



Draft Facility Permit No. 42-04
Part 2 - Permit to Operate
Halifax County C&D Landfill
XXXX, 2011
Doc. ID 9968
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NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

Division of Waste Management

Beverly Eaves Perdue
Governor

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Director

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Secretary

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

DRAFT
CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL
Permit No. 42-04

Halifax County
is hereby issued a

PERMIT TO OPERATE

HALIFAX COUNTY CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL AREA 1
AND
POST-CLOSURE CARE REQUIREMENTS FOR THE CLOSED MSWLF

located on Liles Road (S.R. 1417), approximately 1.2 miles east of the intersection of S.R. 1417 and S.R. 1001 (Justice Branch Road), about 2 miles north of Aurelian Springs, near Littleton, in Halifax 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.

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

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ATTACHMENT 1

PART I: PERMITTING HISTORY

Permit Type	Date Issued	Document ID No.
Permit to Operate (PTO) MSWLF	July 28, 1981	9957
Permit Amendment, PTO for vertical expansion on top of Phases I, II, & III	October 25, 1991	9958
PTO C&DLF on top of MSW	September 25, 1998	9966
Permit Modification # 3, PTO, 1-year extension	December 30, 2002	9967
Permit Modification # 4, PTO	December 22, 2006	RCO 774
Permit Amendment, PTO in compliance with Rule .0547(4)	XXX, 2010	9968

1. From 1981 to 1997, the Halifax County Municipal Solid Waste Landfill (MSWLF) operated on this property as a permitted MSWLF under Permit No. 42-04, with a disposal area of approximately 24 acres. The MSWLF stopped receiving wastes in December 1997, and was closed in September 1998. The landfill was not constructed with a liner below the waste. From 1981 to 1997 the in-place waste volume of approximately 900,000 tons in the MSWLF is recorded.
2. In 1997, the transition plan for the MSWLF included a permit modification request to construct and operate a Construction and Demolition Debris Landfill (C&DLF) – Area 1 (formerly Phase 1) on top of the closed MSWLF. On September 25, 1998 the C&DLF on top of the closed MSWLF began receiving waste. The waste footprints of the C&DLF – Area 1 are approximately 6.5 acres, and the fill operation of the C&DLF is approved up to the elevation of 328 feet above mean sea level (AMSL).
3. From 2002 to 2003, through permit modifications, the C&DLF – Area 1 was approved to continued operations within the same waste footprints of 6.5 acres with increasing the final fill elevation to 346 AMSL.
4. In 2008, the Halifax County applied for a permit amendment in accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0547(4) and requested continued operations within the same waste footprints of 6.5 acres but increased the final fill elevation to 358 feet AMSL, which resulted in a total gross capacity of the C&DLF up to approximately 131,267 cubic yards.

PART II: LIST OF DOCUMENTS FOR APPROVED PLAN

C&D LANDFILL

1. Site and Construction Transition Plan modification application for the Halifax County Landfill, Permit # 42-04. Document titled "Permit Application Report – CDLF Vertical Expansion for Closed MSWLF Unit - Halifax County Landfill – Permit Number 42-04" dated 19 December 1997 and received 23 December 1997.
2. Site plans and operations plan dated 19 December 1997 and received 23 December 1997.
3. Certification letter dated 20 February 1998 and faxed to the Solid Waste Section on 26 February 1998 addressing closure of a 1 acre area of Phase 1 C&D Unit.
4. Certification report dated 24 September 1998 for cap closure CQA for the Halifax County MSW Unit.
5. Modification #3: Permit document dated 3 October 2002, received 3 October 2002 for the extension of C&D landfill operations for one year (until 1 January 2004) consistent with Sheet No. 2/Drawing No. S2.
6. Modification #4: Letter dated 23 December 2003, received 29 December 2003, for extended C&D unit operation over closed MSW landfill until 31 December 2008, consistent with attached Sheet No. 1/Drawing No. S1 showing existing plan view, Sheet No. 2/Drawing No. S2 showing proposed fill sequences 1 to 4, and Sheet No. 3/Drawing No. S3 showing proposed fill sequences 5 and 6.
7. *Corrective Action Plan, Halifax County Landfill, Aurelian Springs, North Carolina.* Prepared by Richardson Smith Gardner & Associates (RSG). June 2008, revised through May 2009. (Doc ID 8694).
8. *Permit Application Halifax County C&D Landfill (Permit 42-04) Area 1 Continued Operations, Halifax County, North Carolina.* Prepared by: RSG. June 2008, revised through January 2010 (Doc ID 12634).

