



Facility Permit Nos.: 67-09 and 67-05  
Permit to Construct & Operate  
Onslow County MSWLF  
Issuance Date: XXX, 2015  
DIN: 24563  
Page 1 of 31

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

Pat McCrory  
Governor

Donald R. van der Vaart  
Secretary

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

**SOLID WASTE MANAGEMENT FACILITY**  
**Permit Nos. 67- 09 and 67-05**

*ONslow COUNTY*  
is hereby issued a

**PERMIT TO CONSTRUCT**

6709-MSWLF-1997 ONSLOW COUNTY SUBTITLE D LANDFILL - PHASE 4 (Lateral Expansion)

**PERMIT TO OPERATE**

6709-MSWLF-1997 ONSLOW COUNTY SUBTITLE D LANDFILL – PHASES I, II, & III  
6705-LCID-1991 ONSLOW COUNTY LANDFILL – LCID UNIT

**PERMIT FOR POST CLOSURE LAND USE**

6705-MSWLF-1984 ONSLOW COUNTY MSW LANDFILL

Located on Meadowview Road (S.R. 1243), approximately seven miles northwest of Jacksonville, Onslow 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 deeds recorded for this property listed in Attachment 1, Part I of this permit.

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

**ATTACHMENT 1  
 GENERAL PERMIT CONDITIONS/INFORMATION**

**PART I: PERMIT HISTORY**

<b>Permit Type - Onslow County Subtitle D Landfill, 6709-MSWLF-1997</b>	<b>Date Issued</b>	<b>Document Identification Number (DIN)</b>
Original Permit Issuance, Permit to Construct (PTC) - Phase 1	October 2, 1997	24469
Permit to Operate (PTO) - Phase 1A –Subcell 1	December 31, 1997	24470
Interim Operational Approval, PTO - Phase 1A	February 04, 1998	24471
Permit Modification, PTO - Phase 1A	March 06, 1998	24472
Interim Operational Approval, PTO - Phase 1A	August 31, 1998	24473
Permit Modification, PTO - Phase 1B	December 21, 1998	24474
Permit Modification, PTO - Phase 1C	January 23, 2001	-
Permit Amendment, PTC - Phase 2	February 19, 2003	-
Permit Amendment, PTO - Phase 2	May 11, 2004	24475
Permit Modification 1, PTO – Phase 2	August 12, 2004	24476
Permit Modification 2, PTO – Phase 2	March 17, 2005	24477
Permit Amendment, PTC - Phase 3	November 19, 2007	3360
Permit Amendment, PTO – Phase 3	December 23, 2008	6510
Permit Substantial Amendment, PTC – Phase 4 and approval new facility expansion to XXX acres	<b>XXXX, 2015</b>	24563

**PART II LIST OF DOCUMENTS FOR THE APPROVED FACILITY PLAN  
 MUNICIPAL SOLID WASTE LANDFILL UNIT (S)**

*ONslow COUNTY SUBTITLE D LANDFILL, 6709-MSWLF-1997*

- Onslow County Subtitle D Landfill Permit to Construct Application, Volumes 1, 2 and 3 of 3, dated June 1997, prepared by Camp Dresser & McKee (CDM).*
- Phase 1A – Sub-cell 1, Onslow County Subtitle D Landfill Construction Quality Assurance Report, dated December 1997, prepared by CDM.*
- Phase 1A, Onslow County Subtitle D Landfill Construction Quality Assurance Report, dated January 1998, prepared by CDM.*
- Onslow County Landfill, Phase 1A, Modification to Permit No. 67-09, Leachate Collection Pipe Filtration Stone Replacement, dated February 13, 1998, prepared by CDM.*

5. *Phase 1B, Onslow County Subtitle D Landfill Construction Quality Assurance Report, dated July 1998, prepared by CDM.*
6. *Phase 1B, Onslow County Subtitle D Landfill Construction Quality Assurance Report, Volumes 1 and 2 of 2, dated October 1998, prepared by CDM.*
7. *Phase 1C, Subtitle D Landfill Construction Quality Assurance, Volumes 1 and 2 of 2, dated December 2000, prepared by CDM.*
8. *Onslow County Subtitle D Landfill, Phase 2 Permit Amendment Application, Volumes 1, 2 and 3 of 3, dated March 2002, prepared by CDM.*
9. *Facility Plan, Engineering Plan, and Operation Plan, Onslow County Subtitle D Landfill, Phase 2, Permit Amendment, dated February 2002, prepared by CDM.*
10. *Phase 2, Subtitle D Landfill Construction Quality. Prepared by CDM. April 14, 2004.*
11. *Additional information required for Phase 2 construction activities to include piezometer abandonment records, well installation records, boring logs, and geotechnical instrumentation monitoring. May 5, 2004.*
12. *Operation Plan Modification, Onslow County Subtitle D Landfill. Prepared by CDM March 2005.*
13. *Onslow County Subtitle D Landfill Phase III Permit Amendment Application. Volumes 1 and 2 of 2, Prepared by: CDM. November 2006. [RCO3359 (Operation Drawings), RCO3358 (Facility Drawings), RCO3357 (Engineering Drawings) RCO 3355 (Application)].*
14. *Onslow County Subtitle D Landfill Phase III Construction Quality Assurance Report, Prepared by: Camp Dresser and McKee, Raleigh, NC. August 2008 (DIN 5770).*
15. *Letter dated December 17, 2008 from Michael Brinchek, P.E. with CDM providing response to DENR comments dated September 17, 2008 and revised Onslow County Subtitle D Landfill Phase III Construction Quality Assurance Report which incorporated the additional data (DIN 6507).*
16. *Monitoring Well Installation and Initial sampling Report, Onslow County Subtitle D Landfill – Phase 3, prepared by CDM. June 25, 2008 (DIN 6199).*

