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

Pat McCrory
Governor

John E. Skvarla, III
Secretary

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

SOLID WASTE MANAGEMENT FACILITY
Permit No. 9703-INDUS-1981

Louisiana-Pacific Corporation
is hereby issued a:

PERMIT TO CONSTRUCT
HORIZONTAL EXPANSION PHASE 3B

PERMIT TO OPERATE
EXISTING LANDFILL UNIT & HORIZONTAL EXPANSION PHASE 3A

PERMIT FOR CLOSURE
NOT APPLICABLE

Located on *1151 ABTco Road* south of Highway 268 and west Roaring River, Wilkes 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.

Digitally signed by Edward F. Mussler III, P.E.
DN: cn=Edward F. Mussler III, P.E., o=NCDWM, ou=Solid Waste Section, email=ed.mussler@ncdenr.gov, c=US
Date: 2014.06.19 11:09:49 -04'00'

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

ATTACHMENT 1
GENERAL PERMIT CONDITIONS/INFORMATION

Permit to Operate Data Table

Permit	Status	Issuance	Expiration
9703-INDUS-1981	Active	June 19, 2014	December 28, 2014

PART I: GENERAL FACILITY

1. This permit is issued by the North Carolina Department of Environment and Natural Resources, Division of Waste Management, Solid Waste Section (Section). In accordance with North Carolina Solid Waste Management Rule 15A NCAC 13B .0201(d), a solid waste management facility permit shall have two parts: a Permit to Construct and a Permit to Operate. The Permit to Construct must be implemented in accordance with Attachment 2 of this permit. The Permit to Operate must be implemented in accordance with Attachment 3 of this permit.

2. The persons to whom this permit is issued ("permittee") are the owners and operators of the solid waste management facility.

3. The Permit to Operate for this facility, dated January 7, 1981, was recorded by the Wilkes County Register of Deeds on January 14, 1981 in Book 592 on Page 505 (Document ID number 18772).

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 receiving waste at this facility the permittee shall be considered to have accepted the terms and conditions of this permit.

6. Operation of this solid waste management facility 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.

Properties Approved for the Solid Waste Facility

Wilkes County, N.C. Register of Deeds				
Book	Page	Landowner	Parcel ID No.	Acres
708	588	Louisiana-Pacific	1603640	405.2±
				Total Site Acreage: 405.2±

Notes:

1. Deed book references are from the Wilkes County GIS website (http://74.114.71.51/wilkesweb/wilkes.html) accessed April 2013.

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

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

Not applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

Permitting History

1. On January 7, 1981 Permit to Operate was issued for operation of a Sanitary Landfill (Industrial).
2. On October 19, 1992 facility ownership was transferred from Abitibi Carolina Corporation to ABTco, Inc.
3. On February 23, 1999 facility ownership was transferred from ABTco, Inc. to Louisiana-Pacific Corporation.

4. On November 4, 2002 an amendment was made to the Permit to Operate for a vertical expansion of the landfill unit.
5. On December 28, 2009 an amendment was made to the Permit to Operate for a five-year renewal and a Permit to Construct was issued for the construction of the Horizontal Expansion.
6. On April 12, 2013 a modification was made to the Permit for renewal of the Horizontal Expansion Permit to Construct.
7. One June 19, 2014 a modification was made to the Permit for operation of Phase 3A of the Horizontal Expansion.

