STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

AND PREVENTION OF SIGNIFICANT DETERIORATION AUTHORITY TO CONSTRUCT AIR EMISSIONS EQUIPMENT THIS CERTIFIES THAT

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

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 and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: July 28, 2010

Permit No.: 1680-00044

Modified: (Change of ownership from Weyerhaeuser to International Paper) July 18, 2017

Part I

A. GENERAL CONDITIONS

- 1. This permit is for air pollution control purposes only. (Ref.: APC-S-2, Section I.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.: APC-S-2, Section II.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.: APC-S-2, Section I.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.: APC-S-2, Section II.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.: APC-S-2, Section II.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.: APC-S-2, Section II.B.15(b))
- 8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-2, Section II.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.: APC-S-2, Section II.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.: APC-S-2, Section V.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 Regulation APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. (Ref.: APC-S-1, Section 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.: APC-S-2, Section V.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.: APC-S-2, Section II.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.: APC-S-2, Section XVI.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. APC-S-2, Section I.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.: APC-S-2, Section V.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.: APC-S-2, Section V.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 APC-S-2, Section XIII.G. (Ref.: APC-S-2, Section V.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.: APC-S-2, Section V.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.: APC-S-2, Section V.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.: APC-S-2, Section V.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.: APC-S-2, Section VI.B.3, 4, and 6)

B. GENERAL NOTIFICATION REQUIREMENTS

1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: APC-S-2, Section V.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.: APC-S-2, Section V.C.3)
- 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.: APC-S-2, Section V.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.: APC-S-2, Section V.D.2)

Part II.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning July 28, 2010, the permittee is authorized to construct and or modify air emissions equipment and emit air contaminants from Emission Point AA-100, the Kraft Mill 7.33 MM lbs of virgin black liquor solids (BLS)/day (annual average) Recovery Furnace with an electrostatic precipitator (ESP) for PM control (Formerly Emission Pt. AA-001).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

EMISSIONS LIMITATIONS

Particulate Matter	0.015 grains/dscf corrected to 8% oxygen not to exceed 63.5 lbs/hr and 407.3277.9 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
PM ₁₀	0.015 grains/dscf corrected to 8% oxygen not to exceed 63.5 lbs/hr and 277.9 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A
Sulfur Dioxide	20 ppm by volume on a dry basis, corrected to 4% oxygen not to exceed 99.3 lbs/hr and 434.7 tons/year, as determined by EPA Reference Method 6C, 40 CFR 60, Appendix A.
Nitrogen Oxides	80 ppm by volume on a dry basis, corrected to 8% oxygen not to exceed 285.2 lbs/hr and 1248.8 tons/year, as determined by EPA Test Method 7E, 40 CFR 60, Appendix A.
Carbon Monoxide	300 ppm by volume on a dry basis, corrected to 8% oxygen not to exceed 650.6 lbs/hr and 2849.6 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.
Volatile Organic Compounds	0.6 lb/ton of virgin black liquor solids not to exceed 91.7 lbs/hr and 401.4 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.

Total Reduced Sulfur (sum of hydrogen sulfide, methyl mercaptan, dimethyl and dimethyl disulfide)	5 ppm by volume on a dry basis, corrected to 8% oxygen not to exceed 13.2 lbs/hr and 57.8 tons/year, as sulfide, determined by EPA Test Method 16A/6C, 40 CFR 60, Appendix A.
Opacity	Less than 35% opacity, as set forth by 40 CFR 60.282(a)(1)(ii), and determined by EPA Test Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

While combusting fuel oil in the Recover Furnace the permittee shall comply with applicable emissions limitations as set forth in Federal standards of Performance for New Stationary Sources (NSPS), 40 CFR 60, Subpart Db, Industrial/Commercial/Institutional Steam Generating Units, Sections 60.42b(d), (e), and (g); and 60.43(b), (e), (f), and (g).

The permittee shall limit opacity to not exceed 20% based on an average of ten consecutive 6-minute averages; not to exceed 35% for 6% or more of the operating time within any quarterly period in accordance with MACT Subpart MM.