17. *Notice of Intent to Close – Phase 1 Partial Closure Project, Onslow County Subtitle D Landfill.* March 17, 2010. Prepared by CDM (DIN 10155).
18. *Construction Quality Assurance Report - Phase 1 Partial Closure Project Onslow County Subtitle D Landfill, Permit No. 67-09.* February 17, 2011. Prepared by CDM Smith (DIN 22585). Approximately 12-acres Phase 1 area, on the south and west slopes, was permanently closed.
19. *Revised Proposed Installation of Voluntary Active Gas Control and Collection System.* Prepared by Enerdyne Power System, Inc. Dated November 9, 2012 (DIN 17657).
20. *Final Authorization Request to Operate the Landfill Gas Control and Collection System (LFGCCS) - Completion Documentation.* November 13, 2013. (Doc ID 20196). Comments & responses. December 13, 2013. (DIN 20533). Prepared by CDM Smith.
21. E-mail correspondence dated December 17, 2013 from Geof Little authorized the continued operations of the Onslow County Subtitle D MSWLF under the current permit for next five year (DIN 22240).
22. *Site Study Application, Onslow County Subtitle D Landfill Expansion.* Prepared by CDM Smith. Dated May 2013 and revised through May 02, 2014. [DIN 20654 (text), 20655 (drawings), & 21003]. Approved on May 06, 2015 (DIN 20656).
23. *Onslow County Subtitle D Landfill Phase 4 Permit to Construct Application.* Prepared by CDM Smith. Dated December 23, 2014 and revised through June 19 2015. (DIN 24566). Including the Design Hydrogeologic Report (DIN 22561) and monitoring plans (DINs 24289 & 24290) were approved on May 13, 2015 (DIN 24291). **This permit application is approved for public review and comment.**

CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)

*Not Applicable*

INDUSTRIAL SOLID WASTE LANDFILL UNIT(S)

*Not Applicable*

LAND CLEARING AND INERT DEBRIS LANDFILL (LCIDLF) UNIT(S)

*ONslow COUNTY LANDFILL - LCID UNIT, 6705-LCID-1991*

*The permit application documents of this LCIDLF unit are incorporated into those of the Subtitle D Landfill, 6709-MSWLF-1997 since 2008.*

1. Original permit submittal document dated December 21, 2000.

2. Approval letter for the Onslow County Landfill Transition Plan dated July 24, 1996.
3. Erosion Control approval letter dated August 26, 1996, from Dan Sams (Land Quality Section Wilmington Regional Office) in reference to the original demolition landfill approval at the Onslow County Landfill.
4. Recorded permit, Book: 1694 and Page: 072 on March 29, 2001, received by the SWS on 11 April 2001.
5. Request for 5-year review for Phase 3 dated November 18, 2005, and submitted by CDM including revised Operations Plan and Phasing Plan.

TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)

*Not Applicable*

MISCELLANEOUS SOLID WASTE MANAGEMENT UNIT(S)

1. *Onslow County Subtitle D Landfill Phase 4 Permit to Construct Application*. Prepared by CDM. Dated December 23, 2014 and revised through June 19 2015. (DIN 24566).

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

ONSLow COUNTY, N.C. REGISTER OF DEEDS				
Book NO.	Page NO.	Grantor	Grantee	Acreages
675	608 -610	Irvin L. Spain and wife, Mary A. Spain and Marnell F. Kazee, widow, and Charles R. Morton and wife, Roberta Morton	Onslow County	193.87
752	530-532	Jack S. Hinson and wife, Mary E. Hinson		175
1282	221-222	Bertha M. Kearney, widow		142.2
1421	156-157	E. Jerone Venters, Jr, and wife, Phyllis B. Venters		175
1421	161 - 162	Robert K. Willms and spouse, Mary R. Willms Sally Willms Mansfield and spouse, Joseph B. Mansfield		175.91
Total Acreage is approximately				861.98 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 (Division), Solid Waste Section (Section). In

accordance with North Carolina Solid Waste Management Rule (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 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 Construct of the landfill that was originally issued on October 02, 1997 was recorded on October 7, 1997 in Onslow County Office of Deeds, Book No. 1402, Page Nos. 28 to 33.
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 the facility the permittee shall be considered to have accepted the terms and conditions of this permit.
6. 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. 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 the “List of Documents for the Approved Plan” 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 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

### PART I: GENERAL FACILITY CONSTRUCTION CONDITIONS

1. This permit approves the new Facility Plan, all onsite solid waste management facilities, and related infrastructure for the Onslow County Subtitle D MSWLF unit, Permit No. 6709-MSWLF-1997 as shown on drawing Sheet Nos. SD-3, LC-3 & LC-4 (**DIN 24566**). This Facility Plan defines the comprehensive development of the MSWLF unit by nine (9) phases encompassing approximately 86.2-acre waste footprint, including the additional lateral expansion of approximately 31.7 acres, in accordance with the NCGS 130A-294.(b1), Rule 15A NCAC 13B .1618(c), and the resolution passed by the Onslow County Board of Commissioners on March 4, 2013 (DIN 20654).
2. The table below lists the dimensions and details for the MSWLF unit, both existing and planned. The approved gross capacity of 9,925,630 cubic yards is defined as the volume measured from the bottom of waste through the top of final cover. The elevations of final grades for the MSWLF are shown on drawing Sheet Nos. LC-3 & LC-4 (**DIN 24566**).

Phased Development	Acreage	Gross Capacity (CY)	Status
Phase 1	24		
Phase 2	6		
Phase 3		3,073,000	Inactive
Phase 3 (remaining)	15	706,570	Active
Phase 4	9.5	1,013,210	To be constructed
Phase 5	13.2	821,270	To be developed
Phase 6	8.3	1,049,080	To be developed
Phase 7	10.2	1,390,950	To be developed
Phase 8	Vertical expansion	1,066,050	To be developed
Phase 9	Vertical expansion	805,500	To be developed
Total	86.2	9,925,630	

3. The permittee shall submit an amendment to this permit according to Rule 15A NCAC 13B .1617(b) for constructing and developing any subsequent phase of Subtitle D MSWLF – Phases 5 through 9 defined in the approved facility plan (**DIN 24566**). The permit amendment application shall be subject to a permit fee according to NCGS 130A-295.8.
4. Pursuant to Rules 15A NCAC 13B .1626(5)(b) or .0566(12), on-site open burning of solid wastes is prohibited. However, burning of land-cleaning debris generated on site as a result of construction activities may be allowed, only if, prior to initiating the controlled burning, the permittee obtains approvals and/or permits from the Section, the North Carolina (NC) Division of Air Quality, and local fire department. The permittee must conduct the approved open burning in compliance with all air pollution and open burn laws, regulations and ordinances.
5. This facility shall conform to the specific conditions set forth in this permit and the provisions of the Rule 15A NCAC 13B .1604(b)(2).
6. Construction of all solid waste management units within this facility must be in accordance with the pertinent approved plans and only for those phases of development approved for construction as described in Attachment I, Part II List of Documents for Approved Plan.
7. Copies of this permit, the approved plans, and all records required to be maintained 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.

**PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT CONSTRUCTION CONDITIONS**

8. Pursuant to Rule 15A NCAC 13B .0201(d)(1), this Permit to Construct is issued to permittee to construct Subtitle D MSWLF – Phase 4, Permit No. 6709-MSWLF-1997 Construction and development of the Phase 4 shall be in accordance with the approved plans (**DIN 24566**) and the requirements stipulated in Rules 1601 through 1680 of the 15A NCAC 13B. The construction of Phase 4 is permitted for approximately:
  - a. 9.5 acres as shown on the drawing Sheet No. EP-05.
  - b. 1,013,210 CY of gross capacity measured from the bottom of waste through the top of final cover with the approved fill elevations up to 185 above mean sea level (amsl) as shown on drawing Sheet No. LO-2.

9. Pursuant to Rule 15A NCAC 13B .1604(b)(2)(H), the permittee must commence the initial, substantial, construction authorized by this Permit to Construct within 18 months from the issuance date of this permit. **This permit shall expire on XXX.** If substantial construction does not begin within eighteen (18) months from the issuance date of this permit, then the permittee must obtain a permit modification from the Section prior to construction, comply with the conditions of the approval and submit a Municipal Solid Waste Landfill permit modification fee according to NCGS 130A-295.8. Substantial construction includes, but is not limited to, issuance of construction contracts, mobilization of equipment on site, and construction activities including installation of sedimentation and erosion control structures.
10. Modifications or revisions of the approved documents or changes during construction of any landfill unit/cell require approval by the Section, and may constitute a permit modification according to Rule 15A NCAC 13B .1617(c) and be subject to a permitting fee according to NCGS 130A-295.8.
11. The permittee must conduct a preconstruction meeting at the landfill facility prior to initiating construction of any phase/cell/sub-cell of the landfill units and must notify the Section at least 10 days prior to the meeting according to Rule 15A NCAC 13B .1621(b)(1).

GEOLOGIC, WATER QUALITY, AND LANDFILL GAS MONITORING REQUIREMENTS

12. Prior to construction of the phase or cell(s) within the phase, all piezometers, borings, and groundwater and landfill gas monitoring wells within the footprint must be properly abandoned by overdrilling first (exception of non-cased borings) and sealed with grout in accordance with 15A NCAC 2C .0113, entitled “Abandonment of Wells.”
13. In areas where soil is to be undercut, abandoned piezometers, monitoring wells and borings must not be grouted to pregrade land surface, but to the proposed base grade surface to prevent having to cut excess grout and possibly damage the wells.
14. A Licensed Geologist must report any pertinent geological feature(s) exposed during phase or cell excavation. After the landfill subgrades are graded according to the lines and grades as shown on drawing Sheet No. LC-1 (**DIN 24566**), pursuant to Rule 15A NCAC 13B .1624(b)(7), the permittee must submit to the Section Hydrogeologist an inspection notification and a written report that includes an accurate description of the exposed geological feature(s) and effect of the geological feature(s) on the design, construction, and operation of the cell, phase, or unit.

15. A Licensed Geologist must supervise the installation of groundwater monitoring wells and landfill gas monitoring wells. Any modification to the approved water quality monitoring, sampling, and analysis plan must be submitted to the Section Hydrogeologist for review. Each groundwater monitoring well and landfill gas well must be constructed according to 15A NCAC 02C and surveyed for location and elevation and have an identification plate permanently attached to the well in accordance with 15A NCAC 2C .0108(o).
16. Within 30 days of completed construction of each new groundwater monitoring well or landfill gas monitoring well, a well construction record (GW-1b form), typical well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section. 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.
17. Within thirty (30) days of the completed permanent abandonment of a 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 Solid Waste Section in accordance with 15A NCAC 2C .0114(b) and be certified by a Licensed Geologist.
18. All forms, reports, maps, plans, and data submitted to the Section must include an electronic (pdf) copy.

#### EROSION AND SEDIMENT CONTROL REQUIREMENTS

19. 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 units during the service life of the facility.
20. All sedimentation and erosion control activities shall be constructed and conformed to the requirements in the approved erosion and sediment control plan, the Sedimentation Pollution Control Law (15A NCAC 4), and any required NPDES permits prior to earth disturbing activities and/or commencement of construction.
21. 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.

22. Modifications to the approved sedimentation and erosion control activities must be approved by the NC Land Quality Section. The Section must be notified of any sedimentation and erosion control plan modifications.

PRE OPERATIONAL CONDITIONS

23. The following conditions must be met prior to receiving wastes at the newly constructed phases, cells, or sub-cells of any landfill unit:
- a. The permittee must obtain a Permit to Operate from the Section for operating the constructed phases, cells or sub-cells of the landfill unit in accordance with Rule 15A NCAC 13B .0201(d).
  - b. Site preparation, final landfill base grading, and vertical separation requirements have been performed in accordance with Rule 15A NCAC 13B .1624 and the approved plans (**DIN 24566**).
  - c. A written Construction Quality Assurance (CQA) and certification report including as-built drawings to demonstrate that the each component of the approved landfill base line system was completed built in accordance with the Rules 15A NCAC 13B.1621 & 1624 and the approved CQA plan (**DIN 24566**) shall be submitted to the Section for review and approval.
  - d. The permittee shall arrange for a site inspection and/or a pre-operative meeting by a representative(s) or regional environmental specialist of the Section for the purpose of demonstrating that the facility construction is consistent with approved plans and specifications.
  - e. Documentation of financial assurance mechanisms must be submitted to the Section. In accordance with Rule 15A NCAC 13B .1628 and NCGS 130A 295.2(h), the financial assurance amount must include costs for conducting closure and post-closure activities at the Subtitle D MSWLF - Phases 1 through 4 areas to receive the PTO and costs for potential assessment and corrective action.
  - f. New groundwater monitoring wells and/or landfill gas monitoring wells shall be installed, and surface water sampling locations shall be established. A baseline sampling event for background water quality shall be performed in accordance with Rule 15A NCAC 13B .1633, and approved water quality monitoring plan. Well construction records and sampling results shall be submitted to the Section Hydrogeologist for review and approval prior to issuing the Permit to Operate.

