

STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

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

Kingsford Manufacturing Company
2387 Highway 72 East
Glen, Mississippi
Alcorn 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: September 9, 2005

Modified: October 6, 2008

Modified: **MAY 30 2012**

Permit No.: 0060-00051

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:
 - i) 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
 - ii) 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:

- i) Persistent violation of any of the terms or conditions of this permit;
- ii) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- iii) 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:

- i) 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.
- ii) Compliance testing will be performed at the expense of the permittee.
- iii) Each emission sampling and analysis report shall include but not be limited to the following:
 - ◆ detailed description of testing procedures;
 - ◆ sample calculation(s);
 - ◆ results; and
 - ◆ 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, RECORDKEEPING, AND
REPORTING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Points AA-001A, Wood Receipt (KMC Ref.: RE-1A), and AA-001B, Wood Storage (KMC Ref.: RE-1B).

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct, including the application of Best Available Control Technology (BACT). BACT has been determined to be good work practice standards and partial enclosure of the truck dump area to minimize fugitive particulate matter (PM/PM₁₀) emissions.

OPERATING LIMITATIONS

The permittee shall limit the wood receipt and storage to 600,000 tons of wet wood per year on a 12-month rolling basis.

RECORDKEEPING REQUIREMENTS

In accordance with Part III, Condition 1, the permittee shall record the amount of wet wood received daily in tons and shall calculate the total amount received each month and each consecutive 12-month period.

REPORTING REQUIREMENTS

In accordance with Part III, Condition 3, the permittee shall submit reports of the amount of wet wood received in tons per year for each consecutive 12-month period of the semiannual period.

Part II (Continued)
EMISSION LIMITATIONS AND MONITORING, RECORDKEEPING, AND
REPORTING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-002, the After Combustion Chamber (ACC) Thermal Oxidizer (KMC Ref.: RE-2), which controls emissions from the following three processes:

- 1) The Rotary Wood Dryer equipped with four cyclones in parallel for control of particulate matter emissions (KMC Ref.: RE-2-C-02);
- 2) The Charcoal Retort Furnace equipped with four cyclones in parallel for control of particulate matter emissions (KMC Ref.: RE-2-C-01); and

The Charcoal Retort Furnace has auxiliary burners providing a total heat input of 8.0 MMBTU/hr, and the ACC has auxiliary burners providing a total heat input of 100 MMBTU/hr. These auxiliary burners are all low-NO_x burners, which reduce the formation of NO_x.

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct, including the application of Best Available Control Technology (BACT). For the auxiliary burners, BACT has been determined to be use of low-NO_x burners to reduce the formation of NO_x and the combustion of natural gas or distillate fuel oil containing no more than 0.1% sulfur. BACT for the charring process has been determined to be operation of the ACC in accordance with the following emissions and operating limitations.

EMISSIONS LIMITATIONS

Particulate Matter (BACT)	2.02 lb/ton of dry wood
PM ₁₀ (BACT)	1.62 lb/ton of dry wood
Sulfur Dioxide (BACT)	0.72 lb/ton of dry wood
Nitrogen Oxides (BACT)	3.10 lb/ton of dry wood
Carbon Monoxide	0.24 lb/ton of dry wood
Volatile Organic Compounds	0.24 lb/ton of dry wood
Opacity	40% (6-minute average)*

* See Part III, Condition 7 for exceptions to the 40% opacity limit.

OPERATING LIMITATIONS

1. The permittee shall limit the amount of dry wood exiting the Rotary Wood Dryer and entering the Charcoal Retort Furnace to 33.6 tons per hour and 210,000 tons per year on a 12-month rolling basis.
2. The permittee shall maintain the ACC combustion chamber operating temperature above 1,400°F on a 3-hour rolling average during normal operations, not to include periods of startup, shutdown, or malfunction. Normal operations are defined as any time char is being produced.

FUEL RESTRICTION

The permittee shall only combust natural gas or distillate fuel oil containing no more than 0.1% sulfur by weight in the auxiliary burners.

PERFORMANCE TESTING

Within 60 days after achieving the maximum production rate at which the Rotary Wood Dryer and Charcoal Retort Furnace will be operated, but no later than 180 days after beginning operation of the Rotary Wood Dryer and Charcoal Retort Furnace, the permittee shall demonstrate initial compliance with the emission limits and standards for the following pollutants by stack testing Emission Point AA-002 in accordance with the specified methods.