Permit Type	**Date Issued**	**DOC ID**
Original Permit to Operate	January 7, 1981	
Permit Amendment	November 4, 2002	
Permit Amendment	December 28, 2009	8903
Permit Modification	April 12, 2013	18298
Permit Modification	**June 19, 2014**	**21203**

LIST OF DOCUMENTS FOR THE APPROVED PLAN

DOC ID	**APPROVED DOCUMENT NAME**
4853	*Landfill Expansion/Permit Modification*. Prepared by RMT. Prepared for: Louisiana-Pacific Corporation. February 13, 2008.
4854	*Landfill Expansion/Permit Modification*. Prepared by RMT. Prepared for: Louisiana-Pacific Corporation. May 2007.
4855	*Response Letter: Additional Information Request, March 6, 2008*. Prepared by RMT. Prepared for: Louisiana-Pacific Corporation. May 5, 2008.
8464	*Letter: Opinion of Probable Costs for Flyash Landfill Closure*. Prepared by RMT. Prepared for: Louisiana-Pacific Corporation. August 10, 2009.
8766	*Letter: 30 Year Maintenance Costs for Expanded Ash Fill [Post-closure]*. Prepared by Roger Latterell. Prepared for: Louisiana-Pacific Corporation. October 13, 2009.
8989	*Letter: Edits to O&M Procedures in Permit Application*. Prepared by Billy Thompson. Prepared for: Louisiana-Pacific Corporation. December 2, 2009.
21237	*Phase 3A Horizontal Expansion Construction Certification*. Prepared by: Roy Hart. Prepared for: Louisiana-Pacific Corporation. June 4, 2014.

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

Not Applicable

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

Not Applicable

- End of Section -

ATTACHMENT 2
CONDITIONS OF PERMIT TO CONSTRUCT

PART I: GENERAL FACILITY

1. The issuance date for this Permit to Construct is **January 8, 2014**. The initial, substantial, construction authorized by this Permit to Construct must commence within 18 months from the issuance date of this permit. If substantial construction does not begin within 18 months from the issuance date of this permit, then the permit to construct shall expire. 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. The permittee may reapply for the permit to construct prior to the expiration date. The re-application will be subject to the statutes and rules in effect on that date and may be subject to additional fees.

2. 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 the Approved Plan.

3. The permittee must conduct a preconstruction meeting at the facility prior to initiating construction of any unit/cell and must notify the Section at least 10 days prior to the meeting.

4. 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 and be subject to a permitting fee.

Geologic, Ground Water and Monitoring Requirements

5. Prior to issuing the Permit to Operate, samples from new ground water monitoring wells and surface water stations shall be sampled for the constituent list approved in the June 2009 Environmental Monitoring Plan.

6. Prior to construction of the phase or cell(s) within the phase, all piezometers, borings, and groundwater monitoring wells within the footprint must be properly abandoned in accordance with 15A NCAC 2C .0113 (b)(1), entitled “Abandonment of Wells.

7. 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.

8. A Licensed Geologist must report any pertinent geological feature(s) exposed during phase or cell excavation. Prior to placing any landfill liner, the geologist must submit to the Section hydrogeologist 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.

9. A Licensed Geologist must supervise installation of groundwater monitoring wells and surface water sampling stations.

10. Any modification to the approved water quality monitoring, sampling, and analysis plan must be submitted to the Section Hydrogeologist for review.

11. Within 30 days of completed construction of each new groundwater monitoring well, a well construction record (GW-1 form), typical well schematic, boring log, field log and notes, and description of well development activities must be submitted to the Section.

12. 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.

13. 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.

Erosion and Sedimentation Control Requirements

14. 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.

15. All earth disturbing activities must be conducted in accordance with the Sedimentation Pollution Control Act of 1973 (15 NCAC 4) and consistent with any other local, state or federal requirements.

16. 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.

17. 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: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

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

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

18. Pursuant to the NC Solid Waste Management Rules (Rule) 15A NCAC 13B .0201(c) and (d)(1), this permit approves construction of the Horizontal Expansion as described in Attachment I, Part IV, List of Documents for the Approved Plan. The construction was divided into two parts: Phase 3A, which has been constructed and approved for operation, and Phase 3B which requires construction. The construction of Phase 3A fulfilled the timing requirement of Item 1. The Permit to Construct the Horizontal Expansion shall expire January 8, 2019.