When combusting black liquor solids the opacity shall not exceed 35%. When combusting fuel oil alone or in combination with any other fuel (except BLS) the opacity shall not exceed 20% based on a six-minute average except for one six minute period per hour not to exceed 27%.

FUEL RESTRICTIONS

The permittee shall restrict fuels so as to ensure continual compliance with stack emission limitations.

The permittee shall restrict the use of fuel oil and natural gas in the recovery furnace such that on a 12-month rolling basis the sum of the annual capacity factors for fuel oil and natural gas, (i.e., the ratio of the actual heat input from the combustion of fuel oil or natural gas to 1.6053×10^{13} BTU/yr) is not greater than 0.10.

FUEL MONITORING AND REPORTING

The permittee shall record and maintain records of the amount of fuel oil and natural gas combusted during each day and calculate the annual capacity factor individually for fuel oil and natural gas for each calendar quarter, as set forth by 40 CFR 60.49b(d).

The permittee shall report the annual capacity factors for each quarter.

EMISSION MONITORING

The permittee shall install and operate continuous emission monitoring systems (CEMS) for monitoring total reduced sulfur, and either oxygen (O₂) or carbon dioxide (CO₂); and a continuous opacity monitoring system (COMS). These systems shall meet specifications under 40 CFR 60, Appendix B and shall comply with the provisions of 40 CFR 60, Sections 60.13, and 60.284; Part III, Item (4).

The permittee shall monitor sulfur dioxide from fuel oil combustion in compliance with 40 CFR 60, Sections 60.13 and 60.47b; and Part III, Item (5).

REPORTING AND RECORDKEEPING

The permittee shall provide notices and reports, and maintain records as required by 40 CFR 60, Sections 60.7, 60.49b, and 60.284(c) and (d).

The permittee shall provide notices and reports, and maintain records as required by 40 CFR 63, Sections 63.9 and 63.10.

PERFORMANCE TESTING

The permittee shall demonstrate compliance with the emission limitations for the following pollutants by stack testing in accordance with the specified methods and the submittal of the report of the results.

Particulate Matter	EPA Reference Method 5.
\mathbf{PM}_{10}	EPA Reference Method 5.
Sulfur Dioxide	EPA Reference Method 6C. (From fuel oil combustion) as specified in 40 CFR 60.47b.
Nitrogen Oxides	EPA Reference Method 7E. The sampling time for each shall be at least eight hours. The test shall consist of three

	sample runs performed consecutively in time.
Carbon Monoxide	EPA Reference Method 10. The sampling time for each shall be at least eight hours. The test shall consist of three sample runs performed consecutively in time.
Volatile Organic Compounds	EPA Reference Method 25.
Total Reduced Sulfur Dioxide	EPA Reference Method 16, 16A/6C, 16B.
Opacity	EPA Reference Method 9.

CEMS AND COMS PERFORMANCE EVALUATION

The permittee shall conduct a performance evaluation of CEMS and COMS as specified in 40 CFR 60 Appendix B. The performance of the evaluation and the submittal of the written report of the results shall comply with the provisions of 40 CFR 60, Sections 60.13(c) and 60.13(c)(2), respectively. Further, should a CEMS (pollutant monitor and diluent monitor) be used for monitoring sulfur dioxide, it must comply with 40 CFR 60, Appendix F, Procedure 1.

Part II. (Continued) EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning <u>July 28, 2010</u>, the permittee is authorized to construct and or modify air emissions equipment and emit air contaminants from Emission Point AA-101, the Kraft Mill 7.33 MM lbs of virgin BLS/day (annual average) Smelt Dissolving Tank that either discharges to the Ducon 144 model 4 wet scrubber for control of PM and gaseous emissions (Formerly Emission Pt. AA-002) or into the Recovery Furnace (AA-100).

