amount has been estimated to be 31,000 tons.
 - d. The City of Greensboro has designated this facility as a backup for MSW disposal in the event of problems accessing the City's transfer station or other disposal options.

- The facility must notify the Regional Waste Management Specialist when this occurs.
- e. The Section must be notified of any changes to local government approval of conditions of use or acceptable material.
8. The facility is permitted to co-dispose of wastewater treatment sludge generated with the facility's approved service area, subject to the terms and procedures of the approved plan.
 9. The permittee must not knowingly dispose of any type or form of municipal solid waste that is generated within the boundaries of a unit of local government that by ordinance:
 - a. Prohibits generators or collectors of municipal solid waste from disposing of that type or form of municipal solid waste.
 - b. Requires generators or collectors of municipal solid waste to recycle that type or form of municipal solid waste.
 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 landfill units in accordance with NCGS 130A-309.25 and addressed by memorandum dated November 29, 2000.
 11. The permittee must actively employ a screening program that detects and prevents the disposal of hazardous, liquid, and other unauthorized wastes. At a minimum, the program must include:
 - a. Random inspections of incoming loads or other comparable procedures.
 - b. Records of all 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, or other excluded or unauthorized wastes. The plan must address identification, removal, storage and final disposition of these wastes.
 12. In accordance with NCGS 130A-295.6 this landfill may use alternative daily cover (ADC) that has been previously approved by another sanitary landfill in North Carolina. The Section maintains a list of approved ADC and its appropriate use, which may be referred to, but is not required to be, in determining ADC types and uses.
 13. The use of alternative daily cover that has not been approved for the facility or approved under NCGS 130A-295.6 must be demonstrated and approved by the Section. Requests for alternative daily cover approval must include a plan detailing the comprehensive use and a demonstration of the effectiveness of the alternative daily cover. The plan must be developed according to Section guidelines. Plans that are approved by the Section will be incorporated into, and made a part of, the approved documents listed in Attachment 1.
 - a. The use of Posi-Shell® as an ADC has been approved for this landfill.

14. The facility must maintain records for all solid waste materials accepted as alternative cover material and used as alternate daily cover. The records must include: the date of receipt, weight of material, general description of the material, identity of the generator and transporter, and county of origin. Such records must be made available to the Solid Waste Section upon request.
15. The use of leachate recirculation as a leachate management tool has been approved for this facility. Leachate recirculation may take place only in landfill areas equipped with a base liner that meets the design requirements of 15 NCAC 13B .1624(b)(1)(A)(i).
16. The leachate collection system must be cleaned and maintained in accordance with the specific requirements of the Operation Plan, 15A NCAC 13B .1626(12)(a), and NCGS 130A-295.6(h)(3). Remote camera inspection of leachate lines shall occur upon completion of construction and at least every five years. Cleaning of leachate collection lines found necessary for proper functioning and to address buildup of leachate on the liner shall occur. Documentation of the leachate line inspections, and cleaning and monitoring must be included in the operating records of the facility and provided to the Section upon request.
17. An updated closure and post-closure plan must be submitted to the Section 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 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 .1627, 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.

Monitoring and Reporting Requirements

18. Groundwater, surface water, and landfill gas monitoring must be conducted as specified in the approved plans. Any modification to the approved water quality monitoring, sampling, and analysis plans must be submitted to the Section Hydrogeologist for review and approved prior to implementation.
19. Ground water monitoring wells and surface water sampling locations must be sampled for Appendix I constituents at least semi-annually in accordance with 15A NCAC 13B .1633(b), the approved water quality monitoring plan, and the current policies and guidelines of the Section in effect at the time of sampling. Landfill gas monitoring must be conducted quarterly in accordance with 15A NCAC 13B .1626(4) unless otherwise specified by the Section.
20. Reports of the analytical data from surface water and groundwater monitoring sampling events must be submitted to the Section within 120 days of the sample collection date. Analytical laboratory data must be submitted in electronic portable document format (pdf) and in spreadsheet format in an Electronic Data Deliverable (EDD) template. All monitoring reports must contain:

- a. a potentiometric surface map for the current sampling event;
 - b. analytical laboratory reports and summary tables;
 - c. a completed Solid Waste Environment Monitoring Data Form, and
 - d. laboratory data submitted in accordance with EDD template.
29. Records of all groundwater, surface water, and leachate analytical data, and records of landfill gas monitoring events must be kept as part of the operating record.
 30. Untreated leachate must be sampled and analyzed at least semi-annually concurrently with the groundwater water and surface water sampling. The leachate must be analyzed for all Appendix I constituents, pH, specific conductance, BOD, COD, nitrates, sulfates, and phosphates. Test results must be submitted to the Section along with groundwater and surface water test results. In the event leachate is recirculated, additional leachate sampling may be required.
 31. A readily-accessible, unobstructed path must be maintained so that monitoring locations are accessible at all times using four-wheel drive vehicles.
 32. Documentation of well completion, development, repair, abandonment, and other pertinent activities associated with each groundwater and landfill gas monitoring well must be kept as part of the permanent facility operating record. The permittee must maintain a record of all groundwater, surface water, and landfill gas monitoring events and analytical results in the facility operating record.
 33. The permittee is responsible to employ properly trained personnel to conduct landfill gas monitoring and operate, inspect, and maintain the constructed landfill gas collection and control system (LFGCCs) and landfill gas to energy system (LFGTE) according to the permit conditions and written protocols for monitoring, inspection & maintenance stated in the approved plans.
 34. Landfill gas monitoring must be conducted at the facility including interior monitoring of on-site buildings in accordance with the approved plan, 15A NCAC 13B .1626 (4), and applicable air quality permits. The permittee must sample landfill gas quarterly unless otherwise required for corrective action or specified by the Section.
 35. The permittee must maintain records of all landfill gas monitoring events in the operating record in accordance with 15A NCAC 13B .1626 (10) (iii). Landfill gas monitoring reports must be added to the facility's operating record within seven days of the monitoring event, and must include a description of the monitoring method used, the sampling results of each well and on-site buildings in percent of the lower explosive limit (LEL), date of monitoring, weather conditions, calibration report, and signature of the sampling personnel.
 36. If landfill gas monitoring detects methane at greater than 25 percent of the LEL for methane in facility structures, or the concentration of methane exceeds the LEL of methane at the compliance boundary, the permittee must comply with the requirements of 15A NCAC 13B .1626 (4).
 37. The permittee must maintain the valid permit (s) from the North Carolina Division of Air

Quality and comply with any local, state or federal regulations including routinely reporting requirements to operate the existing LFGCCs and LFGTE.

38. All forms, reports, maps, plans, and data submitted to the Section must include an electronic (pdf) copy.

Record Keeping and Reporting

40. The permittee must maintain a record of the amount of solid waste received at the landfill unit, compiled on a monthly basis. Scales must be used to weigh the amount of waste received.
41. On or before August 1 annually, the Permittee must submit an annual facility report to the Solid Waste 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 facility 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 landfill 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 waste, in tons from scale records, disposed in landfill cells from December 9, 1997, through the date of the annual volume survey must be included in the report.
 - e. The completed report must be forwarded to the Regional Waste Management Specialist for the facility by the date due on the prescribed annual facility report form.
 - f. 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.

Part III: Construction and Demolition Debris Landfill Unit(s)

Not Applicable

Part IV: Industrial Landfill Unit(s)

Not Applicable

Part V: Land Clearing and Inert Debris Landfill Unit(s)

Not Applicable

Part VI: Transfer Station / Treatment and Processing Unit

Not Applicable

Part VII: Miscellaneous Solid Waste Management

Not Applicable

- End of Permit Conditions -