Coal Ash Landfill (Monofill)

[Permit Issued Separately Under The Permit Number 4204-INDUS-1994]

PART III: PROPERTIES APPROVED FOR THE SOLID WASTE FACILITY

Halifax County NC Register of Deeds			
Book	Page	Property Owner	Acres*
1131	298	Halifax County	210.53
1501	548		
1501	551		
1523	77		
Plat Cabinet 4	Slide 72		
Plat Cabinet 5	Slide 197		
Map Book 10	Page 41		
Map Book 6	Page 83		
Total Site Acreage: 210.53 acres			

Note: * = The landfill facility occupies approximately 210.53 acres consisting Tract A (201.44 acres) and Tract B (9.09 acres). On Tract A, the closed MSW waste footprints for Area 1 are approximately 24 acres. The C&D (Area 1) waste footprints encompass approximately 6.5 acres which is overlain the closed MSW unit (Area 1).

PART IV: GENERAL PERMIT CONDITIONS

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 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 for Area 1 shall expire **XXXX, 2016**. 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 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 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 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 must 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 sedimentation and erosion control, and a General or Individual National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit, if applicable. 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. Construction of any C&D landfill future phases or cells requires written approval of the Section. Application for Permit to Construct must be prepared in accordance with applicable 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 for Area 1 shall **expire XXX, 2016**. Pursuant to 15A NCAC 13B .0201(g), **no later than XXX, 2015**, the permittee must submit to the Section:
 - a. A permit amendment application prepared in accordance with 15A NCAC 13B .0535 (b), and
 - b. A Corrective Action Evaluation Report to demonstrate the effectiveness of the implemented corrective action program in accordance with 15A NCAC 13B .0547(4)(c) and approved Corrective Action Plan (Attachment 1, Part II, Document No. 7).

2. This permit approves the continued operation of the C&DLF – Area 1 on top of the closed MSWLF, as well as the onsite environmental management protection facilities as described in the approved plans. Operation of any C&DLF future phases or cells requires written approval of the Section and must be constructed in accordance with applicable statutes and rules in effect at the time of review.

3. The following table lists the dimensions and details for the existing C&DLF – Area 1 on top of the closed MSWLF. Total gross capacity for the C&DLF unit is defined as the volume measured from the bottom of C&D waste (the top of the cover system of the MSWLF) through the top of final cover of the C&DLF. Fill operations must be contained within the approved elevation contours, with the maximum fill elevation up to the elevation of 358 feet AMSL and with 4 (horizontal) to 1 (vertical) side slopes as shown on Drawing No. S4/Sheet No. 5 and Drawing No. X1/Sheet No. 9. The estimated service life of the facility is through 2015, as stated in the approved plan, Table 1 (Attachment 1, Part II, Document No. 8, Doc ID 12634).