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

Particulate Matter	0.12 lb/ton of black liquor solids not to exceed 18.33 lbs/hr and 80.26 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
PM ₁₀	18.33 lbs/hr and 80.26 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
Sulfur Dioxide	0.1 lb SO ₂ /ton black liquor solids, not to exceed 15.27 lbs/hr and 66.89 tons per year, as determined by EPA Reference Method 6C, 40 CFR 60, Appendix A.
Total Reduced Sulfur (sum of hydrogen sulfide, methyl mercaptan, dimethyl sulfide and dimethyl disulfide)	0.033 lb/ton of black liquor solids, not to exceed 5.04 lbs/hr and 22.07 tons per year, as determined by EPA Test Method 16A/6C, 40 CFR 60, Appendix A.
Opacity	40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

EMISSIONS LIMITATIONS

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

CONTINUOUS MONITORING

The permittee shall install, calibrate, operate, and maintain monitoring devices that continuously measure the pressure differential across the scrubber, and the scrubbing liquid flowrate and supply pressure, except during times the Smelt Dissolving Tank flue gas is ducted into the Recovery Furnace. The scrubber differential pressure monitoring device must be certified by the manufacturer to be accurate with ± 2 inches of water column gauge pressure.

The scrubbing liquid flowrate monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of the design scrubbing liquid flowrate. The scrubbing liquid supply pressure monitoring device(s) must be certified by the manufacturer to be accurate within ± 15 percent of the design(s) scrubbing liquid supply pressure and should be located as close as possible to the scrubbing liquid discharge point. All monitoring devices required under this paragraph shall be recalibrated semiannually and in accordance with the manufacturer's instructions.

PERFORMANCE TESTING

The permittee shall demonstrate compliance with the emission limitations for the following pollutants by stack testing in accordance with the specified methods and the submittal of the report of the results. Testing and report submittal shall comply with the provisions of 40 CFR 60, Sections 60.8(b), (c), (d), and (f), 60.45(b), 60.46b, and 60.285; and PART III, Item (3).

Particulate Matter	EPA Reference Method 5.
\mathbf{PM}_{10}	EPA Reference Method 201 or 201A.
Sulfur Dioxide	EPA Reference Method 6C.
Total Reduced Sulfur Dioxide	EPA Reference Method 16, 16A/6C, 16B.
Opacity	EPA Reference Method 9.

During times where emissions from the Smelt Dissolving Tank, AA-101, are routed through the Recover Boiler, AA-110, the permittee is not required to stack test AA-101.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning <u>July 28, 2010</u>, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-110, the Kraft Mill 504 tons per day (annual average) Lime Kiln that discharges to an ESP for reduction of PM. The Lime Kiln is also a back-up control device for the NCG Incinerator to control LVHC NCGs.

Such emissions shall be limited by the permittee as specified below:

EMISSIONS LIMITATIONS

Particulate Matter	0.01 grains/dscf corrected to 10% oxygen not to exceed 3.84 lbs/hr and 16.82 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
PM ₁₀	0.01 grains/dscf corrected to 10% oxygen not to exceed 3.84 lbs/hr and 16.82 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
Sulfur Dioxide (w/out NCG incineration)	20 ppm by volume on a dry basis, corrected to 10% oxygen not to exceed 8.97 lbs/hr and 39.28 tons/year, as determined by EPA Test Method 6C, 40 CFR 60, Appendix A.
Sulfur Dioxide (with NCG incineration)	450 ppm by volume on a dry basis, corrected to 7% oxygen not to exceed 110.00 lbs/hr and 39.28 tons/year, as determined by EPA Test Method 6C, 40 CFR 60, Appendix A.
Nitrogen Oxides	175 ppm by volume on a dry basis corrected to 10% oxygen not to exceed 56.38 lbs/hr and 246.92 tons/year, as determined by EPA Test Method 7E, 40 CFR 60, Appendix A.
Carbon Monoxide	50.00 lbs/hr and 219.00 tons/year, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.

Volatile Organic Compounds	1 lb/ton of CaO not to exceed 21.00 lbs/hr and 91.98 tons/year, as determined by EPA Test Method 25, 40 CFR 60, Appendix A.
Total Reduced Sulfur	8 ppm by volume on a dry basis corrected to 10% oxygen not to exceed 1.90 lbs/hr and 8.30 tons/year, as determined by EPA Test Method 16A/6C, 40 CFR 60, Appendix A.
Hydrogen Sulfide (H ₂ S)	1 grain/100 scf, as determined by EPA Test Method 16, 40 CFR 60, Appendix A.
Opacity	20% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

The permittee shall limit opacity to not exceed 20% based on an average of ten consecutive 6-minute averages; not to exceed 20% for 6% or more of the operating time within any quarterly period in accordance with MACT Subpart MM.