19. The following conditions must be met prior to operation:

    a. The Permittee must obtain a Permit to Operate for Phase 3B from the Section in accordance with 15A NCAC 13B .0201(d).

    b. Construction Quality Assurance (CQA) documentation as well as a certification by the project engineer that the landfill was built in accordance with approved plans and the conditions of the permit must be submitted to the Section for review and approval.

    c. The Permittee must contact the appropriate regional environmental specialist and permitting engineer to determine whether the Section chooses to hold a pre-operative meeting with key landfill personnel and representatives of the Section.

    d. The edge of the waste footprint must be identified with permanent physical markers.

    e. The Financial Assurance instrument for approved Closure and Post-closure Care costs must be submitted to the Section.

    f. A permitting activity modification fee must be paid.

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

Not Applicable

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

Not Applicable

PART VII: MISCELLANEOUS SOLID WASTE MANAGEMENT

Not Applicable

- End of Section-

ATTACHMENT 3
CONDITIONS OF PERMIT TO OPERATE

PART I: GENERAL FACILITY

1. The Permit to Operate shall expire **December 28, 2014**. Pursuant to 15A NCAC 13B .0201(g), no later than **July 28, 2014**, the owner or operator must submit a request to the Section for permit review prepared in accordance with Section .1603(a)(2) or (3) as applicable, and must update pertinent facility plans including, but not limited to, the facility operation and waste screening plans.

2. All sedimentation and erosion control activities must be conducted in accordance with the Sedimentation Control Act N.C.G.S. 113A-50, et seq., and rules promulgated under 15A NCAC 4.

3. The edge of the waste footprint for all disposal units must be identified with permanent physical markers.

4. The permittee must not knowingly dispose of, or accept for transfer for subsequent disposal, municipal solid waste that is generated within the boundaries of a unit of local government that by ordinance:

   a. Prohibits generators or collectors of municipal solid waste from disposing of that type or form of municipal solid waste.

   b. Requires generators or collectors of municipal solid waste to recycle that type or form of municipal solid waste.

5. 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.

6. Financial assurance as required by state rules and statutes must be continuously maintained for the duration of the facility in accordance with applicable rules and statutes. Closure and Post-Closure cost estimates and financial instruments must be updated annually.

7. Closure or partial closure of any unit must be in accordance with the Closure Plans described in the approved plans and applicable rules and statutes. Revised Closure Plans must be submitted to the Division at least 90 days prior to implementation.

Operational Requirements

8. This facility is permitted to receive solid waste generated by Louisiana-Pacific Corporation as defined in G.S. 130-290 (a)(18a) and (35), except where prohibited by the

N. C. General Statues Article 9 of Chapter 130A, and the rules adopted by the Commission for Health Services.

9. The facility operator must complete an approved operator training course in compliance with G.S. 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 G.S. 130A-309.25 and addressed by memorandum dated November 29, 2000.

10. Alternative daily cover materials and methods must be used in accordance with the approved plans and Solid Waste Section guidelines. Any alternative daily cover materials or methods not previously approved by the Section require review and approval before use. In these cases, a request for use must include a plan detailing the comprehensive use and a demonstration of the effectiveness of the alternative daily cover. The plan must be developed according to Section guidelines. Plans which are approved by the Section will be incorporated into, and made a part of, the approved documents listed in Attachment 1.

11. The facility must maintain records for all solid waste materials accepted as alternative cover material and used as alternate daily cover. The records must include: the date of receipt, weight of material, general description of the material, identity of the generator and transporter, and county of origin. Such records must be made available to the Solid Waste Section upon request.

Monitoring and Reporting Requirements

12. Groundwater, surface water, and landfill gas monitoring locations must be established and monitored as identified in the approved plans.

13. A licensed geologist must be present to supervise the installation of groundwater monitoring wells. The exact locations, screened intervals, and nesting of the wells must be established after consultation with the SWS Hydrogeologist at the time of well installation.

