

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

PERMIT TO CONSTRUCT AIR EMISSIONS EQUIPMENT

THIS CERTIFIES THAT

International Paper Company, Columbus Mill
4335 Carson Road
Columbus, Mississippi
Lowndes County

“Multiple Fuel Power Boiler LVHC NCG Project”

has been granted permission to construct air emissions equipment to comply with emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

Krystal Rudolph

AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: September 11, 2015

Modified: September 28, 2020

Permit No.: 1680-00044

Part I.

A. GENERAL CONDITIONS

1. This permit is for air pollution control purposes only. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D.)
2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)
3. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(5).)
4. It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.1.D(6).)
5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(7).)
6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(a).)
7. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(b).)
8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(c).)
9. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such

records directly to the Administrator along with a claim of confidentiality. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.B(15)(d).)

10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A.)
11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. (Ref.: Miss. Code Ann. 49-17-29)
12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in 11 Miss. Admin. Code Pt. 2, R. 1.1.10, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 1.10.)
13. Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.A(4).)
14. Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
 - a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
 - b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions. (Ref.: Miss. Code Ann. 49-17-21)
15. Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:
 - a) Persistent violation of any of the terms or conditions of this permit;

- b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
or
- c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.2.C.)

16. Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control. (Ref.: Miss. Code Ann. 49-17-39)
17. Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.16.B.)
18. Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref. 11 Miss. Admin. Code Pt. 2, R. 2.1.D(7).)
19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(1).)
20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(3).)
21. Beginning Operation: Except as prohibited in Part I, Condition 24 of this permit, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by 11 Miss. Admin. Code Pt. 2, R. 2.13.G. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(4).)
22. Application for a Permit to Operate: Except as otherwise specified in Part I, Condition 24 of this permit, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(5).)

23. Operating Under a Permit to Construct: Except as otherwise specified in Part I, Condition 24 of this permit, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(6).)
24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to “net” out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(7).)
25. Compliance Testing: Regarding compliance testing:
- a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
 - b) Compliance testing will be performed at the expense of the permittee.
 - c) Each emission sampling and analysis report shall include but not be limited to the following:
 - (1) detailed description of testing procedures;
 - (2) sample calculation(s);
 - (3) results; and
 - (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.
- (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.6.B(3), (4), & (6).)

B. GENERAL NOTIFICATION REQUIREMENTS¹

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(2).)
2. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.C(3).)

¹ The Multiple Fuel Power Boiler LVHC NCG Project was completed in 2016; therefore, no additional notifications are required upon modification of this permit.

3. Upon the completion of construction or installation of an approved stationary source or modification, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(1).)

4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with “as built” plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an “as built” application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. (Ref.: 11 Miss. Admin. Code Pt. 2, R. 2.5.D(2).)

Part II.
EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning upon receipt of certification of construction, the permittee is authorized to modify Emission Point AA-081, the 1400 MMBTU/hr Combination Boiler with multi-cyclone dust collector and electroscrubber in series for particulate matter control to construct a gas handling system to allow the permittee to burn Low Volume High Concentration NCGs from (1) chip bin (AA-032A), and (2) steam stripper (AA-032B) and (3) HTD (AA-032C) (evaporator hotwell, turpentine decanter and digester condenser) in the boiler as a backup for the recovery furnace and to replace the electroscrubber with an Electrostatic Precipitator.

EMISSIONS LIMITATIONS

Particulate Matter	0.045 lbs/MMBTU, not to exceed 63.0 lbs/hr and 275.9 tons/year
PM ₁₀	0.045 lbs/MMBTU not to exceed 63.0 lbs/hr and 275.9 tons/year
Sulfur Dioxide	0.45 lbs/MMBTU (12-month rolling average) and not to exceed 630 lbs/hr (12-month rolling average) and 227 tons/year ² (12-month rolling total)
	0.50 lb/MMBTU (30-day rolling average) when burning oil other than very low sulfur fuel
Nitrogen Oxides	0.5 lbs/MMBTU (30-day rolling average) and not to exceed 700.0 lbs/hr (30-day rolling average) and 3066 tons/year (12-month rolling total).
Carbon Monoxide	0.5 lbs/MMBTU, not to exceed 700 lbs/hr and 3066 tons/yr.
Volatile Organic Compounds	0.10 lbs/MMBTU, not to exceed 140.0 lbs/hr and 613.2 tons/year.
TRS	0.0036 lb/MMBTU not to exceed 5.04 lb/hr and 22.1 tons/yr.
Lead	0.51 lb/hr and 2.2 tons.

² The annual tons/year SO₂ emission limit effectively revised as of the date of the permit modification.