FUEL RESTRICTIONS

The permittee shall restrict fuels so as to ensure continuous compliance with stack emission limitations.

The permittee shall restrict the amount of pet coke combusted in the lime kiln such that the percentage of pet coke shall not exceed 80 percent of BTU value of the total fuel mixture. The permittee shall restrict the amount of lignin combusted in the lime kiln such that the percentage of lignin shall not exceed 80 percent of the BTU value of the total fuel mixture.

FUEL MONITORING AND REPORTING

The permittee shall record and maintain records of the percentage of pet coke and lignin combusted in the lime kiln on a 12-month rolling basis.

The permittee shall submit semiannually a summary report of the throughput, as a percentage of BTU value, of pet coke, lignin and the other combusted fuels (natural gas or fuel oil), on both a daily and an annual (calendar year) basis.

EMISSION MONITORING

The permittee shall install and operate continuous emission monitoring systems (CEMS) for monitoring total reduced sulfur, and either oxygen (O_2) or carbon dioxide (CO_2) ; and a continuous opacity monitoring system (COMS). These systems shall meet specifications under 40 CFR 60, Appendix B and shall comply with the provisions of 40 CFR 60, Sections 60.13, and 60.284; Part III, Item (4)

The permittee shall install and operate a continuous opacity monitoring system (COMS). This system shall meet specifications under 40 CFR 63.

The permittee shall monitor sulfur dioxide from fuel oil combustion in compliance with 40 CFR 60, Sections 60.13 and 60.47b; and Part III, Item (5).

REPORTING AND RECORDKEEPING

The permittee shall provide notices and reports, and maintain records as required by 40 CFR 60, Sections 60.7, 60.49b, and 60.284(c) and (d).

The permittee shall record the monitoring data produced during a performance test required under 40 CFR 63.7 and shall submit a written report of the monitoring results in accordance with the provisions of 40 CFR 63.10 and 40 CFR 63.867.

PERFORMANCE TESTING

The permittee shall demonstrate compliance with the emission limitations for the following pollutants by stack testing in accordance with the specified methods and the submittal of the report of the results. Testing and report submittal shall comply with the provisions of 40 CFR 60, Sections 60.8(b), (c), (d), and (f), 60.45(b), 60.46b, and 60.285; and PART III, Item (3).

Particulate Matter	EPA Reference Method 1-5.
PM_{10}	EPA Reference Method 1-5.
Sulfur Dioxide	EPA Reference Method 6C.
Nitrogen Oxides	EPA Reference Method 7.
Carbon Monoxide	EPA Reference Method 10.
Volatile Organic Compounds	EPA Reference Method 25.
Total Reduced Sulfur Dioxide	EPA Reference Method 16, 16A/6C, 16B.

Opacity

EPA Reference Method 9.

CEMS AND COMS PERFORMANCE EVALUATION

The permittee shall conduct a performance evaluation of CEMS and COMS as specified in 40 CFR 60 Appendix B. The performance of the evaluation and the submittal of the written report of the results shall comply with the provisions of 40 CFR 60, Sections 60.13(c) and 60.13(c)(2), respectively. Further, should a CEMS (pollutant monitor and diluent monitor) be used for monitoring sulfur dioxide, it must comply with 40 CFR 60, Appendix F, Procedure 1.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning <u>July 28, 2010</u>, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-010, the Woodyard Chip Screen House Cyclones (3).

Such emissions shall be limited by the permittee as specified below:

EMISSIONS LIMITATIONS

Particulate Matter	7.26 lbs/hr and 31.8 (total for all 3 cyclones), as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
PM ₁₀	4.44 lbs/hr and 19.44 (total for all 3 cyclones), as determined by EPA Test Method 201 or 201A in conjunction with Test Method 202, 40 CFR 51, Appendix M.
Opacity	40% as determined by EPA Reference Method 9, 40 CFR 60, Appendix A

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning <u>July 28, 2010</u>, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-015, the Chip Conveyors.