C&D Landfill on Top of Closed MSWLF	Acres (on top)	Gross Capacity (cubic yards)	Estimate Service Life (year)	Status
Area 1 (filled as of May 1, 2008)	6.5	67,399	-	Filled
Area 1	-	63,868	4.3	To be filled
Total	6.5	131,267	4.3	-

4. The permittee must maintain permanent markers that accurately identify the edge of the approved waste disposal boundary. The boundaries of both the C&DLF unit and the closed MSWLF unit must be marked.
5. The C&DLF is permitted to receive the following waste types:
 - a. “Construction or demolition debris” as defined in NCGS 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 NCGS 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 NCGS 130A-290 (a)(15) means solid waste that is generated solely from land-clearing activities, limited to stumps, trees, limbs, brush, grass, and other vegetative material.
 - d. “Asphalt” in accordance with NCGS 130-294(m).
 - e. Solid waste that is generated by mobile or modular home manufacturers and asphalt shingle manufacturers in Halifax County. The waste must be source separated at the manufacturing site and must exclude municipal solid waste, hazardous wastes, and other wastes prohibited from disposal at this landfill. It must be transported to the landfill in a shipment or container that consists solely of the separated waste to be disposed.
6. 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).
7. “Yard waste” as defined in G.S. 130A-290(45) shall not be disposed in the C&DLF unit, but may be accepted and managed in the Wood Waste Processing Area within the Halifax County Landfill Facility.
8. 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.
9. Wastewater treatment sludge is not approved for disposal. Wastewater treatment sludge may be accepted, with the approval of the Section, for utilization as a soil conditioner and incorporated into or applied onto the vegetative growth layer. The wastewater treatment sludge must not be applied at greater than agronomic rates nor to a depth greater than six inches.

10. The facility is approved to accept average 54 tons per day or a maximum of 20,000 tons per year based on 280 working days per year in accordance with the approved plans. Maximum variance shall be in accordance with NCGS 130A-294(b1)(1).
11. This facility is permitted to receive C&D waste generated in Halifax County. This service area is consistent with the local government solid waste management plan(s) and local government approval (Resolution) dated June 2, 2008 by the Halifax County Board of Commissioners (Attachment 1, Part II, Document No. 8, Doc ID 12634).
12. 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.
13. 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&DLF unit in accordance with NCGS 130A-309.25 and addressed by memorandum dated November 29, 2000.
14. The permittee must actively employ a training and screening program at the facility prepared in accordance with 15A NCAC 13B .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.
15. The use of alternative periodic cover requires approval, prior to implementation, by the Section. Requests for alternative periodic cover approval must include a plan detailing the comprehensive use and a demonstration of the effectiveness of the alternative cover, 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.
16. Financial assurance must be continuously maintained for the duration of the facility in accordance with Rules 15A NCAC 13B .0547 (4)(e), 15A NCAC 13B .1628, and NCGS130A-295.2(h). 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).
17. 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. All required sedimentation and erosion control measures must be installed and operable to mitigate excessive on-site erosion and to prevent silt from leaving the area of the landfill unit during the service life of the facility.
18. 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 404 of the Clean Water Act, as amended.
19. Modifications to the approved sedimentation and erosion control activities require approval by the North Carolina Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.

PART II: MONITORING AND REPORTING REQUIREMENTS

20. Groundwater and surface water monitoring must be conducted in compliance with Rules 15A NCAC 13B .1630 through .1637, and .0602, and the approved monitoring plan (Attachment 1, Part II, Document No 6, Doc ID 8694). Any proposed modification to an approved plan must be submitted to the Section and approved prior to implementation.
21. Groundwater quality is subject to 15A NCAC 2L – Groundwater Classifications Standards and the Groundwater Protection Standards (GPS) established under Rule .1634(i). Surface water is subject to 15A NCAC 2B – Surface Water and Wetlands Standards.