Opacity	when combusting a coal or oil containing fuel, opacity may not exceed 20% based upon a 6 minute average except for one six minute interval per hour which allows a maximum of 27%. Standards do not apply for periods of start-up, shutdown, or malfunction
Operating Limitations	1400 MMBTU/hr maximum heat input based upon 24-hour rolling average

Fuel Limitation:

The permittee will be limited to untreated wood material other than crossties, rejects from pulp mill, coal, off-site non-wood cellulosic fiber, kraft sludge generated on-site, waste fluff pulp from CMF facility, boiler cinders from Weyerhaeuser mills in Bruce, Philadelphia, and Millport, Alabama, non-hazardous oil absorbent material used to clean oil leaks/spills on-site, a 12 month rolling average of 8700 gallons/ month of on specification used oil, and fuel oil. The permittee will limit the BTU value for a combination of fuel oil and natural gas to 10% or less and a combination of coal and fuel oil to 30% or less of the rated maximum capacity of the boiler (i.e., 1.2264×10^{13} BTU annually) based upon a 12 month rolling total. The boiler is permitted to burn HVLCs as the primary means of destruction, and **LVHCs from the chip bin, steam stripper, and HTD collection system as backup control for the Recovery Furnace.**

Fuel Monitoring and Reporting

The permittee shall record and maintain records of each fuel combusted each day and calculate the annual capacity factor for coal, natural gas and oil for each month. The annual capacity factor is determined on a 12-month rolling average with a new annual capacity factor calculated at the end of each calendar month. (Ref.:40 CFR Part 49b(d))

Continuous Emission Monitoring

The permittee shall install, calibrate, maintain, and operate continuous monitoring for opacity (COMS) to monitor and record the opacity discharged into the atmosphere. The procedures under Performance Specification 1 of 40 CFR 60 Appendix B shall be followed for evaluation and operation of the continuous monitoring system. (Ref.: 40 CFR 60.48b(a) and (e),

NO_x CEMS:

The permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring nitrogen oxides emissions discharged to the atmosphere and record the output of the system. Data shall be recorded during all periods of operation except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments. The 1-hour average NO_x emission rates measured by the continuous monitor and

required under 40 CFR 60.13(h) shall be expressed in lb/million BTU heat input and shall be used to calculate the average emission rate. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2). At least 2 data points shall be used to calculate each 1-hour average.

The procedures under 40 CFR 60.13 shall be followed for the evaluation and operation of the continuous monitoring system and the span value for NO_x shall be determined as outlined in 40 CFR 60.48b(e)(2).

When NO_x emissions data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75% of the operating hours in each operating day, in at least 22 out of 30 successive operating days. (Ref.: 40 CFR 60.48b(b) thru (f))

The permittee shall use the NO_x CEMS to demonstrate compliance with the lb/hr limit on 30-day rolling average basis, determined according to the averaging procedures in 40 CFR Part 60, Subpart Db, and with the ton/yr limit on a 12-month rolling total basis, calculated at the end of each month.

SO₂ CEMS:

The permittee shall calibrate, maintain, and operate a continuous monitoring system for measuring SO₂ concentrations and either oxygen or carbon dioxide concentrations discharged to the atmosphere and record the output of the system. Data shall be recorded during all periods of operation except for continuous monitoring system breakdowns and repairs. The 1-hour average SO₂ emission rates measured by the continuous monitor as required under 40 CFR 60.13(h) shall be expressed in lb/million BTU heat input and shall be used to calculate the average emission rate based upon a 30 day rolling average. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2). The steam generating unit must operate at least 30 minutes for each one hour to calculate an average hourly SO₂ emission rate. Hourly SO₂ emission rates are not calculated if the unit is not operating for thirty minutes or more in a given clock hour. The permittee shall obtain emission data for at least 75% of the operating hours in at least 22 of 30 successive boiler operating days to meet the minimum data requirements to calculate a 30 day rolling average. Otherwise, the permittee shall supplement the emission data with other monitoring systems as approved by the Administrator or the reference methods and procedures as described in 40 CFR Part 60.47b(b).

The permittee shall certify SO₂ and O₂ or CO₂ CEMS monitoring is in accordance with 40 CFR Part 60.47.b for relative accuracy and the procedures under 40 CFR Part 60.13 shall be followed for installation, evaluation, and operation of CEMS under 40 CFR Part 60.47b.

The permittee shall use the SO₂ CEMS to demonstrate compliance with the lb/hr limit on 12-month rolling average basis, determined at the end of each month, and with the ton/yr limit on a 12-month rolling total basis, calculated at the end of each month.

Monitoring and Recordkeeping for Combustion of NCG Gases

The permittee shall record each occurrence that HVLC NCGs (AA-033) are diverted from the combination boiler to the 400 MMBTU/hr natural gas package boiler (AA-080) by recording the date, the start time, and the duration of the occurrence.

Performance Testing

For the Combination Boiler, the permittee shall demonstrate compliance with the emission limitations for the following pollutants by stack testing in accordance with specified methods and submittal of the test report.

Pollutant	Test Method
CO	EPA Reference Methods 10
VOC (as propane)	EPA Reference Methods 25
TRS	EPA Reference Methods 16A/6C
Lead	EPA Reference Method 12

Part III.
OTHER REQUIREMENTS

The permittee shall comply with all applicable Federal Standards of Performance for New Stationary Sources (NSPS), 40 CFR Part 60, Subpart A – General Provisions and Subpart Db – Industrial Commercial/Institutional Steam Generating Units.