Particulate Matter	EPA Test Methods 1-5, or an approved alternative (40 CFR Part 60, Appendix A)
PM ₁₀	EPA Test Method 201 or 201A, in conjunction with Test Method 202, or an approved alternative (40 CFR Part 51, Appendix M)
Sulfur Dioxide	EPA Test Method 6, or an approved alternative (40 CFR Part 60, Appendix A)
Nitrogen Oxides	EPA Test Method 7, or an approved alternative (40 CFR Part 60, Appendix A)
Carbon Monoxide	EPA Test Method 10, or an approved alternative (40 CFR Part 60, Appendix A)
Volatile Organic Compounds	EPA Test Method 18 or 25A, or an approved alternative (40 CFR Part 60, Appendix A)
Opacity	EPA Test Method 9 (40 CFR Part 60, Appendix A)

For the purpose of demonstrating compliance, the permittee shall operate the Rotary Wood Dryer and Charcoal Retort Furnace at their maximum capacities, respectively. The permittee shall also monitor and record the throughput of wet wood and compute the throughput of dry wood in tons per hour, as well as the average hourly temperature of the ACC, to determine compliance with the emission and operational limitations.

For the purpose of demonstrating compliance with the opacity limit, the permittee shall conduct the opacity observations concurrently with the performance test.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to DEQ. If the initial test protocol is acceptable, subsequent test protocols may be waived if these protocols contain no significant changes. Also, the DEQ must be notified prior to the scheduled test date. At least ten (10) days notice shall be given so that an observer may be scheduled to witness the test(s).

MONITORING REQUIREMENTS

1. The permittee shall monitor the amount of wet wood feed to the Rotary Wood Dryer in tons per hour. The permittee shall sample the wet wood daily to determine the moisture content. The permittee shall sample the dry wood exiting the Rotary Wood Dryer no less than monthly to determine the moisture content.
2. The permittee shall install two thermocouples for continuously measuring the operating temperature of the ACC. The thermocouples shall be maintained in accordance with the manufacturer's specifications, which shall be kept on-site. Should the readings from the two thermocouples differ by more than 100°F, the permittee shall take immediate action to determine the cause of and correct this discrepancy.
3. The permittee shall perform daily visual observations of the emissions from the ACC for a period of six (6) consecutive minutes. If any visible emissions are observed, the permittee shall determine the opacity using EPA Test Method 9. If the opacity exceeds the limit specified, the permittee shall take immediate corrective action to reduce emissions below the opacity limit. These visual observations shall be performed by a certified Method 9 observer.

If visible emissions of less than or equal to 20% opacity are observed daily for six (6) consecutive weeks, then the frequency of the visual observations may be reduced to weekly. If any visible emissions with an opacity greater than 20% are observed during the weekly observations, the frequency of the visual observations shall revert to daily for at least six (6) consecutive weeks.

RECORDKEEPING REQUIREMENTS

In accordance with Part III, Condition 1, the permittee shall maintain the following records:

1. A log of the daily average amount of wet wood feed to the Rotary Wood Dryer in tons per hour, the daily moisture content of this wood, the monthly average moisture content of the dry wood, and the corresponding daily average amount of dry wood in tons per hour. The daily amount of dry wood shall be computed based on the amount of wet wood feed, the daily moisture content of the wet wood, and the monthly average moisture content of the dry wood.
2. The total amount of dry wood charred in tons per year for each consecutive 12-month period.
3. A log of the continuous temperature readings from the ACC and the rolling 3-hour average ACC temperature for all periods when the ACC is operating.
4. All instances when the two thermocouples are not within 100°F of each other and the corrective action taken.
5. The hours that any auxiliary burners were operated during each month, including the reason for operation, and the amount of each fuel combusted.
6. A log of the daily or weekly visual observations, any Method 9 opacity readings, and any corrective action taken.

REPORTING REQUIREMENTS

The permittee shall submit reports of any deviations in accordance with Part III, Condition 2. The permittee shall also submit semiannual reports of the following information per Part III, Condition 3.

1. The daily average and daily maximum amount of dry wood processed in tons per hour for each month and sample calculations for determining the amount of dry wood based on the moisture content of the wet wood feed to the Rotary Wood Dryer.
2. The total amount of dry wood charred in tons per year for each consecutive 12-month period of the semiannual period.
3. The average and minimum 3-hour ACC temperature for each month.
4. All instances when the two thermocouples are not within 100°F of each other and the corrective action taken.