- g. The edge of the waste footprint must be identified with permanent physical markers.
- h. The permittee shall completely implement and install site access, security, signs, and safety requirements in accordance with Rule 15A NCAC 13B. 1626.

**PART III: CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL UNIT(S)  
CONSTRUCTION CONDITIONS**

*Not Applicable*

**PART IV: INDUSTRIAL SOLID WASTE LANDFILL UNIT(S) CONSTRUCTION  
CONDITIONS**

*Not Applicable*

**PART V: LAND CLEARING AND INERT DEBRIS LANDFILL UNIT(S)  
CONSTRUCTION CONDITIONS**

*Not Applicable*

**PART VI: TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)  
CONSTRUCTION CONDITIONS**

*Not Applicable*

**PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT UNIT(S)  
CONSTRUCTION CONDITIONS**

*Not Applicable*

*- End of Section -*

**ATTACHMENT 3  
CONDITIONS OF PERMIT TO OPERATE**

**PART I: GENERAL FACILITY OPERATION CONDITIONS**

- 1. The Permit to Operate shall expire **July 13, 2018**. Pursuant to Rule 15A NCAC 13B .0201(g), no later than **January 14, 2018**, the permittee must submit a request to the Section for permit review prepared in accordance with NCGS 130A-295.8 and applicable North Carolina Solid Waste Management Rule (Rule), and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.
- 2. The permittee must not knowingly dispose of solid wastes including municipal solid waste (MSW) and construction or demolition (C&D) solid waste that is generated within the boundaries of a unit of local government that by ordinance:
  - a. Prohibits generators or collectors of solid waste from disposing of that type or form of solid waste.

- b. Requires generators or collectors of solid waste to recycle that type or form of solid waste.
3. This facility is permitted to receive non-hazardous solid waste, as defined in NCGS 130-290 (a) (35) that is:
  - a. Generated within Onslow County including the military facilities which is consistent with the local government waste management plan and with local government approval. The maximum waste rate received from the military facilities within Onslow County is 100 tons per day (**DIN 24566**).
  - b. MSW waste, including C&D waste as defined in NCGS 130-290 (a)(18a) and (4), except where is identified in the approved operations Plan (**DIN 24566**), or prohibited by NCGS Article 9 of Chapter 130A, and the rules adopted by the Commission for Health Services.
  - c. The approved waste disposal rate is approximately 125,000 tons per year, increasing at a maximum rate of 5 percent (5) yearly over the 5-year permit term, with a maximum variance in accordance with NCGS 130A-294(b1)(1).
4. 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.
5. The permittee must actively employ a training and screening program at the facility prepared in accordance with applicable Rules, NCGS 130A-295.6(g), and the approved Operations Plan (**DIN 24566**) 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, or other excluded or unauthorized wastes. The plan must address identification, removal, storage and final disposition of these wastes.
6. The permittee must well maintain permanent physical markers that accurately identify the edge of the approved waste footprint for all active, inactive, and closed disposal units at the landfill facility.
7. Closure and post-closure activities for any landfill unit at this facility must be conducted in accordance with the approved Closure and Post-Closure Plans (**DIN 24566**) and/or Rules 15A NCAC 13B 1627 & .1629.
8. Modification of the approved closure plan to construct an alternative cap system is allowed by Rule 15A NCAC 13B .1627; however, the permittee must submit the Section a modified closure plan 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 landfill 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 Rules 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.
  - c. Surface water, ground water, and explosive gas monitoring.
9. Financial assurance as required by Rules and NCGS 130A-295.2 must be continuously maintained for the duration of the facility in accordance with applicable rules and statutes. Permittee must annually update and adjust closure and post-closure cost estimates and costs for potential assessment and corrective action at the landfill facility for inflation according to Rule 15A NCAC 13B 1628.
10. 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.

11. 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.
12. Copies of this permit, the approved plans and all records required to be maintained 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.

#### ENVIRONMENTAL MONITORING AND REPORTING REQUIREMENTS

##### **General Conditions**

13. Groundwater, surface water, and landfill gas monitoring locations must be established and monitored as identified in the approved plans (DINs 24289 & 24290, respectively). Any proposed modification to an approved plan must be submitted to the Section and approved prior to implementation.
14. The permittee must implement the following permit conditions:
  - a. The permittee must obtain approval from the Section for the design, installation, and abandonment of any groundwater or landfill gas monitoring well.
  - b. Each groundwater and landfill gas monitoring well must be surveyed in accordance with Rules 15A NCAC 13B .1632 (d)(1).
  - c. Each groundwater and landfill gas monitoring well must have an identification plate permanently attached to the well, in accordance with 15A NCAC 2C .0108(o).
  - d. The permittee must maintain the following documentations in the facility operating record in accordance with Rules 15A NCAC 13B.1626(10):
    - i) The report for each monitoring event of groundwater, and surface water, and landfill gas and pertinent analytical data.
    - ii) Documents of well completion, development details, repair, abandonment, and all other pertinent activities associated with each groundwater or landfill gas monitoring well location.
  - e. A readily accessible, unobstructed path must be maintained so that groundwater and landfill gas monitoring wells, and surface water sampling locations are accessible using four-wheel drive vehicles.

### **Water Quality Monitoring and Reporting Conditions**

15. Groundwater and surface water monitoring at this landfill facility must be conducted in compliance with Rules 15A NCAC 13B .1630 through .1637, and .0602, and the approved monitoring plan (DIN 24289). Any proposed modification to an approved plan must be submitted to the Section and approved prior to implementation.
16. Groundwater quality is subject to 15A NCAC 2L – Groundwater Classifications Standards and the Groundwater Protection Standards (GPS) established under Rules 15A NCAC 13B.1634(i). Surface water is subject to 15A NCAC 2B – Surface Water and Wetlands Standards.
17. Unless otherwise specified by the Section, surface water locations, and groundwater monitoring wells must be sampled at least semi-annually in accordance with applicable Rules, the approved monitoring plans (DIN 24289), and the current policies and guidelines of the Section in effect at the time of sampling.
18. Monitoring reports of the analytical results for groundwater and surface water monitoring events must be submitted to the Section within 120 days of the sample collection date. Analytical laboratory data must be submitted in electronic 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. A completed Solid Waste Environmental Monitoring Data Form.
  - d. Laboratory data submitted in accordance with the EDD Template.
19. The permittee must implement the following permit conditions:
  - a. For MSWLF Unit. The four independent samples which comprise the initial baseline sampling event must be collected from each new installed groundwater monitoring well in accordance with 15A NCAC 13B. 1633(b).
  - b. The report including analytical data must meet the requirements stated in the Permit **Condition No. 18** of Part I, Attachment 3 and be submitted to the Section for review.