22. A total of fourteen (14) ground water wells (MW-1 [background], MW-2a, MW-2ad, MW-3as, MW-3ad, MW-6d, MW-7d, MW-15r, MW-16a, MW-17, MW-18s, MW-18d, G-13 and G-13d), and two (2) surface water locations (SW-1 and SW-2), comprise the approved groundwater and surface water monitoring network for the facility, unless otherwise specified by the Section (Attachment 1, Part II, Document No. 7, Doc ID 8694).
- a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any monitoring well or corrective action program well.
 - b. A licensed geologist must be present to supervise the installation of groundwater monitoring wells and corrective action program wells. The exact locations, screened intervals, and nesting of the wells must be established after consultation with the Section Hydrogeologist prior to well installation.
 - c. Each groundwater monitoring well and corrective action program well must be surveyed in accordance with 15A NCAC 13B .1632 (d)(1).
 - d. Each groundwater monitoring well and corrective action program well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108(o).
 - e. Hydraulic conductivity and effective porosity values must be established for each screened interval in order to develop groundwater flow characteristics.
 - f. Within thirty (30) days of completed construction of each new groundwater monitoring well and corrective action program well, the well construction record (GW-1b form), well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned wells and piezometers, and hydraulic conductivity and effective porosity values, as described in subparagraphs c and e of this Permit Condition.
 - g. Within thirty (30) days of the abandonment of a groundwater monitoring well or corrective action program well, the well abandonment record (GW-30 form) and any additional information included in the abandonment record must be submitted to the Section, consistent with 15A NCAC 2C .0114(b), and must be certified by a Licensed Geologist.
 - h. Documentation of well completion, development details, repair, abandonment, and all other pertinent activities associated with each monitoring well and

corrective action program well must be maintained in the facility operating record.

- i. A readily accessible, unobstructed path must be maintained so that monitoring wells, corrective action program wells, and surface water sampling locations are accessible using four-wheel drive vehicles.
23. The permittee must sample groundwater monitoring wells and surface water locations semi-annually except that the monitoring wells MW-18d, G-13, and G-13d shall be sampled annually. Surface water samples and groundwater samples collected from wells MW-1, G-13 & G-13d must be analyzed for constituents listed in Appendices I of 40 CFR Part 258, and groundwater samples from the rest of eleven (11) wells must be analyzed for constituents listed in Appendix II of 40 CFR Part 258. Additionally, water samples must be analyzed for pH, temperature, conductivity, and turbidity according to the approved Water Quality Monitoring Plan (Doc ID 8694). Sampling frequency and sampling constituents are subject to change according to requirements of the applicable corrective action program, unless otherwise specified by the Section.
 24. Monitoring reports of the analytical results for surface water and groundwater monitoring sampling events, and for corrective action program monitoring, 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 a 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. statistical analysis of laboratory data, in accordance with 15A NCAC 13B .1634,
 - d. a completed Solid Waste Environment Monitoring Data Form, and
 - e. laboratory data submitted in accordance with the EDD Template.
 25. All groundwater, surface water, corrective action program, and methane gas monitoring forms, reports, maps, plans, data, and correspondence submitted to the Section must include an electronic (pdf) copy.
 26. The permittee must maintain a record of all monitoring events and analytical data in the operating record.

27. After completion of the post-closure monitoring period, in accordance with 15A NCAC 13B .1627, and completion of the corrective action program, the Section will determine if further monitoring and post-closure maintenance will be required.

