# STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

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

Mississippi Power Company
Plant Victor J Daniel
Highway 63 North
Escatawpa, Jackson, Mississippi

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:

OCT 0 9 2008

Permit No.: 1280-00090

Page 2 of 8

Permit No.: 1280-00090

#### 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.

Page 3 of 8 Permit No.: 1280-00090

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:
  - 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;

Page 4 of 8 Permit No.: 1280-00090

b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant

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

(Ref.: APC-S-2, Section II.C)

facts; or

emission.

- 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

Page 5 of 8 Permit No.: 1280-00090

Fernit No.: 1280-0009

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)

Page 6 of 8 Permit No.: 1280-00090

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)

Page 7 of 8

Permit No.: 1280-00090

# Part II. EMISSION LIMITATIONS AND MONITORING REQUIREMENTS

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AA-002, the 5,460.5 MMBTU/hr (nominal) Combustion Engineering Tangentially-Fired Utility Boiler. This boiler combusts coal (bituminous and subbituminous), #2 fuel oil, used oil, natural gas, petroleum contaminated soil, boiler cleaning waste, wood waste, and #6 fuel oil and is equipped with an electrostatic precipitator. The modification includes the replacement of the boiler burners with new low-NOx burners and the addition of an over-fire air delivery system. (Ref.: Plant Daniel Unit 2).

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

### **EMISSIONS LIMITATIONS**

**Carbon Monoxide** 

0.153 lb/MMBTU based on a 3-hour block average and 3660 tons/year, 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 upon permit issuance.

### BEST AVAILABLE CONTROL TECHNOLOGY

The permittee shall operate and maintain the boiler such that the best available control for CO is combustion control utilizing best combustion practices to maximize boiler combustion efficiency.

Page 8 of 8 Permit No.: 1280-00090

# Part III. OTHER REQUIREMENTS

- 1. For Emission Point AA-002, the permittee shall, within 180 days after the low-NOx and over-fire air modifications have been implemented for each boiler, CO stack testing in accordance with EPA Reference Methods 7 or an approved equivalent. The permittee shall monitor and record the amount of fuel burned during the stack tests and calculate and report the heat input as million BTU and report all emission results in units of lbs CO/MMBTU input.
- 2. The permittee shall submit a test report that presents the findings of the testing requirements of Item #1 above within 60 days of the demonstration of compliance. The test report shall include the fuel heat input determinations and report all emission results in units of lbs CO/MMBTU input.
- 3. The permittee shall submit a written stack test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the Office of Pollution Control. The protocol shall address the conditions under which the plant will be operated during testing, and how and which operating parameters will be monitored during testing. 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).