**Landfill Gas Monitoring, Management, and Reporting Conditions**

20. A landfill gas monitoring event must include monitoring for all explosive gases, including hydrogen sulfide and must be conducted at the facility including interior monitoring of on-site buildings in accordance with the approved landfill gas monitoring plan (DIN 24290) and Rules 15A NCAC 13B .1626(4). Any proposed modification to an approved plan must be submitted to the Section Hydrogeologist and approved prior to implementation.
21. The permittee must sample landfill gas quarterly unless otherwise required for corrective action or specified by the Section.
22. The permittee is responsible to employ properly trained personnel to conduct gas monitoring and to operate and maintain the constructed landfill gas collection and control system (LFGCCs) and landfill gas to energy (LFTGE) project.
23. Landfill gas monitoring reports must be placed to the facility's operating record, according to Rule 15A NCAC 13B .1626(10) & .0566(13), 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.
24. If landfill gas monitoring reveals detections of methane greater than 25 percent of the LEL in onsite buildings, or detections of LEL at the compliance boundary, the permittee must comply with the requirements of Rules 15A NCAC 13B .1626(4).
25. 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 projects.

**RECORDING AND RECORDKEEPING**

26. 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.
27. The permittee must maintain records of the following. Scales must be used to weigh the amount of waste received. The daily reports are to be summarized into a monthly report for use in the required annual reports.
  - a. The amount of all accepted solid waste materials as (i) MSW (ii) C&D wastes, (iii) material used as alternate periodic cover, and (iv) recyclable material.

- b. Daily records of waste received, and origins of the loads.
28. 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 31, 1997 through the date of the annual volume survey must be included in the report.
  - e. The tons of 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 Senior Environmental 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 Senior Environmental Specialist by the date due on the prescribed annual facility report form.

**PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)**

*6709-MSWLF-1997 ONSLOW COUNTY SUBTITLE D LANDFILL*

- 29. This permit approves the continued operation of Phases 1, 2 & 3 of the Onslow County Subtitle D MSWLF, as well as the onsite environmental management, and protection facilities as described in the approved plans (**DIN 24566**). The landfill unit shall conform to all operating requirements described in the approved plans (**DIN 24566**), 15A NCAC 13B .1626, and the conditions specified herein.
- 30. Operation of future phases or cells requires written approval of the Section after documentation has been submitted that the area has been constructed in accordance with applicable statutes and Rules 15A NCAC 13B .1617.
- 31. The Phases 1, 2, and 3 of the MSWLF unit have approved total gross capacity of 3,779,570 CY and encompass waste footprint of approximately 45 acres as described in the approved plan (**DIN 24566**). The maximum approved fill elevation for the Phases 1, 2, and 3 is up to the elevation of approximately 180 feet above mean sea level and with side slopes as shown on drawing Sheet No. LO-2 (**DIN 24566**). The following table summarizes the dimensions and details for the MSWLF unit - Phases 1, 2, and 3. Total gross capacity is defined as the volume measured from the bottom of waste through the top of final cover.

Phased Development	Acreage	Gross Capacity (CY)	Status
Phase 1	24	3,073,000	Inactive
Phase 2	6		
Phase 3			
Phase 3 (remaining)	15	706,570	Active
Total	45	3,779,570	

- 32. Regulated asbestos-containing material as defined in 40 CFR 61 must be managed in accordance with 40 CFR 61. The landfill is prohibited to receive and subsequently disposal of friable asbestos waste according to approved Operations Plan (**DIN 24566**). Disposal of non-friable asbestos waste must be in accordance with Rule 15 NCAC 13B .1626(1)(d) and the approved Operations Plan.
- 33. Medical wastes as defined in NCGS 130A-290(a)(17a) may be acceptable for disposal at the landfill unit in accordance with the approved Operations Plan (**DIN 24566**) and all applicable state or federal regulations, rules, or laws.

34. The MSWLF unit is permitted to co-dispose of wastewater treatment sludge generated within the facility's approved service area, subject to the terms and procedures of the approved plan (DIN 24566) and Rule 15 NCAC 13B .1626(1)(e).
35. In accordance with NCGS 130A-295.6 this landfill may use alternative daily cover (ADC) according to the following conditions:
  - a. ADC and pertinent applications have been previously approved at 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.
  - b. The MSWLF unit is approved to use the following ADC: Posi-Shell Spray.
36. The use of ADC that does not meet the requirements stated in Permit Condition **No. 35** requires approval, prior to implementation, by the Section. Requests for ADC 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 Part II of the Attachment 1.
37. The permittee must maintain records for all solid waste materials accepted and used as ADC. 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 Section upon request. The application of ADC materials in excess of normal application of daily cover of the material shall constitute disposal.
38. The use of leachate recirculation as a leachate management tool requires approval by the Section prior to implementation.
  - a. Requests for leachate recirculation approval must include a comprehensive management plan developed according to Section guidelines and which is consistent with the approved operation plan.
  - b. Plans that are approved by the Section will be incorporated into, and made a part of, the approved documents listed in Part II of the Attachment 1 of this permit.
  - c. If approved, only leachate originating from the MSWLF unit shall be recirculated in the same unit, and the MSWLF unit must comply with the design requirements contained in Solid Waste Rule 15A NCAC 13B .1624.