GROUNDWATER CORRECTIVE ACTION PROGRAM SPECIFIC CONDITIONS

28. Pursuant to Rule 15A NCAC 13B .1637, the permittee must implement a corrective action program to remediate elevated constituents in groundwater in accordance with the approved Corrective Action Plan (CAP), Attachment 1, Part II, Document No. 7, Doc ID 8694. The approved corrective action program consists of Monitored Natural Attenuation (MNA) paired with a landfill gas recovery system to control decomposition gases. Any proposed modifications to the approved CAP must be submitted to the Section and approved prior to implementation. The letter dated 8 June 2009 from the Section approving the CAP is Doc ID 7668.
29. The MNA performance monitoring network consists of nine (9) monitoring wells (MW-2a, MW-2ad, MW-3as, MW-3ad, MW-6d, MW-17, MW-18s, MW-18d, and G13), unless otherwise specified by the Section. Sampling frequency and constituents to be analyzed must be conducted in accordance with the approved CAP.
30. Institutional controls (deed recordation, land and groundwater use restrictions) must be implemented as part of a groundwater treatment system consisting of MNA pursuant to NCGS 143B-279.9 and 143B-279.10. The land and groundwater use restrictions will be imposed on the permitted facility and any buffer property that has been acquired to reduce or eliminate the danger to public health or the environment posed by the presence of contamination on the property. The permittee must submit to the Section, within 180 days of notified to do so, a survey plat, in accordance with the requirements of NCGS 143B-279.10, and as directed by the Section.
31. The permittee must provide a Corrective Action Evaluation Report to describe of the performance and effectiveness of the implemented corrective action program, including a technical evaluation of MNA as a remedy at the facility. The first report must be submitted in accordance with Permit Condition 1, Attachment 3, Part I. Subsequent reports are required every 5 (five) years unless otherwise specified by the Section.
32. After the MNA baseline has been established, an EPA approved MNA screening model is required at least annually to simulate the groundwater remediation at the facility and determine the mass flux and mass balance. The model must be submitted annually with a monitoring report.
33. If the objectives of the corrective action program are not being met, as specified in the approved CAP, Rules, or as determined by the Section, the permittee must immediately implement the Contingency Plan in the approved CAP.

34. If constituents in groundwater migrate beyond the landfill property boundary, or it is suspected to have occurred based on sampling results near the property boundary, the permittee must immediately notify all persons in writing who own land or reside on land that directly overlies any part of the contaminant plume with details of the migration. The permittee must mitigate further releases to the groundwater, reduce threats to human health and the environment, and immediately implement the Contingency Plan in the approved CAP.
35. If the corrective action program is modified to include an active groundwater treatment system:
 - a. The permittee must operate the groundwater treatment system in a manner that will prevent spills, releases or other adverse affects to human health and the environment.
 - b. The permittee must maintain an inspection schedule for the inspection of all parts of the groundwater treatment system as outlined in the approved CAP.
 - c. The permittee must train all personnel operating the groundwater treatment system as outlined in the approved CAP.
 - d. The permittee must sample the groundwater in the impacted aquifer, the groundwater as it enters and exits the groundwater treatment system and measure the volume and rate of flow of groundwater through the groundwater treatment system as indicated in the approved CAP. The data must be submitted to the Section with a monitoring report.
36. The permittee must continue to operate the corrective action program until the 15A NCAC 2L Groundwater standards and the GPS have been met at all points within the plume of contamination that lie beyond the relevant point of compliance for 3 (three) consecutive years, in accordance with 15A NCAC 13B .1637.

LANDFILL GAS MONITORING REQUIREMENTS

37. Landfill gas monitoring must be conducted at the facility in accordance with the approved landfill gas monitoring plan, the approved CAP, and Rule .1626 (4). The permittee must sample landfill gas quarterly unless otherwise required for the CAP or specified by the Section.
38. The permittee is responsible for in compliance with any other local, state or federal rule, regulation or statute for constructing and operating the Blower Assisted Solar Flares or equivalent attached to the existing landfill gas recovery trench.