14. Ground water monitoring wells and surface water sampling locations must be sampled for Appendix I constituents at least semi-annually according to the specifications outlined in the approved water quality monitoring plan and the current policies and guidelines of the Section in effect at the time of sampling.

15. Landfill gas monitoring wells must be sampled for explosive gases at least quarterly and according to specifications outlined in the approved landfill gas monitoring plan and current policies and guidelines of the Section in effect at the time of sampling.

16. Reports of the analytical data for each monitoring event must be submitted to the Section within 120 days of the respective sampling event. Analytical data must be submitted in a manner prescribed by the Section. Records of all groundwater, surface water, and leachate analytical data must be kept as part of the permanent facility record.

17. Untreated leachate must be sampled and analyzed at least semi-annually concurrently with the groundwater water and surface water sampling, one sample per event. The leachate must be analyzed for the same constituents as the groundwater monitoring wells and surface water monitoring locations as specified in the approved monitoring plan. 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.

18. A readily accessible unobstructed path must be cleared and maintained so that four-wheel vehicles may access monitoring well locations at all times.

19. A field log book which details all development, sampling, repair, and all other pertinent activities associated with each monitoring well and all sampling activities associated with each surface water and leachate sampling location must be kept as part of the permanent facility record.

20. All well construction records and soil boring logs for new wells must be submitted to the Solid Waste Section Hydrogeologist for review within 30 days of completion.

21. The owner or operator must maintain a record of the amount of solid waste received at the landfill unit, compiled on a monthly basis. Scales must be used to weigh the amount of waste received.

22. 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 October 8, 1993 through the date of the annual volume survey must be included in the report.

e. The completed report must be forwarded to the Regional Waste Management Specialist for the facility by the date due on the prescribed annual facility report form.

f. A copy of the completed report must be forwarded to each county manager for each county from which waste was received at the facility. Documentation that a copy of the report has been forwarded to the county managers must be sent to the Regional Waste Management Specialist by the date due on the prescribed annual facility report form.

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

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

Not Applicable

PART IV: INDUSTRIAL LANDFILL UNIT(S)

23. This permit approves the operation of the Existing Landfill Unit and Phase 3A of the Horizontal Expansion as delineated by interim edge of waste markers, as well as the onsite environmental management and protection facilities as described in the approved plans.

24. The permitted annual waste disposal rate is approximately 20,000 tons per year, with a maximum variance in accordance with G.S. 130A-294(b1)(1). This rate is approximately 57 tons per day assuming 350 operating days per year as identified in the approved plan.

25. The following table lists the estimated gross capacity, acreage and status details for the landfill units. Gross capacity is defined as the calculated volume from the elevation of initial waste placement to the top of the final cover.

Unit	Acres	Gross capacity (cubic yards)	Status
Existing	5.0	91,500	Operational
Expansion	2.0	140,800	Operational*
Total	7.0	232,300	

*Note: Only Phase 3A of the Horizontal Expansion is operational.

26. The following, at a minimum, must not be accepted for disposal at the facility: hazardous waste, yard trash, liquid wastes, regulated medical waste, sharps not properly packaged,

PCB waste as defined in 40 CFR 761, and wastes banned from disposal in North Carolina by G.S. 130A-309.10(f).

27. The leachate collection system must be maintained in accordance with the leachate management plan. The plan shall include provisions for periodic cleaning and visual inspection. Documentation of the inspections, and cleaning and monitoring must be included in the operating records of the facility and provided to the Department upon request.

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

Not Applicable

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

Not Applicable

PART VII- MISCELLANEOUS SOLID WASTE MANAGEMENT

Not Applicable

- End of Section-

ATTACHMENT 4
CONDITIONS OF PERMIT FOR CLOSURE

PART I: GENERAL FACILITY

Not Applicable

PART II: MUNICIPAL SOLID WASTE LANDFILL UNIT(S)

Not Applicable

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 -