39. The leachate collection and removal (LCR) system must be cleaned and maintained in accordance with NCGS 130A-295.6(h)(3) and the approved Operations Plan (**DIN 24566**). The permittee must maintain documentations of the leachate line inspections, cleaning, and monitoring in the operating records of the facility and provided to the Section upon request.
40. The permittee must complete the following permit conditions of cell activation prior to receiving any waste at a landfill cell or sub-cell:
  - a. Inside the sub-cell, areas of the protective layer that are subjected to soil erosion must be properly backfilled with the earthen material specified in the approved CQA Plan (**DIN 24566**), and compacted, re-grade, and restored to the approved grade lines.
  - b. The LCR piping must be properly connected to the existing LCR piping and a sump so that collected leachate inside the new cell or sub-cell can flow as functional as originally designed.
  - c. The geosynthetic rain cover must be removed and properly disposal off.
  - d. The geotextile that is wrapped around gravel/coarse aggregate columns, which are placed in the sumps and enveloped around leaching piping trenches, to prevent the LCR from silting up, must be properly cut, removed, and disposed so that waste can be placed in direct contact with gravel/coarse aggregate.
  - e. Documents of completing the cell activation activities stated in the paragraphs a. through d. of this permit condition must be included in the operating records of the facility and provided to the Section upon request.
41. The permittee must conduct leachate sampling and analysis according to the approved plan (**DIN 24566**) and the City of Jacksonville Sewer Service Agreement. 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.
42. The permittee must maintain the current and valid Sewer Service Agreement with the City of Jacksonville to dispose of the pretreated leachate to the City of Jackson Wastewater Treatment Plant via an on-site sewer line.

43. The partial closure areas that were received the final cover system of approximately **12 acres** at the south and west slopes of Phase 1 of the MSWLF unit are described in the reports (**DINs 22585 & 24566**). Because the areas are only a partial closure of the site, the required 30-year post-closure period shall not commence until the certified closure date of all landfill cells located at the site. Nevertheless, the permittee is responsible for the maintenance activities at the closed area according to the approved post-closure plan (**DIN 24566**).
44. The permittee must provide continuous coverage for post-closure care for the **12-acre** partial closure area in accordance with Rule 15 NCAC 13B.1628(c) until released from financial assurance requirements for post-closure care by demonstrating compliance with Rule 15 NCAC .1627(d)(3).

**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)**

*ONSLow COUNTY LANDFILL - LCID UNIT, 6705-LCID-1991*

45. This permit is for the operation of the Land Clearing and Inert Debris Landfill (LCIDLF) Unit - Phase 5 area consisting of:
  - a. The current waste footprint of approximately six (6) acres.
  - b. Remaining capacity for waste disposal up to 39,700 CY according to April 8, 2014 measurement.
  - c. Final fill grades up to a center elevation of 119 feet with a 4% slope to elevation 115 feet with the three (horizontal) to one (vertical) side slope as shown on drawing Sheet No. SD-4 of the approved plan (**DIN 24566**).
46. This LCIDLF Unit must conform to the operational requirements of the Rule, 15A NCAC 13B .0566, and to the operational plan (**DIN 24566**) required by Rule 15A NCAC 13B .0565(4). Any revisions to the approved plans must be submitted for review and approval by the Section. Operation of any landfill future phases or cells requires written approval of the Section constructed in accordance with applicable statutes and rules effective at that time.

47. This LCIDLF Unit is permitted to receive land clearing waste, yard trash, untreated and unpainted wood, and inert debris such as rock, brick, concrete, concrete block, and uncontaminated soil according to the Rule 15A NCAC 13B .0563(3) & .0566(2) and approved plan (**DIN 24566**). Waste acceptance requirements may be affected by future revisions and amendments to the NC General Statutes or to the NC Solid Waste Management Rules.
48. The permanent markers that accurately delineate the waste disposal boundary must be established and properly maintained.
49. The following requirements must be maintained and active during operation of the LCIDLF Unit at the site:
  - a. The horizontal buffer between the LCIDLF Unit and Subtitle D MSWLF Unit (Permit No. 6709-MSWL-1997) must be delineated according to Rule 15A NCAC 13B .1624(b)(3)(D).
  - b. Protective bollards or other devices must be installed and maintained to protect the gas wells and ground water monitoring wells in the area of the LCIDLF Unit.
50. Solid waste must be covered with a minimum of six (6)-inch-thick suitable soil cover or to a thickness which can adequately cover exposed wastes, whichever is greater. Soil cover must be placed over the working face at least once per month or when the active area reaches one (1) acre in size, whichever occurs first, or more often when necessary to prevent the site from becoming a nuisance, or to mitigate conditions associated with fire, windblown materials, vectors, or excessive water infiltration.
51. Solid waste must be placed a minimum of four (4) feet above the seasonal high water table according to Rule 15A NCAC 13B .0564(8)(d).
52. Amendments or revisions to the North Carolina General Statutes or to the North Carolina Solid Waste Management Rules or any violation of ground water standards may necessitate modification of the approved design or operation plans, waste acceptance requirements or may require closure of the facility.

**PART VI - TRANSFER STATION/TREATMENT & PROCESSING UNIT(S)**

*Not Applicable.*

**PART VII- MISCELLANEOUS SOLID WASTE MANAGEMENT UNIT(S)**  
**GENERAL CONDITIONS**

53. The Miscellaneous Solid Waste Management Units (MSWMU), as described in the following Permit Conditions are permitted to receive recyclables from the service area stated in the Permit **Condition No. 3** of Part I, Attachment 3, except the on-site Material Recover Facility (MRF). Received recyclables shall be stored, stockpiled, or disposed in the designated areas as shown on drawing Sheet Nos. SD-3, OP-1 and F-1 (**DIN 24566**). The permittee must obtain Section approval before re-locating any of these operations or before revising the operations.
54. The permittee must operate and manage the MSWMU according to the following Permit Conditions, all applicable statutes and rules of the State of North Carolina and the Operations Plan (**DIN 24566**). Any revisions to the approved Operations Plan shall be approved by the Section, prior to implementation. However, a permit modification is not necessary for utilizing alternate markets that are generally or widely used for the legal disposition of recovered material or recyclables.
55. The permittee must conduct random waste screening processes according to the approved Operations Plan (**DIN 24566**) to ensure that prohibited or unacceptable wastes and non-conformance wastes for recycle are identified and removed to designated areas (either at on-site or off-site facilities) for proper disposal at end of each working day.
56. The permittee must operate, maintain, and store received recyclables in reasonably sized areas or piles with adequate fire breaks and lanes, with sufficient dust and odor control measures to minimize airborne emissions and to prevent dust or litter from becoming a nuisance or safety and fire hazard.
57. 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.
58. Effective vector control measures shall be applied as necessary to control flies, rodents, insects, or vermin.
59. The permittee must keep the latest contact information for waste/recyclable haulers, firms, and/or disposal/recycling facilities, including the applicable solid waste permit number must be placed in the operating record.