39. The permittee must conduct a constant evaluation to determine and improve the effectiveness of the active landfill gas recovery system according to the approved CAP. The evaluation data and the effectiveness report according to the approved CAP must be a portion of the Corrective Action Evaluation Report stated in the Permit Condition No. 31 of this permit section.
40. A total of nine (9) landfill gas probes (GM-1, GM-2, GM-2B, GM-2R, GM-3, GM-4, GM-4R, GM-5, and GM-5B) comprise the approved monitoring network for the facility (on Figure 1, Attachment 1, Part II, Document No. 8, Doc ID 12634); unless otherwise approved or specified by the Section.
- a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any landfill gas monitoring probe or well.
 - b. A licensed geologist must be present to supervise the installation of landfill gas monitoring probes or wells. The exact locations, screened intervals, and nesting of the probes or wells must be established after consultation with the Section hydrogeologist prior to probe or well installation.
 - c. Each landfill gas monitoring probe or well must be surveyed for location and elevation by a North Carolina Registered Land Surveyor.
 - d. Each landfill gas monitoring probe or well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108 (o).
 - e. Within thirty (30) days of the completed construction of each new landfill gas monitoring probe or well, a schematic of the probe or well, to include boring log, depth, and screened interval, must be submitted to the Section. The submittal must also include a scaled topographic map, showing the location and identification of new, existing, and abandoned landfill gas monitoring probes and wells.
 - f. Within thirty (30) days of the abandonment of a landfill gas monitoring probe or well, an abandonment record must be submitted to the Section. The boring must be abandoned in accordance with 15A NCAC 2C .0113(d) and be certified by a Licensed Geologist.
 - g. All records of landfill gas monitoring probe or well installation, repair, abandonment, and all other pertinent activities associated with each landfill gas monitoring probe or well must be placed in the facility's operating record.
 - h. A readily accessible, unobstructed path must be maintained so that landfill gas monitoring probes or wells are accessible using four-wheel drive vehicles.

41. All landfill gas monitoring must be conducted by properly trained personnel. Methane monitoring must include interior monitoring of onsite buildings.
42. Landfill gas monitoring reports must be added to the facility's operating record within 7 days of the monitoring event, and must include a description of the monitoring method used, the sampling results of each well and onsite buildings in percent of the lower explosive limit (LEL), date of monitoring, weather conditions, calibration report, and signature of the sampling personnel.
43. The permittee must maintain records of all landfill gas monitoring events in the operating record, in accordance with 15A NCAC 13B .0542 (n).
44. If landfill gas monitoring reveals detections of methane of at least 25 percent of the LEL in onsite buildings, or detections of LEL at the compliance boundary, the permittee must comply with the requirements of 15A NCAC 13B .1626 (4).

REPORTING REQUIREMENTS

45. Copies of this permit, the approved plans, and all records required to be maintained in the operating record by the permittee must be maintained at the facility, unless otherwise approved by the Section, and made available to the Section upon request during normal business hours.
46. The permittee must maintain records of :
 - a. The amount of all accepted solid waste materials as (i) C&D wastes, (ii) alternative cover material used as alternate periodic cover, and (iii) recyclable material.
 - b. Daily records of waste received, and 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.
47. 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 September 25, 1998, 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 Environmental Specialist by the date due on the prescribed annual facility report form.

PART III: CLOSURE AND POST-CLOSURE

48. The permittee must conduct closure and post-closure activities in accordance with the approved plans (Attachment 1, Part II, Document No 8) and Rule 15A NCAC 13B .1627. An updated 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&DLF 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 (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.

49. If the minimum 30-year post-closure period ends before the groundwater corrective action program is terminated, pursuant to Rule .1627 (d)(2)(B) of 15A NCAC 13B, the post-closure care period shall be extended at least until such time as the required corrective action program has been completed.

PART IV: MISCELLANEOUS SOLID WASTE MANAGEMENT UNIT SPECIFIC CONDITIONS

GENERAL CONDITIONS

50. The on-site miscellaneous solid waste management units, including the wood waste processing area, the animal carcass disposal area, the used tire storage area, the white goods handling area, and the used pesticide container storage area must be located in areas of the facility as shown on the approved drawings (Figure 1 and Drawing No. S1/Sheet No. 2, Doc ID 12634). The permittee must obtain Section approval before re-locating any of these operations or revising the operations.
51. Wastes received and product stored shall be maintained in reasonably sized piles with adequate fire breaks and lanes in accordance with the approved operational plans and the pertinent rules.
52. Surface water shall be diverted from all operational and storage areas to prevent standing water in operational areas and under or around storage piles. Water that comes in contact with solid waste is deemed to be leachate and shall be contained on-site or properly treated prior to discharge.
53. These areas shall be operated and maintained with sufficient dust control measures to minimize airborne emissions and to prevent dust from becoming a nuisance or safety hazard.
54. These areas shall be operated and maintained in a manner so as to minimize odors, prevent the creation of a nuisance, potential health hazard, or a potential fire hazard.
55. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, and vermin.