Such emissions shall be limited by the permittee as specified below:

EMISSIONS LIMITATIONS

Particulate Matteras determined by the relationship:E = 4.1 p^{0.67}Where:E is the emission rate in pounds per hour
P is the process weight input rate in tons
per hour
as determined by EPA Test Methods 1-5,
40 CFR 60, Appendix A.Opacity40% as determined by EPA Reference
Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

Part II (Continued) EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning July 28, 2010, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-031, the Oxygen Delignification Unit processes: O₂ Blow Tank, Post O₂ Fan Vent, and #3 Press Feed Tank, (Formerly Emission Pt. AA-024). Emissions from AA-031 may be vented to the Recovery Boiler AA-110 as an alternate NCG incineration device.

Such emissions shall be constructed and operated to comply with the limits specified below:

EMISSIONS LIMITATIONS

Carbon Monoxide	0.7 lb/BDMT, not to exceed 55.13 lb/hr and 195.46 tons/yr, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.
Opacity	40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

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EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning July 28, 2010, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-033, the Kraft Pulping High Volume Low Concentration Gas (HVLC) System, which includes emissions from pulp washing (brown stock washer), knotter, screen, and decker systems, (Formerly Emission Pt. AA-027) (Note the knotter and screen systems are not vented at this facility, and the oxygen delignification system is excluded under the approved NESHAP Subpart S Clean Condensate Alternative.) The HVLC system is controlled by the Multiple Fuel Power Boiler (primary device) or Package Boiler (back-up device). Emissions from AA-033 may be vented to the Recovery Boiler AA-110 as an alternate NCG incineration device.

Such units shall be constructed and operated as efficiently as possible to maximize reduction of emissions.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning July 28, 2010, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-050, the Kraft Mill Bleach Plant, which consists of the caustic scrubbing of the bleach plant vent, E0 Tower, and water scrubbing of the chlorine dioxide generator and is defined in 40 CFR 63 Subpart S as all process equipment after high-density pulp storage prior to the first application of oxidizing or reducing chemicals following the pulping system, up to and including the final bleaching stage. (Formerly Emission Pt. AA-008 and AA-029).

Efficient operation shall be construed to include full-time operation of caustic scrubbing for the bleach plant vent and chilled water scrubbing for the chlorine dioxide generator, to prevent release of any significant chlorine or chlorine dioxide.

Such air emissions equipment shall be operated as efficiently as possible to provide maximum reduction of air contaminants.

EMISSIONS LIMITATIONS

Carbon Monoxide

69 lb/hr and 303 tons/yr, as determined by EPA Test Method 10, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning July 28, 2010, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-062, the Area 430 Dryer Exhaust.

Such units shall be constructed and operated as efficiently as possible to minimize emissions of air contaminants.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning <u>July 28, 2010</u>, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-060, the Pulp Machine Winder and dust collection system consisting of a venturi scrubber for the control of PM (Formerly Emission Pt. AA-021).

Such emissions shall be limited by the permittee as specified below:

EMISSIONS LIMITATIONS

Particulate Matter	0.55 lbs/hr and 2.40 tons/year, as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
\mathbf{PM}_{10}	0.55 lbs/hr and 2.4 tons/year as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
Opacity	40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning <u>July 28, 2010</u>, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-065, the Fourdrinier Exhaust.

Such units shall be constructed and operated as efficiently as possible to minimize emissions of air contaminants.

EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning July 28, 2010, the permittee is authorized to construct or modify air emissions equipment and emit air contaminants from Emission Point AA-112, the Kraft Mill Lime Slaker/Causticizers with scrubber (Formerly Emission Pt. AA-005).

Such emissions shall be limited by the permittee as specified below:

EMISSIONS LIMITATIONS

Particulate Matter	as determined by the relationship:
	$E = 4.1 p^{0.67}$
	Where:
	E is the emission rate in pounds per hour P is the process weight input rate in tons per hour as determined by EPA Test Methods 1-5, 40 CFR 60, Appendix A.
Opacity	40% as determined by EPA Test Method 9, 40 CFR 60, Appendix A.

Such units shall be constructed and operated as efficiently as possible to minimize emissions of air contaminants.

All test methods specified above shall be those versions, or their approved equivalents, which are in effect July 28, 2010.