OPERATIONAL CONDITIONS – MATERIAL RECOVER FACILITY

60. The material recover facility (MRF) is permitted to receive, process, and temporarily store source-separated and commingled recyclable material as defined in NCGS 130A - 290 (a)(26) from surrounding countries in North Carolina.
61. The permittee must operate and manage received material at this facility according to the requirements set forth in NCGS 130A-309.05(c)(1), (2), and (3). Material that is received and temporarily stored at the facility will be transported to a facility owned by Sonoco.
62. Non-processible or non-conforming wastes shall be segregated from the process waste stream and shall be managed, processed, and/or disposed in accordance with the approved plan and all applicable local, state, and federal rules.
63. The permittee must operate and maintain MRF in a manner so as to prevent the creation of an odor nuisance and potential health hazard or a fire hazard and to prevent from becoming windblown or attracting vector. The operation and storage areas must be maintained in sanitary conditions at the close of the day.

OPERATIONAL CONDITIONS – SCRAP TIRE STORAGE AREA

64. This unit shall be operated and managed in accordance with all applicable statutes and rules of the State of North Carolina, the requirements in Rule 15A NCAC 13B .1107, and the Operations Plan (**DIN 24566**). Any revisions to the approved plan shall be approved by the Section, prior to implementation.
65. The unit is permitted to receive used tires and scrap tires as defined in NCGS Article 9, Chapter 130A-309.53(6) & (7) and must temporarily store the used tires inside trailers at the designated area.

OPERATIONAL CONDITIONS – WHITE GOODS AND SCRAP METALHANDLING AREA

66. The permittee is permitted to receive and temporary store white goods as defined in NCGS Article 9, Chapter 130A-290(a)(44) and scrap metal in a container on a concrete pad at the designated area. The permittee must manage the white goods in accordance with the Operations Plan (**DIN 24566**) and all applicable statutes and rules of the State of North Carolina.
67. The permittee must ensure that chlorofluorocarbon refrigerants (Freon) inside the white goods are properly removed by well-trained personnel prior to transporting off-site to a recycling facility.

OPERATIONAL CONDITIONS – CONVENIENCE CENTER

68. The Convenience Center consisting of multiple size containers is permitted to receive/collect small loads of municipal solid wastes and recyclables including scrap metal, discard electronic equipment, cardboard boxes, fluorescent tube/bulbs, used motor oil/antifreeze, lead batteries, cooking oil, and oyster shell.
- a. The discard electronic equipment including television, computer as defined in NCGS 130A-309.131 must be stored in covered container (s) or structures.
  - b. The fluorescent tube/bulbs that are defined as “universal waste” must be managed and handled according to Rule 15A NCAC 13A .0119 and 40 CFR 273 - Universal Waste Rule.
  - c. The area collects and temporary stores used motor oil, defined in NCGS 130A-290.(b)(5), is a public used oil collection center as defined in NCGS 130A-290.(b)(1); therefore, the permittee must operate and manage collected used oil in accordance with NCGS 130A-309.15 & 130A-309.20.
  - d. Oyster shell recycling must be managed or disposed of according NCGS 130A-309.10(1).
69. A visible label, marking, or sign for collected waste must be posted on the exterior surface of a container or placed on a post next to the container or storage area.
70. Proper aisle spaces between waste containers, i.e., drums or roll-off boxes, must be maintained at all times for inspection of leakage, for firefighting, and for container removal.
71. After being weighed on the scale, the received MSW and/or non-conformance recyclables that permitted for disposal must be transported and subsequently disposed of at the MSWLF Unit in this permit; the recyclables must be transported to the recycling facilities when the containers are about to fill up.

OPERATIONAL CONDITIONS – PALLET AND ASPHALT SHINGLE STORAGE AREA

72. The permittee shall operate and management tear-off asphalt shingle facility by implementing the Asphalt Shingle Recycling of the approved Operations Plan (**DIN 24566**). Tear-off asphalt shingle for recycling shall be accepted only when the shingle is appropriately source-separated prior to delivery to the facility. Neither sorting, mixing, processing asphalt shingle nor separating wastes from asphalt shingle are allowed at this facility.

73. Wooden Pallet that is defined in NCGS 130A-290.(a)(44a) and is prohibited to be disposed in the MSWLF Unit can be temporarily stored or stockpiled at the designated area with the maximum dimensions approximately 10,000 square feet and 20-foot height.

OPERATIONAL CONDITIONS – YARD WASTE PROCESSING AREA

74. The area that encompasses approximately three (3) acres as shown drawing Sheet SD-3 is a treatment and processing facility as defined in Rule 15A NCAC 13B .0101(49), and is permitted to receive, process, and store land clearing debris, yard waste, or wooden pallets, as defined in Rules 15A NCAC 13B .0101(23) and .0101(56), and NCGS 130A-290(44a), respectively. The above-permitted waste stream is only generated from the mining of the existing LCIDLF Unit, Permit No. 6705-LCID-1991.
75. This permit **DOESN'T** approve this area to collect, process, treat, or stockpile the wastes stream that is defined in Permit **Condition No. 74** and generated from approved service area stated in the Permit **Condition No. 3** of Part I, Attachment 3 of this permit. The Section may lift this restriction if the permittee submit a modification to the approved operation plan for a review and approval.
76. The reclaimed waste or processed/ground material (such as mulch) from the LCIDLF Unit, Permit No. 6705-LCID-1991, must be stored or stockpiled in a manageable size, no greater than 6,000 cubic yards at any time.
77. The permittee must conduct waste screening processes and monitoring of explosive gas by trained staffs in the course of mining the LCIDLF Unit to ensure that unacceptable wastes are identified and left to the LCIDLF Unit for proper disposal at end of each working day and health and safety of personnel.
78. The permittee must conduct monitoring of explosive gas by trained staffs in the course of mining the LCIDLF Unit to ensure the health and safety of personnel.
79. The permittee is only permitted to use the processed or ground wastes such as mulch for on-site surface stabilization or erosion control. The area is not permitted for composting.
80. The permittee must keep written records of the amount of material excavated from the LCIDLF Unit and placed in the Yard Waste Processing Area as being weighed on the scale.