WOOD WASTE PROCESSING AREA CONDITIONS

56. The facility is permitted to operate a treatment and processing facility as defined in 15A NCAC 13B, Rule .0101(49).

57. The facility is permitted to receive and grind clean wood wastes including land clearing debris, yard waste, and wooden pallets as defined in 15A NCAC 13B, Rules .0101(23) and .0101(56), and NCGS 130A-290(44a), respectively.
58. The wastes are allowed to stockpile to an approximate height of 15 feet over an area of approximately 1 acre prior to grinding. The maximum weight of the waste stockpile is approximate 2,000 pounds.

ANIMAL CARCASS DISPOSAL AREA CONDITIONS

59. The permittee must manage the animal carcass disposal area in accordance with 02 NCAC 52C .0102, other applicable statutes and rules, and the Operations Manual included in Attachment 1, Part II, Document No. 8 (Doc ID 12634).
60. Animal carcasses must be buried a minimum of three feet below ground surface or covered by three feet of soil at the designated area inside the landfill facility as shown on Drawing No. S1/Sheet No. 2 (Doc ID 12634).
61. If it is determined during the operation of the animal carcass disposal area that the operations are adversely impacting ground water, or that the area is a threat to human health, the permittee must close the disposal area.

USED TIRE STORAGE AREA CONDITIONS

62. The waste tire collection site must be operated in accordance with the requirements of 15A NCAC 13B .1107, other applicable statutes and rules, and the Operations Manual included in Attachment 1, Part II, Document No. 8 (Doc ID 12634).
63. The facility is permitted to receive tires and scrap tires, as defined in NCGS Article 9, Chapter 130A-309.53(6) and (7) with the maximum volumes up to three (3) covered trailers.

WHITE GOODS HANDLING AREA CONDITIONS

64. The facility is permitted to receive white goods as defined in NCGS Article 9, Chapter 130A-290(44) and scrap metals. The permittee must manage the white goods in accordance with the approved Operations Manual included in Attachment 1, Part II, Document No. 8 (Doc ID 12634) and any applicable statutes and rules.
65. The permittee must provide for the proper removal of chlorofluorocarbon refrigerants.

USED PESTICIDE CONTAINER STORAGE AREA CONDITIONS

66. The facility is permitted to receive used pesticide containers, approximately 5,000 containers from local agricultural sources in the Halifax County.
67. The permittee must placed the collected used pesticide containers inside the sheltered storage area shown on the as shown on Drawing No. S1/Sheet No. 2 (Doc ID 12634).

PART V: POST CLOSURE CONDITIONS FOR THE UNLINED MSWLF UNIT

68. The unlined MSWLF unit (below the active C&DLF) was closed in 1998. Post-closure maintenance and monitoring of the landfill unit must be conducted in accordance with Documents 1 and 8, Attachment 1, Part II, and the N.C. Solid Waste Management Rules.
69. The permittee must maintain the integrity and effectiveness of the cap system, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, leachate outbreaks, or other events; preventing surface water from impounding over waste; and preventing run-on and run-off from eroding or otherwise damaging the cap system.
70. Post-closure use of the property is subject to review and approval by the Section and must not disturb the integrity of the cap system, or the function of the monitoring systems. The Section may approve any other disturbance if the owner or operator demonstrates that disturbance of the cap system, including any removal of waste, will not increase the potential threat to human health or the environment.
71. Any proposed lateral expansion to the closed C&DLF unit and/or the unlined MSWLF unit would be considered a new landfill for purposes of Solid Waste Management permitting.

- End of Permit Conditions -