Part III OTHER REQUIREMENTS

- The permittee shall comply with all applicable Federal Standards of Performance for New Stationary Sources (NSPS), 40 CFR 60 Subpart A – General Provisions, Subpart Db, Industrial Commercial/Industrial Steam Generating Units, and Subpart BB – Kraft Pulp Mills.
- 2. The permittee shall comply with all applicable Maximum Available Control Technology (MACT), 40 CFR Part 63, Subpart A - General Provisions, and Subpart MM – Standards for Hazardous Air Pollutants from the Pulp and Paper Industry.
- 3. For Emission Points AA-100, AA-101, and AA-010, stack testing shall be conducted within 180 days of the Certification of Construction to confirm compliance with emission limitations:
 - a. A pretest conference at least thirty (30) days prior to the scheduled test date is needed to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. Also, the Office of Pollution Control must be notified prior to the scheduled test date. At least TEN (10) DAYS notice should be given so that an observer may be scheduled to witness the test(s).
 - b. All stack test methods shall be those specified in PART II, or their approved equivalents. A determination of equivalency must be made prior to testing. Testing for nitrogen oxides shall be by CEMS and subject to the provisions of 40 CFR 60.46b. Where a Reference Method is not available and testing becomes necessary, the method shall be as proposed by the permittee and approved by the Office of Pollution Control.
 - c. Performance testing facilities shall provide properly located sampling ports adequate for applicable test methods, safe sampling platform(s), and safe, ready access for test observers. The sampling platform shall be sufficiently large to provide space for at least one observer in addition to personnel performing the tests.
 - d. Documentation of operating conditions during testing for process equipment and control devices shall be provided with the test report. Depending on which emission unit is being tested, such documentation may include, as appropriate, Kraft sludge analyses; fuel quality analyses; fuel flow/firing rates; steam production rates; pressure drop across control devices; scrubbing liquid flow rate and pressure; electrostatic precipitator field electrical data; electrostatic granular filter electrical

data; black liquor flow rate and percent solids; production rate of airdried pulp; and production rate of CaO from the lime kiln.

- e. Combined flow sampling on points with common stack is not permissible; each permitted device process, or unit shall be provided with sampling ports in ductwork, breeching, etc., so as to permit testing of that single device, process, or unit.
- 4. Continuous Monitoring
 - a. Where specified in Part II preceding, the appropriate continuous monitoring shall be provided. Such equipment shall meet the specifications required by EPA in promulgated regulations and guidelines applicable at the time of purchase of the monitors.
 - b. Pursuant to 40 CFR 60.48b(f), the permittee shall provide standby capability for the monitoring of nitrogen oxides.
 - c. The permittee shall monitor and record fuel feed rates for each type of fuel and steam production rates for each boiler.
 - d. Continuous monitoring devices shall conform to the requirements of (2)(E) above, i.e., each device shall be located so as to monitor a single permitted plant device, process, or unit. Monitoring of combined flow in a common stack arrangement is not permitted.
- 5. The permittee shall obtain fuel receipts from the fuel suppliers to demonstrate that only very low sulfur oils are being combusted.
- 6. The permittee shall provide such equipment (sweepers, water trucks, etc.) as necessary to accomplish prompt and rapid cleanup of materials spills and to provide capability for periodic cleaning of mud or other debris lost from vehicle traffic on roadways. The lime kiln area roadways shall be kept clean of lime mud or dust.
- 7. The handling of collected bottom ash and fly ash and any other similar materials, if such material is not wetted, shall be performed in a manner such that dust loss to the ambient air is minimized to the greatest extent practicable. Additionally, the ultimate disposal site for such materials must be managed in such a manner that waste materials are kept wetted or covered to prevent wind entrainment of dust.
- 8. For Emission Points AA-110 and AA-015, the permittee shall perform visible emission observations (Method 22) on a weekly basis. If during the visible observation any visible emissions are noted, the permittee shall perform an EPA

Reference Method 9 Visible Emission Evaluation (VEE). (Ref.: APC-S-6, Section III.A.3.)

9. For Emission Points AA-062 and AA-065 the permittee shall minimize usage rates and VOC contents of additive chemicals where feasible.