*- End of Section-*

**ATTACHMENT 4**  
**CONDITIONS OF PERMIT FOR POST-CLOSURE LAND USE**

**PART I: GENERAL FACILITY**

1. Pursuant to Rule 15A NCAC 13B .1627 (d)(1)(A), the permittee must maintain the integrity and effectiveness of the cap system of the landfill units, including making repairs to the cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and prevent surface water from impounding over waste and run-on and run-off from eroding or otherwise damaging the cap system. In addition, a vegetative cover of native grasses must be maintained and mowed regularly.
2. Pursuant to Rule 15A NCAC 13B .1629(c)(3), the permittee must submit the Section a plan to use the closed landfill property which is subject to review and approval by the Section. Post-closure use of the landfill must not disturb the integrity of the cap system of the landfill units, or the function of the monitoring systems. The Section may approve any other disturbance if the permittee demonstrates that disturbance of the cap system, including any removal of waste, will not increase the potential threat to human health or the environment.
3. Pursuant to Rules 15A NCAC 13B .1627 (d)(1)(C) & (D), the permittee must conduct the rule-required monitoring events and maintain a record of the monitoring events and analytical data during the post-closure periods. Reports of the sampling events and analytical data must be submitted to the Section in a timely manner.
4. Any proposed expansion to the closed landfill units will be considered a new landfill for purposes of Solid Waste Management permitting according to Rule 15A NCAC 13B .0510(d).

**PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)**

*ONSLOW COUNTY SANITARY LANDFILL (SOUTH HILL), 6705-MSWLF-1984*

5. The permittee must properly operate, maintain and decommission the constructed LFGCCs & LFGTE system at the 29-acre unlined landfill unit, which was closed in 1997, according to the approved plans, the Permit Conditions Nos. 22 and 25 in Part I, the Attachment 3 of this permit.
6. The permittee must submit the Section a written request for review and approval of any modification, alternation, expansion, or termination of the existing LFGCCs or LFGTE system prior to beginning the project.

7. If the minimum 30-year post-closure period ends before the LFGCCs or LFGTE project are terminated, pursuant to Rule 15A NCAC 13B .1627 (d)(2)(B), the post-closure care period shall be extended at least until such time as the LFGCCs or LFGTE project has been decommissioned.

*ONSLow COUNTY CATEGORY 1 LANDFILL (MIDDLE HILL), 6705-MSWLF-1984*

8. The permittee must develop, design, construct, operate, maintain and decommission the solar energy project at this unlined landfill unit, which was closed in 1988, according to the approved plan (**DIN 24566**), the following permit conditions, Rule 15A NCAC 13B .1604(b)(2) [except for .1604(b)(2)(H), which is not applicable for this project], local building ordinances/codes for structures and utilities, and applicable state and federal regulations.
9. This post-closure land use permit approves the permittee to develop, construct, and operate the Phase 1 (1.8-megawatt) solar farm at this closed unlined landfill unit consisting of the following components:
  - a. Backfilling, compacting, and re-grading the selected earthen material over the existing landfill final cover system according to the plans (**DIN 24566**) to construct a foundation system for safely supporting the solar structural components and to facilitate surface drain via a new design drainage system. The design and construction of the above-mentioned tasks must be determined and supervised by a professional engineer registered in the State of North Carolina. The copies of the as-built drawings (site layout and typical detail drawings) and approved documents related to the tasks must be placed in the facility operating record and submitted to the Section for the record upon requested.
  - b. 6,000 300-watt solar photovoltaic (PV) panels which will be mounted on fixed-tilt racking system supported by 3,000 concrete ballasts blocks on the top deck portion (approximate 8 acres) of the 26-acre closed and unlined landfill.
  - c. Supporting equipment and/or apparatus including three 500-kilowatt inverters, transformers, and electrical wiring/conduit.
  - d. The infrastructure supporting this project including services roads, stormwater drainage system, fencing/ security measures to restrict limited access, signage.
10. This permit DOESN'T approve additional solar energy project development at side sloped areas of this closed landfill and the other on-site landfill units. Future expansion of the solar project at this landfill facility requires a written request (including project narrative plan, schedule, and drawings) for Section's review and approval.

11. The permittee must ensure that the design, construction, installation, or operation of any component of the solar project encompassing the 8-acre landfill area shall:
  - a. Contract a third-party qualified engineer who is registered in the State of Carolina or his designee:
    - i. To be present on-site when the any construction work is taking place on the final cover system.
    - ii. To be present on-site when an approved task that intrudes the landfill final cover system occurs.
    - iii. To be present on-site when the restoration of the damaged final cover system including supervision of the required quality assurance/quality control tasks occurs.
    - iv. To prepare, sign, and certify a report including as-built drawings, as required that the contracted work was completed in accordance with the approved document and/or applicable rules.
  - b. Not damage the final soil cover system of this closed landfill unit including the health of existing vegetative cover, the existing environmental monitoring system, stormwater and drainage system, or LFGCCs. The permittee may be allowed to disturb the landfill final cover system according to Rule 15A NCAC 13B 1629(c)(3). All damaged components of the operations, environmental monitoring, and/or post-closure care activities in this landfill unit must be properly restored to the original condition which can be functional as there are designed for.
  - c. Not left exposed wastes inattentively. Wastes exposed from the closed landfill unit or generated during the course of construction and operation must be properly stockpiled and disposed of at the on-site Subtitle D MSWLF Unit in the end of working day.
  - d. Not interfere with the rule-required routine or non-scheduled post-closure care activities at the closed landfill unit including mowing, monitoring, inspection, maintenance, and, repair, etc. The permittee shall seamlessly coordinate the landfill post-closure care activities with the routine operation and maintenance activities of the solar project.
12. The permittee must conduct landfill gas monitoring and take necessary actions should the detected explosive gas concentration exceed the action level according to the approved plan (DIN 24566) and Rule 15A NCAC 13B. 1626(4). The adequate and sufficient ventilation for any enclosed structures such as inverter, transformer, and/or

boxes/panels/vaults to accommodate electrical/electronic devices at the landfill unit must be properly designed and installed.

13. The permittee must prepare and finalize the written document of operation and maintenance of the solar array which shall be integrate into the existing Post Closure Plan for this landfill unit after the solar system is constructed, tested, and connected to the local utility power grids. The copy of final post-closure plan must be placed in the facility operating record and submitted to the Section for review and approval.
14. If the minimum 30-year post-closure period ends before the solar energy project are terminated, pursuant to Rule 15A NCAC 13B .1627 (d)(2)(B), the post-closure care period shall be extended at least until such time as the solar energy project has been terminated.

**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 & PROCESSING UNIT(S)**

*Not Applicable*

**PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT**

*Not Applicable*

- End of Permit Conditions -