5. The hours that any auxiliary burners were operated during each month, including the reason for operation, and the amount of each fuel combusted.
6. A log of the daily or weekly visual observations, any Method 9 opacity readings, and any corrective action taken.

Part II (Continued)
EMISSION LIMITATIONS AND MONITORING, RECORDKEEPING, AND
REPORTING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-003, Char Truck Loadout (KMC Ref.: RE-3).

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct, including the application of Best Available Control Technology (BACT). BACT has been determined to be use of a telescoping chute and seal system and/or a fabric filter system to reduce particulate matter emissions to 0.01 gr/dscf.

Part II (Continued)
EMISSION LIMITATIONS AND MONITORING, RECORDKEEPING, AND
REPORTING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-005, a natural gas-fired boiler with a design capacity of less than 10 MMBTU/hr.

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct, including the application of Best Available Control Technology (BACT). BACT has been determined to be use of good combustion practices, including combusting natural gas only.

FUEL RESTRICTION

The permittee shall only combust natural gas.

Part II (Continued)
EMISSION LIMITATIONS AND MONITORING, RECORDKEEPING, AND
REPORTING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AD-000, Plant-Wide Miscellaneous Operations.

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct, including the application of Best Available Control Technology (BACT). BACT has been determined to be good work practice standards.

Part II (Continued)
EMISSION LIMITATIONS AND MONITORING, RECORDKEEPING, AND
REPORTING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AD-001, Plant-Wide Fugitive Emissions from Roadways (KMC Ref.: RW).

Such air emissions equipment shall be constructed in accordance with design criteria in the application, plans, and other technical documents submitted with the application to construct, including the application of Best Available Control Technology (BACT). BACT has been determined to be paving all roadways, as specified in the initial PSD application, and using good work practices, such as street sweeping, to minimize fugitive emissions.

Part III
OTHER REQUIREMENTS

1. The permittee shall maintain on-site records of all required monitoring data and support information required by this permit for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. These records shall be made available for review upon request by DEQ personnel.
2. The permittee shall report any deviations from the permit requirements, including deviations attributable to upsets, within five (5) working days of such deviation. The reports shall also include the cause of the deviation(s) and any corrective actions or preventive measures taken. A copy of the report shall be maintained in accordance with Part III, Condition 1.
3. The permittee shall submit semiannual reports of the information required to be reported per Part II of this permit. The reports shall be submitted by July 31 and January 31 for the preceding six-month period with all instances of deviations from the permit requirements clearly identified.
4. For each emission point, any monitoring, recordkeeping, and reporting required in this permit shall become effective upon certification of construction of the emission point, as required in Part I, Condition 14.
5. For each emission point, the permittee shall perform regular inspections and maintenance as needed each month or more often to maintain proper operation of the equipment. Equipment, including all pollution control devices, shall be operated and maintained in accordance with manufacturer's specifications or standard operating procedures. Records of these inspections and any maintenance shall be kept in log form.
6. For each emission unit with a pollution control device (e.g. fabric filter, cyclone, etc.), the permittee shall operate the control device at all times when the emission unit is operating unless otherwise specified in this permit.
7. The permittee shall not cause, allow, or permit the discharge into the ambient air from any point source or emissions, smoke or any air contaminant of such opacity as to obscure an observer's view to a degree in excess of 40% opacity. This shall not apply to vision obscuration caused by uncombined water droplets. Exceptions are provided in APC-S-1, Section 3.1(a) and (b).
8. The permittee shall determine the sulfur content of each shipment of distillate fuel oil received at the facility. The sulfur content may be determined based on certification provided by the fuel oil supplier or from a sulfur analysis per an ASTM reference method. This information shall be kept on site in accordance with Part III, Condition 1, and shall be reported in accordance with Part III, Condition 3.

9. The permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes procedures for operating and maintaining the emission units and pollution control devices during periods of startup, shutdown, and malfunction, especially as it pertains to operation of the ACC (Emission Point AA-002) and those units for which heat is supplied by the ACC. The startup, shutdown, and malfunction plan may be a separate document or may be part of the facility's standard operating procedures. Nothing in this condition is intended to limit the applicability of the state regulations contained in APC-S-1, Section 10, "Provisions for Upsets, Startups, and Shutdowns".